



Culture of Command & Control of nuclear weapons in the Middle East - Saudi Arabia

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Executive Summary

The Saudi regime differs from all the other regimes in the region both in its ideological makeup and its organizational structure. Both these will have a profound effect on command and control (C2) of nuclear weapons. Furthermore, conventional wisdom views Saudi Arabia as the country most likely to seek a military nuclear capability in the wake of Iran. Saudi Arabia sees itself as a “Frontline” state in a proxy “Cold War,” between Iran and the conservative Arab bloc, and as the defender of moderate Arab regimes threatened by the Iranian fundamentally anti-status-quo posture. Iranian's attainment of nuclear weapons would be perceived as an anti-Arab and Shiite (i.e. anti-Sunni) capability, the aim of which is to help Iran not only achieve political and economic predominance in the region, but redress what it sees as the historic injustice of Sunni predominance in Islam and Saudi control over the holy cities of Mecca and Medina. The fear of such developments will almost certainly bring Saudi Arabia to seek an equalizer.

It is doubtful that Saudi Arabia could rely on American assurances in the face of a nuclear Iran. A Pakistani nuclear umbrella is also not as feasible as it was when Saudi Arabia financed that country's nuclear program. Saudi Arabia's indigenous R&D capabilities are limited. Therefore, the more likely course of action for the Kingdom will be to purchase a nuclear capability (perhaps from Pakistan) or to co-opt another country (such as Egypt) into developing a nuclear capability.

Unlike Iran, Saudi Arabia will view nuclear weapons as purely a deterrent, or a counter-balance against threats of use of such weapons by its adversaries. It will have to present them not only as a deterrent against (Muslim, albeit Shiite) Iran but also against (infidel Jewish) Israel. Saudi Arabia will probably also present a frame of reference regarding who the nuclear weapons are supposed to protect that includes the Arab Gulf States at least. This will entail extension of command, control, communication and intelligence (C3I) capabilities to these states in the name of establishing credibility for this form of extended deterrence.

Saudi Arabia's nuclear posturing will derive primarily from that of its nuclear adversaries – particularly Iran. The Saudi preference would probably be to view the nuclear weapons as a deterrent and to minimize its exposure. Saudi Arabia has always preferred conflict resolution by way of discussion and consensus (albeit frequently paralyzing consensus), and has, for the most part, eschewed shows of force against perceived threats. The preferred Saudi paradigm of nuclear posturing therefore would be: (1) To declare nuclear status, but to refrain from operational deployment of weapons or even to provide assurances that the weapons are maintained steps away from operational readiness; (2) To declare “no first use”, in order to send a clear message of the defensive and deterrent nature of the weapons. This preference however may not be practical for long. The Saudi nuclear posture will be affected by the fractured (or pluralistic) Saudi structure and sluggish decision-making process which tends to seek consensus through consultation within the family and in the broader circles of supporters of the regime (primarily senior clerics – *‘ulama*). It will also be affected by the behavior of Iran and the tendency of the clerics to promote a strident anti-Iranian agenda. After integrating all these factors and others, it seems that Saudi Arabia will probably tend to trail behind Iran in projection of nuclear assertiveness, and certainly will act in a more restrained manner.

In contrast to the autocratic or authoritarian states in the region, the decision making forum in Saudi Arabia is wide. Civilian control of the Saudi military is absolute, but it is extended through representatives of the royal family and not through a Western-style professional military hierarchy. This consultative model of decision making may well become a major Achilles heel of Saudi command, control and communication (C3) of nuclear weapons. For as long as it can, the Saudi regime will probably prefer to rely

on collective decision-making, and will not confer the authority to brandish, or launch, nuclear weapons in the hands of the King alone. This may not be defined in formal procedures (as many of the regime's workings are not ensconced in formal laws), but in an understanding that even if the King has formal authority, he will not use it without broad consultation.

The second level in the chain of command will be the military forces, most likely the Saudi Arabian National Guard (SANG). Nevertheless, the regime may well view nuclear weapons as *sui generis* in terms of the level of loyalty necessary for any individual who comes near them. While the National Guard as a whole is loyal to the regime, it is also devoutly Wahhabi and therefore elements within it may be susceptible to Jihadi-Salafi arguments regarding the moral fabric of the leadership, and the incompatibility between the principles of Wahhabi ideology and the alliance with the West. The concern that this body may contain "Trojan Horses" with sympathy to the Jihadi networks, will increase in regards to nuclear weapons, and will challenge the C3 procedures. This may induce the regime to consider alternative lines of command, based only on officers from the royal family. This could either streamline the chain of command, or contrarily make the C3 procedures even more cumbersome, convoluted and prone to failure.

