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THE COURSE FROM CYRUS TO “TAQQIYA.”¹
Iran's 'National Character' and the Current Nuclear Crisis

By
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Abstract

The question of whether Iran will make the bomb is a vexed one. In balance are the unrelenting sanctions, the inexorable push to pariah status and the imminence of military action on the one hand, while on the other, is a chimerical power status that not only serves to satisfy civilizational urges but also fulfils its perceived destiny as the dominant regional player. This article examines the impact of Iran's “national character,” as inferred through the prism of history and contemporary polity, on the current nuclear crisis and thereafter scans the larger strategic context that Iran is faced with. The article concludes with a short-term prognostication.

Keywords: Asymmetric warfare, Break-out capability, Dualism in central authority, IAEA and Iran, Iran nuclear program and proliferation, Iran strategic context, National character, Persian vs. Islamic identity, US 2007 NIE, US-Iran relations.

Introduction: The Weight and Substance of History

In 539 BCE, one of the most successful yet extraordinary sieges in the history of warfare was brought to conclusion when Cyrus the Great invested Babylon. Cyrus was an emperor of a mould that the ancient world had not witnessed. Rather than a head-on against an impregnable yet magnificent fortification, he chose not just the timing (to penetrate the city defences during a period of night long festivities and revelry) but also to harness nature by diverting the Euphrates as it coursed through the city and entering when the river level fell below its walls unchallenged. The city,

historians report, fell without any significant resistance.² Babylon was the Jewel in Cyrus's crown. His Achaemenid Empire now spanned from the Indus in the East to Sardis and Lydia in Asia Minor and Egypt in the West. What characterised Cyrus' empire and gave it distinct features that set it apart from the empires of antiquity was its tolerance, its abhorrence of barbarity and pillage and most importantly the setting up of a humane organisational and administrative core. All this was embodied in training and Persian polity,³ which was sensitive to the historical and diverse cultural context within which the Empire flourished and drew sustenance.

The golden period of Cyrus the Great was followed by a cycle of continuous turmoil when Persia was overrun frequently and had its territorial contours ravaged and reshaped through the centuries. Invaded and occupied by Greeks, Parthians, Sassanids, Ottomans, Arabs, Mongols and often drawn into and distressed by the affairs and struggles of great powers, Persia has tenuously held on to its past and its civilizational identity. The Islamic conquest of the land (633-656 AD), however, marked a turning point in the history of Persia for it not only vigorously introduced a new subjugating spiritual persuasion, but also influenced the rulers' temporal right to make laws. Significantly it fractured the cultural soul of the people. The social dynamics that were set into motion were dominated by an abiding tension between the deep rooted Persian distinctiveness and the new Islamic identity; this stimulus is most apparent in its dealings with other nations and remains to this day.

After a near millennium of occupation and political turmoil, the Saffavid dynasty (1501-1736 AD) reunified Persia proclaiming Shi'a Islam as the ordained religion of the Empire.⁴ Persia during this period underwent a revival; some historians credit the Saffavids for founding the modern State of Iran giving shape to its geographic frontiers⁵ and controlling the day-to-day influence of religion to an extent unknown in other Islamic lands.⁶

By the middle of the 16th century the Saffavid rule had passed its zenith. Lavish life styles, slowdown in economic activity, poor governance, uncontrolled rebellions, insecure frontiers and the territorial opportunities that Persia's imperial rivals (Russian Czars and the Ottomans) saw in the anarchic situation within, all contributed to the disintegration of the empire. A warlord from Khorasan, Nadir Shah, restored some semblance of order when in 1736 he deposed the last of the Saffavids and crowned himself Shah. However his oppressive reign was short lived and once again gave way to a period of internal strife and civil war.

