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Staring Down an Abyss¹

Prospects of bringing nuclear deterrent stability in the Sino-South Asian region

by

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The Nuclear Motive

Nuclearisation of the South Asian region was driven by forces that were vastly different from that which resulted in the apocalyptic human tragedies of Hiroshima and Nagasaki. The first four nuclear weapon states built their arsenal with a war-fighting logic which led to strategies that not only propagated the first use but also conventionalized the weapon, with the perverse belief that control of escalation was within their means. The uninhibited intrusion of technologies gave to them the power to obliterate the world many times over in a 'Strangelovesque²' parody that mocked life.

Motivation for the Sino-Indo-Pak arsenals was more by the need for an impermeable defensive shield that took inspiration from Brodie's aphorism that nuclear weapons had changed the very character of warfare with war avoidance rather than waging being the political objective. India's nuclear doctrine evolved from four guiding norms. The first was that the nation would not be the first to use nuclear weapons. The second, a nuclear first strike would invite an assured massive retaliation. There was a third equally critical unwritten faith and that was, under no circumstance would the weapon be conventionalized. The final canon, it is significant to note, developed in the time of the Cold War and yet remained uniquely divorced from the one norm that characterized that war, that is, the illogical faith that a nuclear war was not only wageable but also winnable. This last principle matured into an iron cast division between the Controller of the weapon and its Custodian.

The decision not to conventionalize, was based on circumstances unique to the Indian State. India's nuclear program was conceived and executed through a techno-political decision made in 1948, which resulted in the establishment of the Indian Atomic Energy Commission. From then onwards through the 1974 euphemistic peaceful nuclear explosion and the near quarter century of dithering, till India declared herself a nuclear weapon state in 1998, the agenda was driven by a techno-politico-bureaucratic nexus. The paradox was the absence of formal military involvement in the nuclear establishment till after 1998. Significantly, no other nuclear weapon state has embarked on a weapons program without the direct and persistent involvement of the military. All this was a direct consequence of the post partition aberration in higher defence management which suffered from a misplaced trepidation of military control of the state and the flawed belief that civilian control of the military not only implied superior dual control by the politico-bureaucratic alliance but also a self fashioned conviction that military matters were essentially of execution and had little to do with policy making or strategic planning. It was not till 1999 when the Kargil review committee and the consequent group of ministers reviewed national security in its entirety, that substantial changes to higher defence management in India were put in place. The institution of the Strategic Forces Command and its Commander in Chief along with a doctrine to operationalise the deterrent were amongst the salient reforms.

Of the techno-politico-bureaucratic nexus it must be said that even before the articulation of the nuclear doctrine it never sought a conventional role for nuclear weapons. Whether this strategic orientation was by instinct, design, by tradition or an innate fear of the power of the military is really not germane to our study; what it did do was to create a distinctive approach to the entire process of operationalising the deterrent, for it played a decisive role in separating Controller from the Custodian. Viewed from a different perspective this last feature expressed the conviction that, between nuclear armed antagonists, the use of nuclear weapons sets into motion an uncontrollable chain of mass destruction that not only defies manipulation but also obliterates the very purpose of polity.

Nuclear Multilateralism

Another divergence from the cold warriors was an understanding of the changed nature of the nuclear equations of the day when no individual correlation could operate without external influences. Nuclear multilateralism introduced pulls and pressures that were unpredictably different from the two state face-offs of the past. In the multilateral situation motivations of the one had a downstream effect on the other nuclear weapon states which was neither precisely predictable nor could be rationalized. In the backdrop of avoidance being the leitmotif the need therefore was for the faith in the nuclear calculus where intentions, rather than capability alone, weigh in with greater influence.