There is reason to assume that weapons will not be deployed in the following areas: the entire area of the Hijaz (Mecca and Medina); the Eastern province which has a large Shiite – and hence potentially pro-Iranian – population, despite the potential benefit of placing nuclear weapons in an area which the potential enemy (Iran) may be hesitant about attacking. Possible areas of deployment may be in military cities situated in different parts of the country – the King Faysal Military City in the King Khalid Military City near Hafr al-Batin, or the SANG base in Damam, thus indicating that the weapons are directed towards Iran or Iraq; the Tabuk area, positioning which would imply that the weapons are directed towards Israel; King Abdul 'Aziz Military City in the Khamis Mushayt area, South-West of the country facing Africa – probably not a high priority option.

It is most likely that the custody of the weapons will be stored separately from delivery systems, and even key components of the weapons may be kept in disassembled manner in nearby installations subject to a senior member of the royal family. Theoretically, such an arrangement may be seen as precluding the assembly of a nuclear weapon without express authorization by the political leadership.

Unlike authoritarian regimes, Saudi political culture would probably tolerate a quasi-Western procedure for authentication of orders by seconds in command at the political level. The authentication procedure could include the King and the Crown Prince or the Minister of Defense. It is unlikely that the regime would introduce clerics or individuals outside the royal family into such a procedure.

The long-time close relationship with the West, especially the US, and the desire to demonstrate that the regime is responsible and reliable, could provide for a hospitable environment for the introduction of advanced Western C3 systems, including for authentication and PALs to prevent unauthorized theft or launch by terrorists, or rogue and renegade elements from within the system.

Introduction

The Saudi regime differs from all the other regimes in the region both in its ideological makeup and its organizational structure. Both these will have a profound effect on command and control (C2) of nuclear weapons. Furthermore, conventional wisdom views Saudi Arabia as the country most likely to seek a military nuclear capability in the wake of Iran. Saudi Arabia sees itself as a "Frontline" state in a proxy "Cold War" between Iran and the conservative Arab bloc, and as the defender of moderate Arab regimes threatened by the Iranian fundamentally anti-status-quo posture. The Saudi leadership is only too aware that Iran's, and other radical groups', branding of it as having sold out to US interests and influences (and of being "too soft" in the struggle against Israel), carries a great deal of weight in Arab public opinion. It is this fear of a nuclear armed Iran threatening to overthrow the regional, and perhaps subsequently global, status-quo, that is dominant in Saudi (and current Egyptian) attitudes. A nuclear Iran would become a far more formidable regional hegemonic power than one which was not armed with nuclear weapons. Paradoxically, after the American invasion of Iraq in 2003, which Saudi Arabia supported because of its fear of Saddam Hussein's efforts to upset the status-quo, Iraq no longer stood in the way of Iran becoming the dominant power in the region (and the ascendancy of the Shiites in that country is even perceived from Riyadh as facilitating that process).

Until 2006, the Saudis believed that the Iranian nuclear program could be dealt with through diplomatic means and a level of appeasement. It was believed that the West would succeed in containing the Iranian threat and therefore, the Kingdom could hedge its risks by pursuing a friendly dialogue with Tehran, leaving the West (and particularly the US) to wield the big stick. Since 2006, Saudi rhetoric has become more assertive.

Therefore, in Saudi eyes, Iranian's attainment of nuclear weapons would dramatically shift the balance of power in the region. An Iranian bomb would be perceived by the Kingdom – and in much of the Arab world as an Iranian (i.e. anti-Arab) and Shiite (i.e. anti-Sunni) capability. In the eyes of the Saudi regime a nuclear Iran will then strive to achieve not only political and economic predominance in the region, but to redress what it sees as the historic injustice of Sunni predominance in Islam and Saudi control over the holy cities of Mecca and Medina.¹ The fear of such developments will almost certainly bring Saudi Arabia to seek an equalizer.