The Qajar dynasty (1796-1925) eventually triumphed but it was Pyrrhic victory for, Imperial Russia, France and Great Britain had used the period of disorder to establish colonial footholds in the region.⁷ Debatably, the defining moment in the history of the Qajars and indeed Persia came in the form of two seemingly unrelated events; the discovery of oil in 1908 by the British in Khuzestan and Churchill's decision in 1911 to change the Royal Navy's primary energy source from coal to oil (keeping in perspective that Britain had abundant resources of coal and the Royal Navy was the lynchpin of their imperial strategy). Intense renewed interest in Persia became the focus of British colonial policy and its control became a fiercely contested issue with the Russians, in what became a part of the "Great Game."⁸ The appropriation of strategic interests was formalised in the Anglo-Russian Convention of 1907 which divided Persia into spheres of influence notwithstanding national sovereignty.⁹ During World War I the country was occupied by British, Ottoman and Russian forces.

Post World War I, the collapse of the Ottoman Empire, the Russian revolution and the extreme instability of the Qajar government, led to a military coup establishing Reza Shah Pahlavi as the dominant figure in Persian polity. In 1925 he crowned himself as the founder of the Pahlavi Dynasty. Reza Shah ruled with an iron hand, he not only introduced modernity but his socio-economic reforms sought to divorce Islam from the temporal. Nationalism, secularism, militarism and authoritarianism were at the core of governance. Although the transformation was radical both in form and content, it was his neutrality during World War II that cost him his throne and not his uncompromising restructuring. In order to enable an alternate route for passage of the "Lend-Lease" oil and supplies to relieve a beleaguered USSR, an Anglo-Soviet force occupied Iran, in August 1941. In a swift campaign, the force opened the "Persian Corridor,"¹⁰ compelled the abdication of Reza Shah and installed his more pliable son, Mohammad Reza Shah Pahlavi, in his place. Iran's brief dalliance with a constitutional monarchy came to a cheerless end when a CIA inspired coup deposed premier Mossadegh from office and replaced his rule by an autocratic Shah with intrusive American support. Modernisation, irrelevant elitist reforms, militarism, secret service high handedness and petro-politics was the grammar of governance. In 1979 the Pahlavi dynasty collapsed under the weight of a popular revolution which turned the capitalist economy on its head and replaced it with Islamic socio-economic policies.

Scars of History on ‘National Character’

The ‘rhythm of a continuous civilization’ of cycles of disintegration and growth¹¹ has not left Iran unscarred. The rallies and routs that its people have been witness to through history have had four significant effects:

- Firstly it has left the body politic fractured between ‘Monarchists’, ‘Islamists’ and the ‘Nationalists.’
- Secondly, it has generated abiding tensions between Persian and Islamic identities the former repelling the latter not only in the idea of an Islamic world state but also the distinction between Arab culture and Persian tradition.
- The establishment of Shi’ism in Persia and the consolidation of Clerical power was a subtext to a dual system of authority.
- Lastly, the inability to reconcile the geographic fact of an ancient civilization surrounded by Arab States (more a result of recent colonial delineation consequent to the breakdown of the Ottoman Empire). This conflicting reality juxtaposed with periods of subjugation, works in contradiction with self images of past pre-eminence.

The factors discussed thus far have left an unerring impression on the Iranian psyche, their cultural values and indeed traits of “national character.” The focus of this article is to examine the impact of Iran’s “national character” as inferred (without meaning to create a caricature of a cultural stereotype and thereafter develop a theory found on it) on the current nuclear crisis and touch upon the larger strategic context that it is faced with and then flesh out an argument that would serve to prognosticate the future.

The Quandary of Iran’s Nuclear Ambitions

The West’s attitude to Iran’s nuclear programme is driven by the USA who has viewed the matter through monochromatic lenses. Two ‘staple’ arguments exist, the first goes like this; “why would a nation that is the fourth largest producer and exporter of oil, sitting on the third largest reserves in the world,¹² actively pursue a

nuclear programme spending billions on nuclear power other than for developing nuclear weapons.”¹³ The second is that Iran has claimed that its nuclear efforts are for peaceful purposes while the US thinks it is for weapons, which of the two is true is now a point of view; however once the capability of enriching uranium is achieved the making of a bomb becomes simple with its downstream proliferation effect on Saudi Arabia, Turkey, and Egypt, making West Asia “more dangerous for all, including Iran.”¹⁴ The problem with these uncomplicated narratives, bereft of nuances is that it fails to account for either the historical context or the political circumstances that is so much a part of the Iran of today.