Underlying nuclear multilateralism is the need to redefine how best to achieve a stable deterrent relationship given the thorny linkages that exist between the actors. Clearly now a perceived destabilizing act by the USA would agitate Russia which would in turn affect China, make India nervous and cause tremors in Pakistan. In this altered plurality the true enemy is the dynamic that rocks the equilibrium. The search for stability has propelled our doctrines to find answers by creating arsenals that are credible at a minimum level and the discernable determination to implement doctrine. The essence of it all was not just to persuade oneself of a deterrent at hand but also to convincingly project the consequences of the use of nuclear weapons would indeed be 'more pain than gain'. The reasonableness of this understanding is based on orthodox belief that leadership is rational and willing to engage in interest benefit calculations when making decisions that have strategic ramifications. Acceptance that destruction would be on a mass scale and would be mutual is central to this logic. However, the changed situation in the region brought about by Islamic fundamentalism and the increasing role that non state entities and terrorists (at times by design and at others by default) play would raise a big question mark on this basic understanding of the prudence that exists in nuclear weapon control.

Nuclear Doctrine

India's nuclear doctrine was made public on 4th January 2003. The doctrine presents two perspectives. The first part deals with 'Form' with nuclear exchange avoidance and minimality as governing considerations. Sensitivity to the multilateral

nature of settings and yet not show a diffidence to the existential nuclear challenges that marked the regional scenario; was intrinsic to policy. Credibility as a function of surveillance, effectiveness, readiness and survivability completed the structure. The doctrine provided for alternatives and a guarantee that the second strike would cause unacceptable damage. Also included are certain philosophical goals that underscored belief in the ultimate humanity of things.

The second part of the doctrine deals with substance, with operationalising the deterrent and Command and Control as the main themes. Development of the 'triad' is so structured that credibility was neither compromised nor readiness undermined. As mentioned earlier a clear division is made between the Controller and Custodian with multiple redundancy and dual release authorization at every level. Command of the arsenal under all circumstances remains under a political prerogative with comprehensive alternatives provided for the nuclear command authority. To recapitulate the salient features of the Indian nuclear doctrine are listed below:-

- Nuclear weapons are political tools,
- The nuclear policy follows a 'Punishment Strategy'. Its governing principle would be No First Use.
- Retaliation to a first strike would be massive and would cause unacceptable damage.
- The use of chemical, biological or other WMD may invite nuclear option.
- Nuclear weapons will not be used against non nuclear weapon states.
- A unilateral moratorium against nuclear testing and continued stringent controls over proliferation.
- The goal of global nuclear disarmament remains.

As mentioned earlier, a deterrent relationship is founded entirely on rationality. On the part of the deteree there is rationality in the conviction of disproportionate risks and on the side of the deterrer rationality of purpose and transparency in confirming the reality of risks. The exceptional feature of this cognitive transaction is that the roles are reversible with the crucial proviso that it is in the common interest to maintain

equilibrium in the relationship. The determinants of a durable deterrent co-relation are for the association to withstand three pressures that are an abiding feature of contemporary politics in the region:

- The deterrent must be stable by which is implied the doctrinaire underpinnings; command, control and arsenal stewardship must be unwavering and transparent. Inconsistencies and opacity promotes unpredictability, a speculative bulge in the arsenal or the temptation for pre-emptive action.
- Crisis stability entails the abhorrence of a predilection to reach for the nuclear trigger at first provocation. In this context decision time must give adequate leeway for recognition of having arrived at a 'redline' through transparency and unambiguous signaling.
- Technological intrusions place the planner on the horns of a dilemma. As a rule technology's impact on the arsenal and command and control systems serves to compress time and increase overall effectiveness. This intrusion is inevitable. What is undesirable is that it also invites covertness whereas its impact demands transparency.

The three dynamics above have a common thread which could be exploited to enhance stability. This common thread is the need for transparency. During the cold war the two protagonists managed these dynamics through the brute power of the arsenal, dangerous tripwire readiness and incessant provocative deployment. Any solution on these lines is neither exceptional nor tenable and from a contemporary point of view ludicrous. If stability is the aim then clarity and precision in mutual dealings provide the opportunity to develop and solidify the deterrent relationship.