¹ The indications of these Saudi fears are manifold: For example, Turki al-Faysal, the former Saudi Ambassador to the US, declared in May 2010 that a nuclear Iran symbolizes the "point of no return" for the Middle East, would bring the Arab states under a constant threat, and would force them to act against Iran. The Saudi journalist, 'Abd al-Rahman al-Rashid, considered to be close to the leadership, suggested in an editorial in *al-Sharq al-Awsat*, that the Iranian nuclear program is not directed against Israel, but rather against Iran's neighbors in the Gulf and the Middle East: "The Iranians are enriching uranium to produce nuclear weapons aimed, essentially, at its neighbors, mainly Pakistan. However, the danger encompasses the other neighboring countries as well, such as Saudi Arabia, Oman, Iraq, Afghanistan, Turkmenistan and Azerbaijan..." "More important to us is the Iranian intervention in Arab affairs," said Mansur al-Mansur, head of the Centre for Strategic Studies, a government-linked think-tank in Riyadh. These fears were vividly articulated in the Saudi daily *al-Watan*, in an editorial published on February 11, 2010: "Iran's history, its contemporary actions, and its future strategy do not indicate that it intends to co-exist peacefully with its neighbors. For example, its continued occupation of some Arab territories in the Gulf region, support for some rebellious and anarchist movements in neighboring countries, and the unfriendly statements made by its officials every now and then against this country or that, among other indicators, do not bode well in terms of Iran's regional policy." Another indication is the statement by Saudi Foreign Minister Sa'ud al-Faysal, who stated in a press conference that Iran's attainment of a nuclear weapon would be considered as *casus belli*. A senior Saudi diplomat, when asked during an interview about the best way for the region to respond to a nuclear Iran, he stated: "With another nuclear weapon."

The Role of Nuclear Weapons for Saudi Arabia

Unlike Iran which would most likely view nuclear weapons as a capability that enhances Tehran's coercive clout in the region, Saudi Arabia will view such weapons as purely as a deterrent, or a counterweight against the brandishing of nuclear weapons by its adversaries. Though the immediate cause for the acquisition of nuclear weapons will have been Iran, for a variety of reasons – not the lightest domestic constraints – the Saudi leadership will have to present them not only as a deterrent against (Muslim, albeit Shiite) Iran but also against (Infidel Jewish) Israel.

Saudi Arabia, which has traditionally achieved its goals in the region through “soft power” (diplomatic and religious, backed up by financial power) would probably not change this paradigm after acquiring a nuclear weapon. The fact that at least one of the potential nuclear threats that the Kingdom will have to refer to will be a Muslim country will also be a constraint towards an official and open presentation of scenarios for actual use of the weapons. As a regime in which the ruler purports to be the “Guardian of the Two Holy Cities” and the “Commander of the Faithful”, and is beset by a radical Islamist opposition with strong inroads into the regime, any other attitude would be domestically untenable.

The Saudi claim to regional leadership (at least in the Gulf) will also impose on a nuclear Saudi Arabia an extension of the frame of reference regarding who the nuclear weapons are supposed to protect. A priori, in the light of the Saudi commitments to the Gulf Cooperation Council, the Arab Gulf states will all be perceived – and even declared – to be under the protection of the Saudi nuclear umbrella. This will entail extension of command & control & communication & intelligence (C3I) capabilities to these states in the name of establishing credibility for this form of extended deterrence. The role of the nuclear weapons therefore will be to deter Iran, Israel and any other future potential threat (a Shiite regime affiliated with Iran in Iraq; a Jihadi-Salafi regime) from launching a nuclear attack against Saudi Arabia or any of its allies in the Gulf.

Will a nuclear Saudi Arabia extend this deterrence to employing the nuclear threat in order to deter conventional military threats to the Kingdom and its allies? It appears that the level of confidence that the Saudi regime will have in its own capability to control events will determine its propensity to try to counter conventional challenges with an implied nuclear threat. Such behavior is not compatible with the general Saudi behavior, and the fear of escalation will probably preclude it even more in a nuclear environment.

Potential Saudi Courses of Action after Iran's Nuclearization

Saudi Arabia may pursue one of several course of action once Iran acquires nuclear weapons:

- Theoretically, it may decide that its current military capability and its US umbrella are sufficient to obviate the need for nuclear capacity. Reliance on the guarantee of American extended deterrence would carry with it a potentially high domestic price. The regime will have to take into account that blatant reliance on the US against a Muslim – albeit Shiite – state will discredit it still further in the Saudi and broader Arab streets. Past experience shows that a Western presence on Saudi soil did aggravate anti-Western religious sentiment that developed into anti-regime activity. Therefore, this option seems very unlikely from the domestic point of view. The damage to US credibility that Iran's nuclearization will cause in the region also does not augur well for this option, as the Saudi leadership may have doubts regarding even the most formal and iron-clad assurances of US extended deterrence, given that the US will have demonstrated a failure to have prevented the materialization of the threat in the first place.
- Reliance on a Pakistani nuclear guarantee may have been an option in the past (and probably was at the time that Saudi Arabia secretly funded the Pakistani nuclear program, during the Zia Ulhaq era). This option is believed by some observers to make some sense so long as the two countries enjoy an amiable relationship. However, given the present situation of Pakistan as a candidate for "failed statehood", particularly its potential disintegration, the gains being made by radical Islamic forces against the integrity of the Pakistani establishment, and the danger that elements allied with al-Qa'ida or the Taliban might gain control of Pakistani nuclear assets (at least some of them), this would not necessarily seem a feasible option. In this context, it should be noted that there was, at the time that the Pakistani program was revealed, serious information that Saudi Arabia had funded the program, and that there was an agreement between the two countries that Saudi Arabia could call on those capabilities that it had funded if need be.
- It may decide to buy a bomb (perhaps from Pakistan).² It is common knowledge that Saudi Arabia, unlike some of the other states in the region, does not have, and will not have, an indigenous capability to produce its own nuclear weapons, and will inevitably have to acquire "turnkey" or "off the shelf" capabilities from a willing supplier. The Democratic People's Republic of Korea (DPRK) would be a candidate for that, however inimical its regime is to the Saudis – in this connection it may be recalled that in the 1980s Saudi Arabia acquired heavy strategic nuclear capable CSS-2 SSM (surface-to-surface-missiles) from the People's Republic of China (PRC), under a deal brokered by Saudi Arabia's Pakistani ally, at a time when there was no connection between the PRC and Saudi Arabia, and diplomatic relations were held with Taiwan rather than the PRC. So necessity is the mother of invention, and the nature of the supplier is less important.
- It may begin its own indigenous nuclear program to develop the capacity to develop nuclear weapons. The Saudi tradition of indigenous R&D is meager, especially in the military domain. Thus it may acquire "turnkey" facilities, in a variation of the Libyan example.

² David Albright argues that Saudi Arabia "would be the first of the world's eight or nine nuclear powers to have bought rather than built the bomb." There are also theories that Saudi Arabia and Pakistan have an agreement, such that if Saudi Arabia deems it necessary to acquire nuclear weapons, then Pakistan will protect Saudi Arabia and base nuclear weapons on Saudi land.

- A partnership with another allied Sunni Arab country or a coalition of Arab Sunni countries – Egypt might be a suitable partner, in spite of some animosities, but given some very fundamental shared interests concerning preservation of the status-quo in the face of the radical anti-status-quo challenge.
- Jumping on the bandwagon – the probability that Saudi Arabia would align itself with Iran in order to secure itself from an Iranian attack ("if you cannot cut off the hand of your enemy – kiss it") is extremely low, but not out of the question, and some current Saudi cow-towing to the Iranians might suggest this as a preferred course – though it is doubtful that the Saudi leadership could view it as being ultimately successful, since the Iranian leadership is viewed as fiercely committed to its radical, almost messianic, agenda.

Whatever course for acquisition of nuclear weapons Saudi Arabia will choose, it is doubtful that nuclear ambiguity will be an option. The very reason that the nuclear option will have been developed – a deterrent against an openly nuclear armed Iran – will preclude such an option and force the Kingdom to renege on its commitments to the Non-Proliferation Treaty - NPT (only recently ratified). A nuclear Saudi Arabia will, therefore, most probably be an openly nuclear state.

Potential Saudi Nuclear Posturing

Saudi Arabia's nuclear posturing will derive primarily from that of its nuclear adversaries – particularly Iran. The Saudi preference would probably be to view the nuclear weapons as a deterrent and to minimize its exposure. Saudi Arabia has always preferred conflict resolution by way of discussion and consensus (albeit frequently paralyzing consensus), and has, for the most part, eschewed shows of force against perceived threats. This is evident in its policies towards Iran, Iraq under Saddam Hussein and even (except in few cases) its weaker neighbors such as Yemen. On the other hand, the kingdom hosted US and coalition forces in 1991 and 2003, and its armed forces participated in the liberation of Kuwait.

It seems that in a scenario in which Iran has become a declared nuclear power, Saudi Arabia will not be able to adopt a posture of nuclear ambiguity. It is more likely to acquiesce to an implicit nuclear posture, and therefore, the Saudis will most likely avoid frequent demonstrations of their nuclear capability, refrain from brandishing it and do their best not to be drawn into nuclear one-upmanship (*muzayidat*) towards Iran. The preferred Saudi paradigm of nuclear posturing therefore would be:

- To declare nuclear status, but to refrain from operational deployment of weapons or even to provide assurances that the weapons are maintained steps away from operational readiness.
- To downplay, as much as possible, the role of nuclear weapons in its defense doctrine.
- To declare "no first use", in order to send a clear message of the defensive and deterrent nature of the weapons.

This preference however may not be practical for long. The Saudi nuclear posture will be affected by three main factors – two tempering it and the third forcing it to be more confrontational.