Iran took its first step in its nuclear enterprise with an agreement on nuclear cooperation with the USA in 1957 under Eisenhower’s “Atoms for Peace” programme. The Shah, in 1960, then contracted a research reactor along with the tools necessary to create his own civilian nuclear agenda; indeed the same tools could be reconstituted to make a nuclear weapon core. Iran was a signatory of the Nuclear Non-Proliferation Treaty in 1968. He followed up with an ambitious plan to build 20 nuclear power reactors; it is not entirely clear whether it was commercial interests that turned a “Nelson’s eye” to the staple, but it was evident that the option to develop nuclear weapons by seeking access to full nuclear fuel cycle was on the cards.¹⁵

What was neither foreseen nor anticipated by the West was the intensity and profundity of the revolution of 1979 that ushered in a populist Islamic Republic. It also brought to the fore the bottomless divide between the Monarchists, the Islamists and the Nationalists. The Monarchists found inspiration in Iran’s imperial past and loyalty to the American-backed Shah marked their creed. Intrinsically they sought to place Islam in a position from where it had no part to play in governance. Islamists, however, believed that they spearheaded a revolution in order to preserve Shi’ism and restore it to its former glory; central to the Islamists is preservation of the Islamic Republic as a divine duty above all other duties of the individual.¹⁶ The Nationalists owe their roots to the failed constitutional revolution of 1906, they neither succeeded in sowing the seeds of secularism nor the foundations for a liberal modern state; the cause of the nationalists was championed by a minority of intellectuals, lawyers and the middle class and their ideology was in direct opposition to both the Monarchists and the Islamists.¹⁷

The US in addition to the NATO were the major powers behind the Shah; the suddenness of the popular explosion and its rapid upsetting of the status quo, failure

of intelligence and the inability to consider the unthinkable of an Iran shorn of the Shah, left US policy-making in disarray, questioning “who lost Iran”? When in truth it was more ‘the Iranian people who had gained Iran.’ What was left was an abiding US perception of the Iranian regime as a gang of glassy-eyed radicals while for the Iranians their sense of the United States as the ‘Great Satan’ went back to 1953 and the overthrow of the Mossadegh government by the CIA. In both capitals, talk of the relationship was tinged with ideology and at times with religious fervour (one recalls Bush’s enunciation of the “Axis of Evil;” how and why, was never clear, since the countries involved neither had an axis of ideology nor purpose). The very notion of engagement represented a moral compromise.¹⁸ The US embassy hostage crisis¹⁹ further deepened and enlarged the chasm between the two. The subsequent ill-fated rescue attempt and the importunate embarrassment that the hostage taking caused, has to this day, jaundiced relations so severely that any correlation has first to surmount a deep mutual suspicion and near absolute mistrust.²⁰

With the advent of the Islamists a curious event occurred, Khomeini deliberately suspended Iran’s nuclear programme on the grounds that it was un-Islamic. However, the 1980-1988 war with Iraq, the use of chemical weapons, the attacks on the two quiescent nuclear reactors at Bushehr (started in 1975 with German aid) and the revelation that Iraq had a covert nuclear weapons programme, prompted the government to reactivate the nuclear programme with a view to develop a deterrent of its own.²¹