The Tri-Polar Tangle

A singular feature of deterrent relationship in the region is its tri-polar character. As is well known today, it was the collusive nature of the Sino-Pak nuclear relationship which fructified in the latter's nuclear weapons program. It is in this context that the

Sino-Pak nuclear weapons program must be seen as the two faces of 'Janus.'³ Therefore it is logical to conclude that there exists a doctrinal linkage between the two which permits a duality in China's nuclear policy; a declared No First Use can readily fall back on Pakistan's developing First Use capability as far as India is concerned.

No scrutiny, of any consequence, of the regional nuclear situation can avoid looking at the internals of Pakistan. The country today represents a very dangerous condition that has been brought about by the precarious recipe that the establishment has brewed in nurturing fundamentalist and terrorist organizations as instruments of their military strategy⁴. The extent to which their security establishment has been infiltrated is suggested by the recent attacks on PNS Mehran, Kamra airbase, the assassination of the Punjab Governor and the extent of support that the act garnered in civil society⁵. Such a state of affairs does not inspire any confidence in the robustness of their nuclear command and control structures⁶. Also the current 'plutonium rush', development of tactical nuclear weapons and the uninhibited growth of their arsenal do not in anyway enthuse belief in their ability to exercise rational stewardship over their nuclear stockpile. The direction, in which Sino-Pak collusion is headed, will to a large extent, influence the nuclear equilibrium in the region. If the alliance was intended (as it now appears) to nurture a first use capability in order to keep nuclear stability on the boil then the scope for achieving lasting constancy is that much weakened. The current political situation in Pakistan however presents a frightening possibility which is in nobody's interest to promote, more so, since terrorist elements have sworn to obtain nuclear weapons⁷. The fact that there is global realization of the gravity of the situation was underscored when President Obama addressed, what he termed "a big concern" (during his interviews with Bob Woodward of the Washington Post while reviewing the Afghan War strategy between March to November 2009), "*A potential game changer would be a nuclear weapon in the hands of terrorists, blowing up a major American city. Or a weapon of mass destruction in a major American city. And so when I go down the list of things I have to worry about all the time, that is at the top, because that's one area where you can't afford any mistakes. And so right away, coming in, we said, how are we going to start ramping up and putting that at the centre of a lot of our national security discussion?*"⁸ There are growing apprehensions that elements in the military either lack

the will to combat the insurgency within that country or in a worst case situation actively get involved in the transfer of nuclear hardware to the jihadists. The inexplicable disappearance of key nuclear scientists not to mention those who had recorded liaisons with the Al Qaeda⁹ remain seriously alarming episodes.

Against the reality of conventional war with its limited goals, moderated ends and the unlikelihood of it being outlawed in the foreseeable future, the separation of the conventional from the nuclear is a logical severance. Nuclear weapons are to deter and not for use; intent is the key; coherence and transparency are its basis. This must remain an abiding principle that ought to push leadership into a situation which abominates its use. However given the politics of the region, historical animosities and the emasculated nature of civilian leadership in Pakistan, the dangers of adding nuclear violence to military perfidy is more than just an aberrated faith. Stability in this context would then suggest the importance of reinforcing assured retaliation to nuclear violence, at the same time to harmonize with certain foundational rules of conduct.

Stresses on Deterrent Stability

There is an entire range of factors that influence stability of a deterrent relationship but those that disproportionately prevail are what will be discussed in the ensuing paragraphs. We begin with the strategic environment and its external dimension. A single hyper power marks the global situation in the wake of the curtains coming down on the Cold War. In addition, the trends of globalization which technology and the mushrooming of democracies has ushered in, makes for the very concept of nation states in terms of their absolute sovereignty a shaky proposition. Three very obvious inconsistencies remain an abiding source of friction for a sovereign nation within the international system. In fact it makes a mockery of the individual nature of a state's power and its interests. These three maybe summarized as follows:

- The internal dimension of sovereignty encourages centralism at a point in history when more plurality and democracy is demanded.
- Sovereignty in its external avatar makes inconceivable international laws and universal regulations yet it is precisely the opposite that globalization requires.

- Given the vast differentials in military and economic power, sovereignty in terms of supremacy of state remains a chimerical concept. This is vitiated by the networked and globalized nature of the contemporary situation.