- The first, moderating, factor is the fractured (or pluralistic) Saudi structure and decision-making process. The sluggishness of the Saudi regime is attributed to a tendency to seek consensus through consultation within the family and in the broader circles of supporters of the regime (primarily senior clerics – *'ulama*). In this sense it is a patrimonial leadership with some degree of collective leadership, required to placate the various factions with it. The House of Saud governs by consensus and has done so successfully since the inception of the kingdom. Maintaining consensus – a process that is largely opaque to all but the best-informed observers – has become increasingly complicated for the leadership over the last decade. The consultations tend to be drawn-out and circuitous, and thus somewhat unsuited for fast-moving decision-making that a brinkmanship nuclear crisis environment may superimpose. The regime therefore would probably shy away from any actions that it may fear would trigger or exacerbate a crisis.
- The second moderating factor is a variable – the degree by which the Saudi regime may assess that it can rely on allies (the United States, other regional forces such as Egypt, Iraq or Turkey) or even non-allies but interested parties in the international theatre (Russia, China) to restrain Iran, and to save Saudi Arabia the dilemma of a nuclear faceoff with Iran. This factor will be influenced by the perception of those countries' willingness to act on Saudi Arabia's behalf, and their relations with Iran.
- The third, exacerbating, factor is the foreseen behavior of Iran. Iranian nuclear belligerence coupled with Saudi perception of a nuclear Iran as an existential threat, not only to the Ibn Sa'ud dynasty, but to the very predominance of Sunni Islam in the Arabian Peninsula – will compel the Saudis to upgrade their nuclear posture to correspond to the perceived Iranian challenge. The influence of the clerics, whose view of Iran and the Shiites is far less pragmatic than that of the ruling family, is in itself an exacerbating factor. Therefore, if Iran deploys its nuclear weapons and develops a doctrine which includes exercises, nuclear alerts and veiled threats to deliberately unnerve its neighbors, Saudi Arabia will probably have to adapt its nuclear posture accordingly.

After integrating all these factors and others, it seems that Saudi Arabia will probably tend to trail behind Iran in projection of nuclear assertiveness, and certainly will act in a more restrained manner.

Once it acquires a nuclear weapon, the Saudi leadership would face the practical questions of deployment (where in the Kingdom?), responsibility for protection of the weapons (security – who will guard them? What tribes will be represented in this task?), and establishing credible C3I, chains of command, Permissive Action Links (PALs), communication, intelligence. It may seek at least some assistance regarding these from heretofore reliable allies, such as the US, Pakistan or Egypt, to the degree that they will be perceived to be trustworthy in this regard.

Religious Aspects and Influence of the Clerics

From the inception of the Saudi state, state and religion have gone hand in hand. The alliance between al-Saud and al-Sheikh (the leading family of the *'ulama*) - or between *'umara* (princes) and *'ulama* – was, and remains, one of the building blocks of the regime's legitimacy. The clerics are a driving force towards a confrontational, and almost paranoid, attitude towards Iran; they will probably tend to be a radicalizing factor in any crisis with Iran, and encourage the regime to maintain a policy of active containment of the "Shiite threat". The reliance on religious legitimacy to rule accords the clerics great influence (albeit not authority). While the regime has succeeded in promoting its own loyal clerics within the clerical establishment, even these have to be attentive to the lower level and more radical clerics.

Nevertheless, the clerics – including and possibly even especially – the radical "awakening Sheikhs" movement, are unanimous in their strident opposition to oppose the ascendancy of Shiite Iran, and would support a policy that aims at containing Iran's influence in the Gulf. The clerics have even actively stoked the fire of anti-Iranian and anti-Shiite paranoia, even before Iran has acquired a nuclear weapon. An interesting case in point is the spreading of rumors by clerics that the Iranians were proselytizing for Shiite Islam in Saudi Arabia. The Saudi royal family did not believe the rumors, but they did allow them to circulate, and even encouraged them as the clerical interest in demonizing Iran helped the regime indirectly to garner support in the face of the more threatening Shiite Iranian enemy.

The Saudi clerical establishment has been relatively silent on the question of Islamic legitimacy of acquisition or use of nuclear weapons. This may have been due to a desire not to feed the legitimacy of the Iranian program by indirectly sanctioning Iran's actions (or Iraq's before that) through Sunni religious opinions which permit the acquisition of weapons of mass destruction (WMD). Once the nuclear genie is out of the bottle, however, the regime will be in need of religious legitimization for its own nuclear option. Then, the regime's clerics will have no problem finding the appropriate Qur'anic references, already prepared by Jihadi-Salafi clerics that sanction the regime's actions.