Between 1985 and 1999, Iran’s clandestine quest, enabled acquisition of key components for their nuclear weapons agenda from Pakistan’s state-run nuclear weapons programme through the A.Q. Khan network.²² These included blueprints for manufacture of centrifuges along with a starter kit; samples of centrifuge components; instructions for enriching uranium to weapon grade level, all of which contributed in full measure to their pursuit of full nuclear cycle capability.²³ Their unrelenting pursuit led them to China from where they not only secured a nuclear cooperation agreement in 1990 but also secretly imported a metric ton of uranium hexafluoride which ought to have been reported to the International Atomic Energy Agency (IAEA) under its safeguards agreement. From Russia it obtained the necessary assistance to reactivate the reactors at Bushehr and know-how from their grey markets to advance their programme. Germany and the EU provided a host of dual use technologies and precision hardware through the private sector, while Iran on her part

has sponsored clandestine front organisations and used black market procurement networks to fuel its nuclear programme despite the prevalence of regulatory regimes and a tranche of sanctions.²⁴

By 2007, a cautious US intelligence establishment (cautious on account of the calamitous consequence of America's National Intelligence Estimate (NIE) on Iraq of August 2002 which led to invasion in 2003 without a shred of credible evidence of an active nuclear programme) made public on 3rd December 2007, key judgements of NIE 2007 on Iran. The estimate had come to two important conclusions that would rebut the argument that Iran harboured an active nuclear weapons programme and at the same time, perplex allied nations; firstly, that Iran was racing ahead to produce the fuel that would give it the capability to build a bomb and secondly, it had suspended all of its work on the actual design of a weapon in late 2003.²⁵ The year 2003 is particularly significant for it cannot be a coincidence that the cessation of weapon design effort comes after the invasion of Iraq, just two months post interdiction of the *BBC China* with its cargo of uranium centrifuges bound for Libya, and about when the A.Q. Khan nuclear black market network was unravelling and America's threshold for a strike on Iran was relatively dropping. Whether suspension was the aggregation of these events or the product of an over chastised and unbalanced US intelligence establishment is not entirely clear; yet the undeniable effect of the estimate was to release the pressure on the Iranians to make transparent their nuclear programme. Circumstantially, Washington's apparent acceptance that Iran had suspended weapon design activities (rightly or wrongly) had two important ramifications:

- Firstly it placed Iran within the NPT umbrella which reserved the right of signatories to have a civilian full fuel cycle capability. It is equally possible that Iran had indeed completed design work so that all components of the mosaic that makes for weaponizing are in place. The Iranian nuclear programme once again thrived in an ambience of ambiguity (which falls into a pattern - '*taqqiya*'). Today they have a convincing capability to build a weapon and their decision makers, the option to take the plunge from a civilian nuclear programme to a military one.

- Secondly, the release in pressure and the probability of a nuclear armed Iran sent alarm bells ringing in Israel and the Arab states particularly Saudi Arabia and the Emirates. Ironically it was one of those moments in history when the Arabs and the Israelis were on the same side.²⁶

After years of refusing to negotiate with Iran, the US in 2009 joined Britain, France and Germany in an attempt to provide incentives in return for cessation of enrichment. The negotiations ended in a stalemate. In September a public revelation was made by the US, Britain and France of the existence of a secret uranium enrichment site underground at Fordow near the holy city of Qom. This brought into question Iran's intentions, was it to construct a covert 'breakout' facility where it could, without strictures, process weapon grade uranium? The fact that they were obliged to declare the facility at the time of starting construction further compounded distrust of Tehran's intentions.

Even while diplomatic negotiations were in progress the UN Security Council between 2006 and 2010 passed four rounds of economic sanctions for Iran's failure to suspend enrichment and cooperate adequately with the International Atomic Energy Agency. In addition to UN sanctions, America and the UK had their own array of incisive sanctions which included making it dangerous and indeed ruinous for banks and financial institutions to lend money to Iran and increasing the risk factor to those who did business with Iran. Sanctions were grinding the Iranian economy to a meltdown, yet the nuclear programme stayed its course.

In November 2011, the IAEA released its latest report on Iran's nuclear programme, suggesting that Iran is secretly working to obtain a nuclear weapon. The report documents alleged Iranian testing of explosives, experiments on detonating a nuclear weapon, and work on weaponisation. Iran may have dismissed the claim but in the wings is an extremely nervous Israel, perceiving a very clear and existential threat posed by the nuclear programme. Notwithstanding, Iran undoubtedly would have noted the West's approach to Saddam and Gaddafi as opposed to Kim Jong Il and it is reasonable to assume that they have come to the conclusion that it was the North Korean nuclear arsenal that made the difference. From this perspective it makes strategic logic for Iran to do nothing to change the West's belief that they are very close to weaponizing if not already in possession of a small nuclear arsenal.