Centralism, the absence of plurality and the vast disparity in economic and military power are all symptomatic of the situation in the region. Add to the equation a defacto military center of power that has persisted in the use of non-state actors in pursuit of its 'national interests'¹⁰ and the portents of instability become more than apparent. The impact of these contradictory forces taken together not only makes for an unstable relationship, but also brings in a measure of nuclear multilateralism on account of the chain reaction that is set into motion in an action-reaction situation. While the lone hyper power would seek to control the action-reaction predicament, the other poles in the global scenario would seek advantage in it. The fact of the Sino-Pak collusion in the nuclear field is one such manifestation while the NPG waiver is another symptom of the same. The necessity is to cause strategic equilibrium in a manner in which the realities of the regional situation interplays with the external environment. The one virtue that would serve to bring about balance is transparency.

The next consideration is internal pulls and pressures that the protagonists are subject to. These often defy rationality and tend to serve an agenda that loses sight of purpose of the nuclear deterrent, that is, nuclear war avoidance and, as has been stated by the governments, a repugnance for a nuclear arms race in the cold war mode. Unfortunately, the effect of these internal dynamics is not just to enlarge the arsenal but to drive it in a direction that is neither predictable nor over which controls exist.

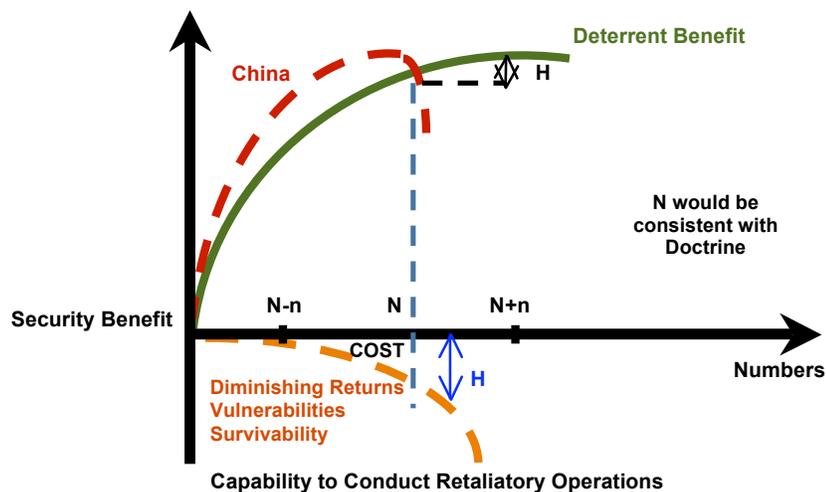
- The impending mounting of nuclear warheads on the Babur cruise missiles, the work in progress of arming conventional submarines with nuclear tipped missiles are cases in point which do not in anyway uphold stability of a deterrent relationship. Additionally they do not conform to any strategic or doctrinal underpinnings (whose goal is nuclear war avoidance). Far more disturbing is Pakistan's declared policy to employ non-state actors¹¹ as an essential part of their military strategy. Given the fact that both control and custody of the nuclear arsenal is resident with the military and complicity with

terrorist organizations such as the Lashkar-e-Tayyiba is an indispensable part of their gambit, the probability of a failure of orthodox command and control (as conventional wisdom understands it) is cataclysmically high. Such a state of affairs hardly engenders confidence in a deterrent relationship remaining stable. Add to this cauldron the impending operationalising of tactical nuclear weapons and you have the nightmare morph into reality.

“How Much is Enough?” and the Philosophy of Avoidance

Security anxieties that plague the region are fed on a staple of historical suspicions, absence of trust and a stultifying and obsessive paranoia. It places before the planner a lopsided and unbalanced ‘failure conundrum,’ having the potential to spur ‘speculative bulges’ in stockpile of fissile material and in the arsenal all in search of an answer to that open ended inscrutable question of ‘how much is enough?’ Logic for numbers may be found provided the strategic underpinnings that govern the development of the arsenal are kept verifiably transparent. One such logic to cap arsenals is graphically illustrated below:

**FIGURE 1: HOW MUCH IS ENOUGH?
SECURITY BENEFIT OF NUCLEAR WEAPONS**



Quite obviously the graph, bereft of numbers, is more indicative of a line of reasoning than of a mathematical formulation. The framework uses subjective concepts such as ‘diminishing returns in security benefits’ as determined by vulnerabilities, survivability and the economics of maintaining a large arsenal. The rub, however, is really that this construct is more readily adaptable by states that have abjured the first use of nuclear weapons and not by those that consider nuclear war fighting as an integral part of their military strategy. Also, for reasons of vulnerability of vector and in order to provide credibility to the arsenal and its development, a No First Use (NFU) nation’s nuclear armory follows a very predictable trajectory. Significant to this trajectory is the assurance of massive retaliation. The graph makes certain assumptions:

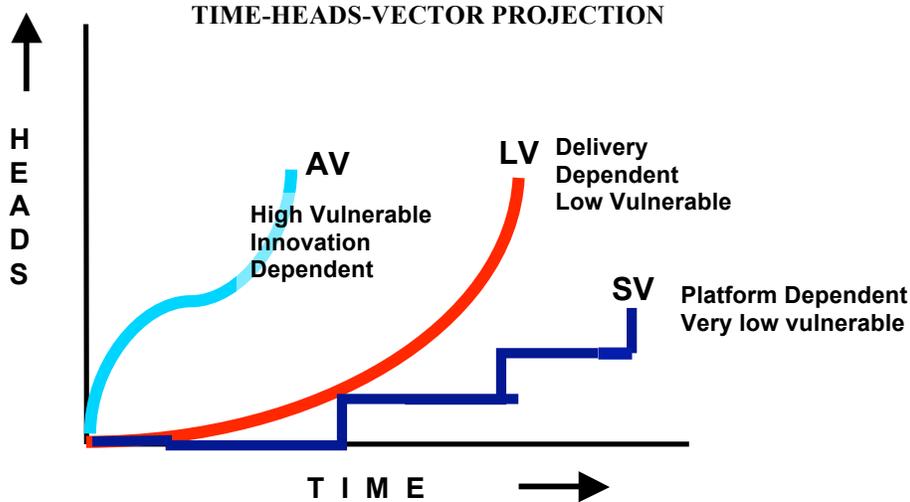
- Strategic underpinning and nuclear doctrine of the protagonist stipulates NFU.
- In the event of a breakdown in deterrent relationship and recourse is taken to or a nuclear exchange contemplated, then the nature of the arsenal is so sculpted that its survivability is not just guaranteed, but retaliation is assured and is massive in its destructive potential.

The curves themselves are, once again, suggestive in form; yet planners will note that given units, they will define the arsenal and the eventual retaliatory weight. The evolution in form of an NFU arsenal is graphically depicted below:

FIGURE 2: THE EVOLUTION OF NFU ARSENAL

Parameters: NFU, 2nd Strike Survivability

Probabilistic Analysis: Vulnerability, Retaliatory Weight



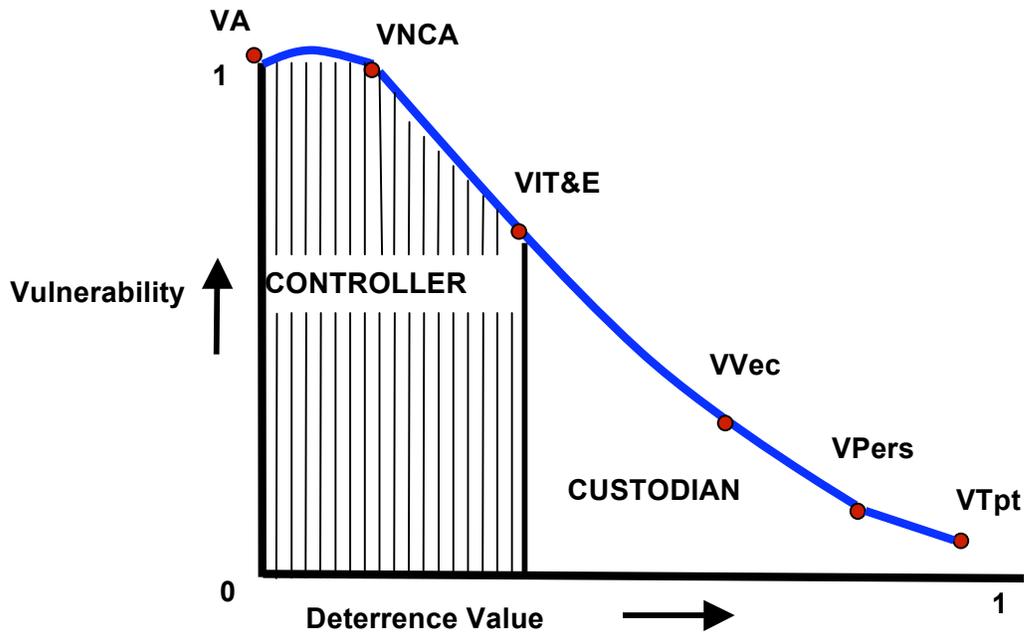
Legend: AV, LV & SV – Air, Land and Submarine Vector

Source: Author

Separation of the Custodian from the Controller of nuclear weapons is another feature that underscores the philosophy of 'avoidance' which characterizes the very different and unusual nature of the weapon; it also provides a basis for strategic Confidence Building Measures. Intrinsicly such an approach is robust in its abiding commitment to avoidance. When viewed against a situation where custody and control are resident in the same military 'trigger finger' a whole set of contradictions appear in terms of 'intentions-to-use'. The separation of custodian from controller, vulnerability of the various elements and impact on deterrence is depicted below:

FIGURE 3: THE PHILOSOPHY OF AVOIDANCE - SEPARATION OF CUSTODIAN FROM CONTROLLER

VULNERABILITY & IMPACT ON DETERRENCE



Note: Vulnerability values based on CARVER/DELPHI

Index: VA – Vulnerability of Arsenal; VNCA – Vulnerability of the Nuclear Command Authority; VIT&E – Vulnerability of IT and Electronics; VVEC – Vulnerability of Vectors; VPers & VTpt – Vulnerability of Personnel and Transportation.

Source: Author

Technology intrusions into the arsenal are inevitable. It serves to modernize, miniaturize, compress time frames and, most significantly, the dilemma it poses is that it invites covertness while its impact demands transparency. The absence of transparency manifests itself in ‘speculative bulges’ in the arsenal and combined with technology holds the portents to carve an arsenal designed for nuclear war fighting which would make mockery of attempts to stabilize the deterrent relationship. This, if unregulated, represents the most dangerous development in our times. The direction in which arsenals are headed is a grim reminder of the upshot of opacity and the probable descent to a nuclear war fighting capability.

To summarize, we have thus far noted the effect of the external environment introducing nuclear multilateralism; an enfeebled civilian leadership in Pakistan that is incapable of action to remove the military finger from the nuclear trigger; the active attendance and involvement of non-state actors in military strategy; technology intrusions that invite covertness while its effects demand transparency; internal environment that without rationale finds solace in bigger, larger and more varied arsenals; security anxieties, all for want of transparency, shoving arsenals down the slippery slope of developing nuclear war fighting capabilities; absence or at best ambiguity in doctrinal underpinnings that mould nuclear posture and the alarming reality of ‘intention-to-use.’ The larger consequence of the considerations discussed so far makes the status quo untenable. The need for change in the manner in which we do business is urgent and is the call of the hour. Strategic restraint predicated on failsafe controls, verification in a transparent environment, providing logic to size and nature of the arsenal and putting the brakes on the slide to nuclear conventionalizing become imperatives to stabilizing the deterrent relationship.

The nuclear nightmare, when articulated, is a hair trigger, opaque deterrent leaning towards conventionalizing under single military control steered by a doctrine seeped in ambiguity and guided by a military strategy that carouses and finds unity with non-state actors. It does not take a great deal of intellectual exertions to declare that this nightmare is upon us.