Decision-Making and Chains of Command

Political Decision-Making

In contrast to the autocratic or authoritarian states in the region, in which the leadership at the top contains no more than a handful of individuals, the decision making forum in Saudi Arabia is very wide. Civilian control of the Saudi military is absolute, but it is extended through representatives of the royal family and not through a Western-style professional military hierarchy. The nominal commander of the Saudi military forces is King Abdullah, who is also Prime Minister and Commander of the Saudi National Guard. King Abdullah's son, Prince Mithab bin 'Abdallah serves as the Assistant Vice Commander for Military Affairs, and is in control of the National Guard. For the regular military, the Minister of Defense (since 1962), Prince Sultan bin 'Abd al-'Aziz is in charge of most decision-making.

There have been few situations that may have compelled the regime to adopt more streamlined modes of decision-making. The natural tendency towards “if it ain’t broke – don’t fix it”, and the need to offer token symbols of semi-democracy, have increased the tendency of the regime to implement even broader participation, rather than creation of a well defined executive.

This consultative model of decision making may well become a major Achilles heel of Saudi C3 of nuclear weapons. The more the regime will estimate that there is a low probability of circumstances that will call for activation of the nuclear arsenal (even at the level of placing the nuclear arms at high alert), the less constraints there will be to develop a well formed executive decision-making body with clear authority for that purpose. For as long as it can, the Saudi regime will probably prefer to rely on collective decision-making, and will not confer the authority to brandish, or launch, nuclear weapons in the hands of the King alone. This may not be defined in formal procedures (as many of the regime’s workings are not ensconced in formal laws), but in an understanding that even if the King has formal authority, he will not use it without broad consultation.

An alternative view may be that the actual possession of nuclear weapons capabilities, including delivery systems and a high level alert emanating from an aggressive Iranian nuclear posture intended to intimidate and unnerve the Saudis (and the US), will induce a change in the heretofore "comfortable" modus operandi of the Saudi leadership. Although it now appears out of character, a much higher level of authorization regarding nuclear contingencies may be pre-conferred on a select but minute group of individuals, with supreme authority vested in a recognized leader. Whether this scenario is realistic depends a great deal on how the collective leadership interprets the nature of the threats against the kingdom, its allies in the region, or its interests, and what the best appropriate responses might comprise. In such a scenario, Saudi nuclear C3I could become much more similar to patterns (described elsewhere) of a strong leader centralized decision-making (Egypt, Syria), which could shorten C3I control span.

The identity of the King and the line of succession are much more critical in assessing Saudi paradigms of decision-making and C2 of nuclear weapons than in other countries. This is due to the inherent instability caused by the age of the current leadership (and current line of succession), and ramifications of the unsustainability of the system of succession of the sons of ‘Abd al-‘Aziz ibn Sa’ud, which creates an accelerating rate of change and instability due to health issues and successive deaths of Kings. In other words, age could be an issue, as could the health of the leadership, in establishing the legitimacy of nuclear C3I authority, which brings to mind comparison and contrast to the case of Iran, where the regime appears to be far more confident of its C3 chain of command, supported as it is by the IRGC, and the latter's firm domination of the regime's instruments of coercion and strategic assets.

The two primary decision makers for the nuclear scenario we are drawing would be King 'Abdallah bin ‘Abd al-‘Aziz (born in 1924) and his brother Prince Sultan (born in 1926). Given the ages of 'Abdallah and Sultan we may expect that they will be off the stage – physically or politically – by 2015-2020, or by the time Saudi Arabia goes nuclear. The line of succession after the two would normally include the other sons of ‘Abd al-‘Aziz ibn Sa’ud³ whose ages range today between 79 and 65 (89 to 75 in 2020). Even after this list is exhausted, the next round of candidates (the grandsons of ‘Abd al-‘Aziz ibn Sa’ud) will only come to power in another fifteen years when the eldest (and hence most probable candidate) will be 85 years old.⁴ There is no way of knowing what the physical and mental health of the successor candidates will be, and how that will affect the decision-making process and C3 structure of the nascent nuclear force. This uncertainty will

³ These would include: Mutaib bin 'Abd al-'Aziz (born 1931); Badr bin 'Abd al-'Aziz (born 1933); Na'if bin 'Abd al-'Aziz; (Sudeiri - born 1933); 'Abd al-Rahman bin 'Abd al-'Aziz (Sudeiri - born 1931); Salman bin 'Abd al-'Aziz (Sudieri - born 1939); Ahmed bin 'Abd al-'Aziz (Sudeiri - born 1940); Sattam bin 'Abd al-'Aziz (born 1941); Muqrn bin 'Abd al-'Aziz (born 1945).