In the meantime the Israel-US combine has already let loose a covert war. On the morning of 29th November 2010 the Iranian nuclear physicist Majid Shahriari was working his way on Artesh Street in central Tehran when a motor cycle pulled up alongside his Sedan, stuck a limpet mine and sped away. Within moments an explosion left the scientist dead. Some twenty kilometres northward and a few minutes later another motor cyclist drove up to the car of Fereydoun Abbasi Davani and placed his explosive, only this time the victim managed to get away. Abbasi was a ballistic missile scientist. On the same day President Ahmadinejad announced that centrifuges used to enrich uranium had been damaged in cyber attacks.

The nature of war that we are currently witness to in Iran does not readily fall into any mould. Covert action, cyber attacks and political alienation reinforced by economic sanctions and intrusive nuclear inspections on the one hand, has unleashed globally disruptive nationalism on the other. A far more dangerous effect is what weak nations turn to in despair: terrorism. The recent spate of bombings in Tbilisi, New Delhi, Bangkok and Burgas targeting Israeli tourists would give notice that Iran may have joined battle. The imponderable here is what form escalation will take, will it be air strikes restricted to the four major nuclear facilities at Natanz, Fordow, Arak and Isfahan; a continuation of the covert war targeting both key personnel and nuclear infrastructure or large scale strikes on military and economic targets. Whatever form escalation takes, what is a certainty is collapse of Iranian oil supplies, an upsurge in terror attacks which may just embrace the nuclear dimension, and a period of great instability in the region.

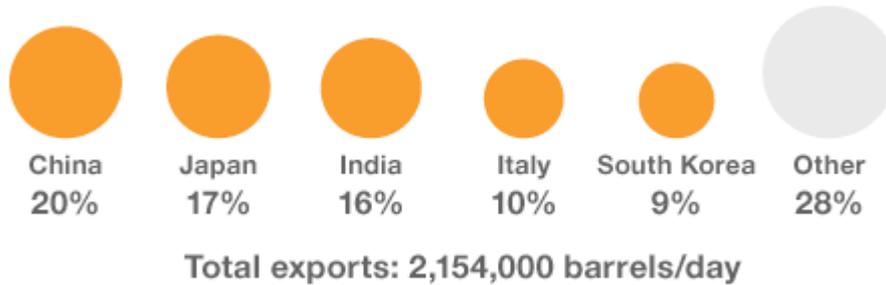
Impact of Sanctions on Energy Security and the Strategic Context

We have thus far examined the nuclear quandary that both Iran and the West are faced with, on the one hand is the right to enrich while on the other is the repudiation of the reasons to enrich. We note the graphic statement of Iran's oil export destinations in Table 1, which provides a perspective on the impact of universal sanctions on energy security. When viewed against the total world consumption of 86 million barrels/day (mbl/day), Iran's exports amount to about 2.5% of global needs. However this does not give a wholesome picture of the situation. The largest consumer of oil, the USA, which accounts for over 25% of global consumption does not import any oil from Iran; 20% is destined to European consumers of which close

to 15% goes to the weaker economies of Italy, Spain, Greece and Turkey for whom alternative sources are being put in place.

Table 1

Iran's top oil export destinations 2010



Source: US Energy Information Administration

Control and restoration of oil supplies from Libya and Iraq to markets in the west and specifically to wean EU dependence on Iran not only provided the strategic logic for the recent wars there, but also presents a convincing argument for a possible war in Iran. It is therefore no surprise that of Libya and Iraq's global exports of 1.4mbl/day and 2mbl/day, 20% goes to the EU which amounts to 680,000bl/day against 430,000bl/day that was coming from Iran (source: Global Trade Atlas and Energy Information Administration, USA). Clearly energy insecurity stares down only the Eastern economies.