Conclusion: Out-staring an Abyss

The challenge before us is clear. To put the genie back into the bottle is neither realistic nor a proposition that merits serious consideration. Areas that could be addressed begin with dispelling the veil of opacity that surrounds the nuclear deterrent. Technology intrusions that have put the arsenal on a hair trigger must be subjected to a safety catch through the instruments of transparency and the removal of ambiguities in strategic underpinnings. NCA to NCA communications must be conditioned by institutional verification measures that evaluate and exchange risks and alert status. It is only such devices that will enable strategic restraint to be realized in the region. While these remain

the broad objectives, the first series of steps on the road to stability maybe specifically identified as follows:

- Transparency in strategic underpinnings (including collusion) through the declaration of doctrinal canons must be made unambiguously clear.
- Command and Control of the deterrent must differentiate between the custodian and the controller as also between the conventional and the nuclear without entertaining the possibility of non-state actors being a part of the overall strategy.
- Technological intrusions must be made transparent both with a rationale and the impact on arsenals particularly so when the dangers of conventionalizing of the nuclear weapon becomes manifest.
- Alert status of the deterrent at all times must be communicated. Logic for stockpile or fissile material and numbers and nature of arsenal will serve to eliminate the dangers of speculative bulges.

Thus far nuclear relations in the region have been bedeviled by a persistent effort to combat the monsters that the shroud of covertness has cast; it has left us the unenviable task of out staring an abyss. Nietzsche in the circumstance would have advised an assault on the on the first causes – dispel opacity.



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On retirement after 45 years in uniform, he is settled in the Nilgiris. He passes down his operational and strategic experience through articles in professional journals and participation in seminars. He has lectured at the Staff College, Higher Command College, the United Services Institute and the National Maritime Foundation. He has tenanted the Admiral Katari Chair of Excellence at the United Services Institute and is also a member of the adjunct faculty of the National Institute of Advanced Studies. His contribution to Track II dialogues in the quest for a new paradigm in nuclear security are comprehensive.

End Notes

¹ Nietzsche F. Beyond good and evil, Chapter IV: Apophthegms and Interludes. He who fights with monsters should be careful lest he thereby become a monster. And if thou gaze long into an abyss, the abyss will also gaze into thee.

² Dr Strangelove was a Hollywood satire directed by Stanley Kubrick set in the nineteen sixties. The insanity of the tripwire readiness of the American nuclear establishment to initiate a process that sets off a chain reaction which culminates in a nuclear holocaust. The real tragedy in this spoof was the dangers of decentralization and pre delegation, so to the inability to control escalation. The irony was that there was no real provocation.

³ In Roman mythology Janus, the God of beginnings and endings is represented by a double faced head each looking in opposite directions. He is frequently used to symbolize change and transitions from one condition to another

⁴ Foreign Affairs Round Table proceedings on 'Causes of Instability in Pakistan' 31 Mar 2009.
www.foreignaffairs.com/discussions/roundtables

⁵ Extract from Professor Hoodbhoy's personal letter of 11th January 2011 on the assassination of Governor Taseer
"...Not a single religious scholar nor ordinary people (stood up) to condemn the killing. The interior minister Mr. Rehman Malik said he too would kill a blasphemer with his own hands ..."

⁶ Woodward, Bob, Obama's Wars, Simon Schuster 2010, Pgs 35,45,362.

⁷ Bloom, Mia. Dying to kill, COLUMBIA University Press 2005, pg 173. Al Qaeda fatwa (the Hamid al Fahd Fatwa) of May 2003 to acquire Nuclear weapons and weapons of mass destruction..

⁸ Woodward, Bob, Obama's Wars pg 363-369

⁹ International Institute of Strategic Studies, Nuclear Blackmarkets: Pakistan. A. Q. Khan and the Rise of Proliferation Networks (Arundel House: London) 2007, pg 99

¹⁰ US Secretary of State cable-30 Nov. BBC.co.uk/news. Wikileaks key issues

¹¹ General Kayani's statements with respect to Pakistan's army's support to militants as quoted in The Hindu 02 Dec., 2010