⁴ These include: Sa'ud al-Faysal (born 1940); Khalid al-Faysal (born 1941); Mutaib bin Abdallah; Turki al-Faysal (born 1945); Saud bin Abd al-Muhsin (born 1947); Khalid bin Sultan (born 1949); Muhammad bin Fahd (born 1951).

give rise to jockeying among the next line of successors. While in each case there will be a clear understanding regarding the identity of the King, the question of the third in line (a status which will become increasingly relevant given the expectation for a new round of succession) will be increasingly important. It should not be assumed – actually, it would be highly unlikely – that the traditional Saudi regime will leapfrog over the elders to crown a younger generation just in order to guarantee stability for a long period.

During this period, a growing Iranian hegemony – and the almost inevitable Sunni-Shiite tension that will accompany such a process, possible crisis in Iraq after the US withdrawal, and decline in American projection of power, the consultation process which was usually relatively leisurely regarding who will be the third, fourth, etc' in line, will have to be much more condensed and will put strains on the system. The sons who will then compete for the line of succession will try to recruit support. The role of the Bay'a Council (comprising all the above) will become more and more pivotal as the line of succession becomes problematic.

However, since the *'ulama* are formally seen as the “King Makers” – the *Ahl al-Hall wal-'Aqd* (those who bind and unbind [loyalty]) it will be only natural that the princes will compete for their support. Some of the princes are already perceived as close to the Salafi and radical Wahhabi establishment. This will facilitate their outreach to the *'ulama*. Such an enhanced status of the key clerics may inject a new – and until now less central – element in to the decision making process as a whole and the nuclear decision-making process in particular: religious input into the “practical” issues of C3 of the nuclear arsenal. This could potentially become a very disconcerting issue, expanded upon elsewhere (in the chapters on the Jihadi-Salafi scenario, and regarding a possible *Muslim Brotherhood* nuclear armed Egypt), since religious authorities may pursue agendas that are divorced from Western notions of *Realpolitik*, even more so than the current regimes; this would therefore open up severe challenges regarding potential catastrophic miscalculation.

Military Chains of Command

The second level in the chain of command will probably be military forces, which are perceived as the most loyal to the regime. Similar to other regimes in the region, Saudi Arabia maintains two “military” organizations: the regular military, and the Saudi Arabian National Guard (SANG), which can be compared to the Republican Guard in Iraq, or the Iranian Revolutionary Guard Corps (IRGC) in Iran in terms of the regime's reliance on it regarding its security, survivability, and perhaps in future strategic, namely nuclear, assets. The regular military and the National Guard are totally separate in command, planning, deployment and budgeting. The National Guard is at least two thirds the size of the regular army in manpower; it is widely perceived not only as more loyal but also as more efficient, modern and capable, as opposed to the regular military which has often purchased systems which it could not integrate, and became useless.

The political leadership is intimately involved in all key nominations inside the National Guard and the rest of the security apparatuses. High ranking officers in these organizations have proven their loyalty to the regime and come from the “appropriate” background (community, sect, family). Some of them are bound by family links to the royal family, and they all share the interest of regime survival.

Deployment and Custody

Saudi Arabia is a very large country, with broad expanses of territory in which to deploy nuclear weapons. The considerations regarding deployment will have to take into account a number of factors: domestic stability, which will probably be a far more serious consideration in a scenario of an emboldened nuclear Iran on the Saudi doorstep; access of senior commanders and political leaders to the nuclear sites; proximity to existing military bases and bases of the National Guard, and to the SSM deployment and Air Force installations; proximity (or distance) relative to high-value targets, such as the Holy Cities of Mecca and Medina.

In light of these considerations, there is reason to assume that weapons will not be deployed in the following areas: the entire area of the Hijaz (Mecca and Medina); the Eastern province which has a large Shiite – and hence potentially pro-Iranian – population, despite the potential benefit of placing nuclear weapons in an area which the potential enemy (Iran) may be hesitant about attacking. Possible areas of deployment may be in military cities situated in different parts of the country – the King Faysal Military City in the King Khalid Military City near Hafr a- Batin, or the SANG base in Damam, thus indicating that the weapons are directed towards Iran or Iraq; the Tabuk area, positioning which would imply that the weapons are directed towards Israel; King 'Abd al-'Aziz Military City in the Khamis Mushayt area, South-West of the country facing Africa – probably not a high priority option.

It is most likely that the custody of the weapons will be stored separately from delivery systems, and even key components of the weapons may be kept in disassembled manner in nearby installations subject to a senior member of the royal family. Theoretically, such an arrangement may be seen as precluding the assembly of a nuclear weapon without express authorization by the political leadership.