Asymmetric warfare refers to the rigours of a weaker adversary attempt to counter a stronger military player by adopting alternatives to a simple head-to-head contest. Iran has sought to develop a unique denial force based largely upon flotillas of fast attack crafts backed by conventional and midget submarines and a variety of vessels capable of laying mines. These are supported by shore-based anti-shipping missiles, aircrafts, rockets and artillery all with rudimentary command and control. The theoretical problem with asymmetry in the Iranian context is that it draws inspiration from guerrilla land warfare doctrines which in the maritime domain translates to inability to go beneath the surveillance blanket; counter precision strikes or threaten versatile command and control structures and fatally so, to break through enveloping manoeuvres.

Three issues have to be addressed when assessing Iran's ability to close the Gulf as threatened periodically. Firstly, the attitude of global shipping to disruptions;

if the 8 year ‘tanker wars’ of 1980 to 1988 is any thing to go by despite 544 attacks during that period and 400 human casualties, after an initial 25% drop in traffic, the shipping industry adjusted to the risk and quickly resumed normal operations. Second is Iran’s military potential to fulfil the task. Neither are they equipped materially nor technologically for any sustained denial operations. What they could achieve is small scale disruption in an effort to put pressure on the other Gulf States. Even this will have to be weighed against the probability of a massive US led conventional retaliation that would quickly neutralize their war waging capacity and cripple their economy. Thirdly and most significantly is that not only have the sanctions begun to bite, but Iran is itself critically dependent on oil revenues.²⁷

Strategic savvy will suggest that Iran’s ability to close the Strait of Hormuz is hardly a foregone conclusion (despite Vice President Rahimi’s most recent declaration that “not a drop of oil will pass through the Strait”), particularly so, in the light of the mounting US presence in the Gulf theatre. Under the circumstances the question really is, is Iran willing to commit economic, military and political hara-kiri? And what of the strategy of despair: terror? Given the situation, this too would invite disproportionate retaliation as indeed Iran would have noted the devastation caused in Libya, Iraq and Afghanistan.

Prognostication as a Conclusion

The perils of prognostication are palpable, yet one draws inspiration from Keynes when he suggested (while prognosticating) that he “...would rather be vaguely right than precisely wrong”.

The problem for Iran with a nuclear breakout using safeguarded facilities and rapid translation to attaining a de-facto nuclear weapon status is, the high probability of early detection, which would invite a military strike on all known nuclear infrastructure. One way to avoid a strike and yet persist with the programme is to maintain an entirely covert parallel programme. The other is to divert low enriched uranium from safeguarded facilities (Natanz) to a clandestine enrichment plant to achieve weapon grade fuel. The decision to go one way or the other will not be the outcome of deliberate decision making; on the contrary it may come as a desperate reaction to the worsening internal conditions or just be a populist act swayed more by historical swagger and visceral antagonism. In the latter eventuality, the Islamists, the

Monarchists and the Nationalists may find common truck. It is this will to perceived self eminence that draws strength from the past.

The episode of the 2007 American NIE on Iran and its divisive effect on the Islamic world is a telling occurrence in the clash between Persian distinctiveness and the Islamic identity. After all, which other historical event has brought the Arabs on the same side of the fence as Israel? Therefore to bank on the Islamic world to influence Iranian decision making is and will continue to be a pipe dream.

In 2008, with sanctions severely hurting, oil revenues at an all time low (which earlier contributed 80% of GDP) and practically all major global players ranged in opposition, or at least not with it, conventional wisdom would have suggested that the Ahmadinejad regime along with the clerical order was on the verge of imploding. But that did not happen despite the pressures and privations that inflicted the nation and the people. In fact, Ahmadinejad was re-elected to the presidency in 2009, the religious establishment came through unscathed and the Monarchists and the Nationalists were marginalised. The explanation lies in the separation and yet symbiotic relationship between Shi'ism and the political Islamist order, the two existing in mutual reinforcement against what was seen to be the common oppressor. This correlation goes back historically to the establishment of Shi'ism and how the consolidation of clerical power was a part of a dual system of the power of the State under the Saffavids.

The question of whether Iran will make the bomb is a vexed one. In balance are the unrelenting sanctions, the inexorable push to pariah status and the imminence of military action on the one hand, while on the other, is a chimerical power status that not only serves to satisfy civilizational urges but also fulfils its perceived destiny as the dominant regional player. And what of the other Gulf States and neighbours, particularly Saudi Arabia, which on 10th February 2012 gave notice of its elaborate nuclear programme and did not rule out a weapons agenda?²⁸ While this may have a domino effect on regional proliferation, it could also develop into a deterrent relationship in-region through the removal of nuclear inequity (an idea whose time may well have arrived). The difficulty with a resolution that takes such a tack is the conflict that it will arouse with the status quo powers that are more than likely to ensure that the current balance is not upset even if it means resort to a conventional clash. The more pressing anxiety is the coming of the next nuclear age when erosion of proliferation regimes presents increased probability of clandestine networks

delivering the bomb to non-state actors, at which time prevention and pre-emption, are the only rejoinders.

Despite the Byzantine nature of things, Iran has persevered with the belief that the most credible way to counter and buttress non-intervention in regional affairs is to attain nuclear weapon status. Notwithstanding this conviction, she has skilfully avoided a head on situation with the USA. Iran has also observed certain clear redlines when supporting militias in the Middle East in terms of hardware supplied and the groups supported. In their nuclear policy, Iran has found the means to challenge the USA in the latter's contradictory approach to countering proliferation; of invading Iraq, cutting a deal with Pakistan, imposing sanctions on Iran, seeking a regime change in North Korea and indeed, turning a blind eye to Israel. In this unpredictable setting, nuclear weapons or even an unambiguous break out capability not only provides balance to a strategic posture but would also extract more concessions and more incentives from America and the West. The fact that Iran has progressed uranium enrichment levels from 3.5% to near 20% and has stockpiled over 1000 kg of low enriched uranium,²⁹ while within the stipulations of the NPT, would suggest that Iran may well build for itself an unremitting 'break out' capability stopping a step short of weaponising and yet at the same time giving notice of a looming potential. (5339 words)



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The Admiral retired on 30 September 2009, after nearly 45 years in uniform. He is today settled with his wife in the Nilgiris and passes down his operational and strategic experience through articles and participation in seminars that deal with his primary areas of expertise. He has contributed to various professional journals and continues to support his Alma Mater in Kochi through his writings. He has lectured at the Staff College, Higher Command College, the United Services Institute and the National Maritime Foundation. He is a member of the adjunct faculty of the National Institute of Advanced Studies and has tenanted the Admiral Katari Chair of Excellence at the United Services Institute. Internationally, his participation in the Track II Ottawa Dialogue, the Bellagio Carnegie Endowment discussions, the Indo-Sino-Pak trilateral dialogue, Chaophraya Dialogue and the papers he has presented there seek to provide a new paradigm for nuclear security on the sub-continent.

End Notes

¹ From Shi'ite theology; would suggest deception for a just cause. Taqqiya in concept means to protect oneself or those under one's care from harm. Similar ethical tenets are to be found in other religious texts including those of Hinduism, Judaism and Confucianism. The idea is driven by a non-binaristic approach to ethical obligations in extreme circumstances.

² 'Cyropaedia of Xenophon; The Life of Cyrus the Great'. The siege of Babylon Book 7, Section 5 (7.5.1 to 7.5.70)

³ Ibid 1.2.15 "...Thus the elders form a college every member of which has passed through the full circle of noble learning; and this is that Persian polity and that Persian training which in their belief, can win them the flower of excellence".

⁴ Savory R, 'Iran under the Saffavid's, Cambridge, UK, 1980.