The actual forces that would have custody of nuclear weapons would probably be the National Guard (much like the IRGC in Iran). Nevertheless, the regime may well view nuclear weapons as *sui generis* in terms of the level of loyalty necessary for any individual who comes near them. While the National Guard as a whole is loyal to the regime, it is also devoutly Wahhabi and therefore elements within it may be susceptible to Jihadi-Salafi arguments regarding the moral fabric of the leadership, and the incompatibility between the principles of Wahhabi ideology and the alliance with the West. The concern that this body may contain “Trojan Horses” with sympathy to the Jihadi networks, will increase in regards to nuclear weapons, and will challenge the C3 procedures. This may induce the regime to consider alternative lines of command, based only on officers from the royal family. This could either streamline the chain of command, or contrarily make the C3 procedures even more cumbersome, convoluted and prone to failure.

Authorization and Verification

Unlike authoritarian regimes, Saudi political culture would probably tolerate a quasi-Western procedure for authentication of orders by seconds in command at the political level. The authentication procedure could include the King and the Crown Prince or the Minister of Defense. It is unlikely that the regime would introduce clerics or individuals outside the royal family into such a procedure. The acceptance of the discretion of the King as *wali al-'amr* ("He who commands") regarding the interests of the community – of course assuming he consults on those issues – is traditionally accepted by the clerical establishment, and they will probably support such decisions retroactively.⁵

Technology

The long-time close relationship with the West, especially the US, and the desire to demonstrate that the regime is responsible and reliable, could provide for a hospitable environment for the introduction of advanced Western C3 systems, including for authentication and PALS to prevent unauthorized theft or launch by terrorists, or rogue and renegade elements from within the system. Unlike other countries in the region, the Saudi military is relatively open to use of highly sophisticated Western C3 systems, and is less apprehensive than most of the military establishments in the region that those systems will include backdoors and other such elements which might corrupt them in time of crisis. This would enable Saudi Arabia to use sophisticated PALS as safety measures against tampering or accidental detonation. At the first stage of becoming a nuclear power it stand to reason that the Saudi military will not pre-determine which delivery system will be used for which weapon, and it would probably be hesitant to create such constraints in advance.

Communications may be a different matter: while welcoming the incorporation of advanced Western C3 elements, perhaps more so than other nuclear armed states examined here, it is likely that redundancies would include some of the customary "primitive" means suggested elsewhere. In the Saudi case, as long as it is the Saudi royal family and not a radical Islamic regime, there may be less apprehension that Western allies would corrupt, disrupt or incapacitate the C3 systems, but rather that the Iranians might do so, thus anyway necessitating the establishment of default capabilities.

⁵ A salient example is the religious legitimacy that the clerical establishment provided to accepting US forces during Desert Storm. A *fatwa* was issued which declared Saddam Hussein a heretic, allowing the regime to rely on infidels against another infidel.

Coalition Consideration in Saudi C3 of Nuclear Weapons

Saudi Arabia leads the Gulf Cooperation Council, which purports to represent not only an economic, but a strategic and military framework for cooperation. However, this framework lags far behind any comparable multi-national military cooperation organization in aspects of common C3. Nevertheless, we may assume that a Saudi nuclear capability will be seen as part of the strategic doctrine of the GCC, and such a doctrine may entail deployment of weapons in these countries, especially if there is a perception that it is the Gulf States that are at risk rather than the Saudi Arabian homeland, or if it deemed appropriate that a tactical nuclear capability be deployed there to establish a "tripwire" posture of extended deterrence, much along the lines of NATO strategy in Western Europe at the height of the Cold War. It is unlikely however that Saudi Arabia will allow any of the Gulf countries to take part in the control over the weapons, or put them at their disposal, as the US did in Western Europe under NATO arrangements.

Another potential partner for a nuclear Saudi Arabia will be Egypt. Saudi Arabia may well "outsource" R&D of nuclear weapons to Egypt and even engage the Egyptian in developing a C3 doctrine for those weapons. As opposed to the Gulf States which are perceived by the Saudis as junior partners, the level of cooperation with Egypt in developing and implementing the nuclear doctrine would probably be much higher. Although historically there have been fluctuating moods in the Egyptian-Saudi relationship, competition for supremacy standing in the Arab world, and even violent fistcuffs (in the war in Yemen in the 1960s the Egyptians supporting the republican forces fought the Saudis supporting the royalist forces) – still in latter days there has been a broad base of common interest between the two. Both, at least so long as Egypt is ruled by the current regime, or a continuity one, preservation of the status-quo is a joint priority, and the threat posed by anti-status-quo powers like Iran is a shared worry that could unite the parties.