⁵ Aksin, Somel Selcuk, Historical Dictionary of the Ottoman Empire, Scarecrow Press Inc. 2003, pg 306. Treaty of Zuhab 17 May 1639, was an accord signed between the Ottoman and Saffavid Empires demarcating and dividing disputed territories.

⁶ Amir, Said Arjomand, 'The Turban for the Crown' the Islamic revolution in Iran, Oxford University Press, pg12.

⁷ The treaty of Turkmenchay (21 Feb 1828) recognized Russian suzerainty over the Erivan Khanate.

⁸ Hopkirk, Peter. 'The Great Game': The Struggle for Empire in Central Asia, pg 1-12. Kodansha International 2002.

⁹ Palmer and Colton. 'A History of the Modern World', seventh edition, pg 698. Alfred A. Knopf New York, 1991.

¹⁰ Coakley, Robert W. 'Global Logistics and Strategy' Chap 9: The Persian Corridor, Washington 1955.

¹¹ Toynbee J. Arnold. A Study of History, Abridgement of Volumes I-VI by DC Sommervell pg 360-368. Oxford University Press New York 1950.

¹² All rankings from information compiled by the US Energy Information Agency, 2009/ 2010.

¹³ Sanger, David E. 'The Inheritance', Harmony Books New York, pg 33.

¹⁴ Ibid, pg 63.

¹⁵ The former head of the Atomic Energy Organisation of Iran (AEOI), Akbar Etemad, revealed to Le Figaro, the French right wing newspaper, in 2003 that a special research team had been tasked with providing all technologies necessary to build a bomb.

¹⁶ Amir, Said Arjomand, 'The Turban for the Crown' the Islamic revolution in Iran. Oxford University Press pg 183.

¹⁷ Ibid, pg 72.

¹⁸ Mohamed ElBaradei, 'The Age of Deception'. Bloomsbury Publishing London 2011, pg 241.

¹⁹ On 04 November 1979, the US embassy in Iran was stormed by Islamist students and 52 Americans were held hostage for 444 days. To the USA's abiding embarrassment the episode included a disastrous rescue mission (Operation 'Eagle Claw'). The Algiers Accord of 1981 ended the messy affair with the release of all hostages on 19 January 1981.

²⁰ Amir, Said Arjomand, 'The Turban for the Crown' the Islamic revolution in Iran. Oxford University, pg 128-133.

²¹ Chubin, Shahram, "The Politics of Iran's Nuclear Program" in *The Iran Primer*, United States Institute of Peace, <http://iranprimer.usip.org/resource/politics-irans-nuclear-program>. 2010

²² *Nuclear Black Markets*, International Institute of Strategic Studies a net assessment, pg 65-91. Arundel House, London 2007.

²³ The 8-step full nuclear fuel cycle comprises Mining, in nature uranium ore contains only 0.7% of the fissile isotope U-235; Milling, the ore is processed to produce 'yellow cake' a uranium concentrate; Conversion to uranium hexafluoride gas (UF6) the feedstock for uranium enrichment in a centrifuge; Enrichment, the centrifuging process to increase concentration of U-235; Fuel fabrication, the making of fuel rods; Storage, after use in a reactor the depleted nuclear fuel mostly U-238 is stored in a spent fuel pool it contains 1% fissile plutonium; Reprocessing-the recycling of spent fuel for separating plutonium.

²⁴ *Nuclear Black Markets*, International Institute of Strategic Studies net assessment, pg 51-53. Arundel House, London 2007.

²⁵ Sanger, David E. *The Inheritance*, Harmony Books New York 2009, pg 4.

²⁶ Ibid, pg 91.

²⁷ Author's articles published in the May 2012 issue of the DSA and globaldefencenet.com

²⁸ As quoted by Saudi Prince Turki al-Faisal in Webb, Susan, “Saudi Arabia going Nuclear—Why no Uproar?” *peoplesworld.org*, 10 Feb 2012.

²⁹ Albright, David ; Stricker, Andrea and Walrond,Christina. “*ISIS Analysis of IAEA Iran Safeguards Report, 25 May 2012*”.