

Nuclear Weapons and National Security

LT COLONEL A A ATHALE*

INTRODUCTION AND DEFINITIONS

Peace and security are two terms that are often clubbed together. Yet there appears to be an enduring dichotomy between the two. Peace, more often than not is defined as absence of active violence. Kautilya defines it as a period during which the vanquished is preparing for and the victor exploiting for an imminent next round.¹ Hans J Morgenthau echoes this sentiment.² Security on the other hand is a much more comprehensive term and can be defined as a situation in which there is absence of a perception of a threat to survival. Thus defined peace could exist even in the circumstances wherein security is totally lacking. During the early parts of the 20th century, the continent of Asia had relative peace under the European colonial domination, but security for the multitudes of ancient civilizations was absent.

As seen earlier there is a clear dichotomy between peace and security but on the other hand there is a close linkage between security and independence. Independence of decision making, both internal as well as external being only possible under the condition of security. Independence of decision making is a necessary precondition for development -- our national goal. This linkage can be easily understood when we contrast the striking progress of the last 39 years with the stagnation of earlier 150 years. The technological developments in the fields of transportation, communication, weapon systems with intercontinental ranges and weapons with global effect as well as development of international trade, have made independence a utopian concept. In its place what obtains today is the relativistic concept of interdependence.³ In the area of security, as well as other areas, this interdependence can either be symmetrical, as existing between the two super powers in the realm of nuclear weapons, where action and response are equally matched - or it can be asymmetrical as has existed between India and China in the field of nuclear weapons since 1964. The national objective thus boils down to obtain relative independence of necessary decision making by ensuring security through reduction to the minimum the conditions of asymmetric interdependence. This goal can only be achieved through the creation of relevant capabilities.

Often the terms potential or capacity and capability are used interchangeably and imprecisely. Potential or capacity is the presence of essential raw

* Lt. Col. A. A. Athale is a research scholar in the Department of Defence and Strategic Studies, University of Pune.

material for the build up of capability. For instance India has the world's 6th largest reserves of iron ore and 7th largest of coal. Thus she has the potential of being the world's major steel producer. Her capability of steel making based on the existing steel plants is merely 10/12 million tonnes per annum making her 16th in world ranking order in steelmaking. Throughout this paper the word 'Capability' is used in the sense of a ready and usable commodity that comes into being when potential through influence of willful action is transformed.⁴

Security as defined earlier has two components i.e. the material and the psychological. The material factor is based on the analysis of the adversaries capability and the psychological aspect is based on the way it is perceived by both the parties involved. The area of perception is highly abstract and defies clear understanding as well as quantification. The element of intent is inbuilt in the analysis of specific capabilities. As an example Chinese placement of MRBMs tipped with nuclear weapons in Eastern part of Tibet would indicate a clear intention to threaten the Indian heartland, an intent as clear as the similar placement had been in 1962 in Cuba. Our goal of achieving symmetric interdependence will need a careful analysis of capabilities around us and then examining countervailing capabilities creation as a viable strategy. A strategic analysis emphasizing capabilities fulfills the twin criteria of reliability and realism.

The Sino-Indian interactions since 1964 illustrate the effect of asymmetric security interdependence. Ever since 1964 India has followed a strategy of unilateral nuclear disarmament vis a vis China. In the initial period the justification was the meagreness of Chinese capability and later the rationale shifted to reliance on Chinese professed peaceful nuclear intentions. In practice, in 1965 during the Indo-Pak conflict China gave an ultimatum over problem involving some sheep⁵ and in 1971 had allegedly threatened a nuclear strike against New Delhi.⁶ In contrast in 1979 when China invaded and later got bogged down in Vietnam, Indian reactions were mute.⁷ Thus the asymmetry has led to Chinese capability to intervene in South Asian matters vital to Indian security precisely because India has no countervailing capability.

This lengthy framework would have its purpose served if semantics can be neutralised from further discussion. The justification of capability based analysis was also necessary to refute the oft repeated charge of strategic analysts ignoring 'intent'. However if intent analysis is to be equated with content analysis then one might have to ignore the reality and believe that the Chinese MRBM's sole purpose is to shower rose petals on the Rajpath in

New Delhi and that the USS Enterprise sailed into Bay of Bengal in 1971 so that the US Sailors aboard could get a sun tan.⁸ While the worst case syndrome is to be avoided through a careful analysis of the specificity of capability, giving primacy to mere statements would amount to ostrich like behaviour and would also lack the virtue of prudence when the fate of our civilization is at stake.

THE ENVIRONMENT

No Margin of Error. Nuclear weapons are absolute weapons. Without going into the technicalities of measurement of the damage caused by blast, heat, radiation, local and global fallout and secondary effects, it will be accurate to say that even a crude 20 Kiloton (Kt) fission device is capable of wiping out a fair sized urban centre.⁹ Thus our analysis has no margin of error permissible. It will not be idle to speculate how much the survival of our 5000 year old civilization is credited to the intrinsic resilience and how much it owes to a navigational error and underdeveloped technology of killing. The fateful navigational error was made by Columbus on 12 October 1492 that led the European hordes to America and resulted in the destruction of Red instead of Asian Indians. (the former being as civilized, as numerous and as peacefully isolated as the later) The survival in the middle ages could well be attributed to the primitiveness and limitations of technology of killing and destruction based on sword and hammer. The nuclear weapons have solved this problem while the political intentions of at least some of our adversaries remain firmly rooted on the philosophical meta values that are based on the evil nature of man,¹⁰ in direct contrast to our universal humanism that is based on the concept of universal divinity, making concept of total war an alien one.¹¹ Quincy Wright in his study of war mentions that the first time the concept of universal humanism came up in Europe in the 19th century about 4000 years after our Upnishads. Therefore, neither the technology nor the intent leaves us any margin for errors.¹²

Concept of Non Super Power Nuclear War. Nuclear war per se being a world catastrophe and hence unthinkable is a fallacy. There exists a clear distinction between all out general nuclear war involving the obscene super power stockpiles and a proxy or regional nuclear war involving only 40 to 50 fission weapons of 20 kt. The general nuclear war will be an undoubted global catastrophe.¹³ In the second case it will be pertinent to point out that right up to 1963 partial test ban treaty, the world has learned to live with nuclear weapons going off in remote parts of Asia and Pacific. Though a regional disaster, the world at large would remain unaffected. Dr Henry Kissinger in 1956 foresaw the rise of Asian nations in the nuclear field. He

advocated that in order to protect world security from the threat posed by "weak, irresponsible or merely ignorant states, it will be necessary to make a precedent of use of nuclear weapons." Kissenger feels that this task of 'education' howsoever unpopular and presumptuous must be performed by the US as an unpleasant duty.¹⁴ Chances of this education taking place in South Asia are much greater than was the case with China, which atleast was still a part of the Yalta Framework. Prof. Roger Hilsman, a former Asst Secretary of State in the Kennedy administration, in a lecture to a professional audience at Poona University on 6 Dec 1985 clearly stated that a regional nuclear exchange between India and Pakistan is not going to affect the superpowers. The reality is thus far more menacing for India and of immediate relevance. Provided ofcourse we have got over the induced syndrome of regarding Black, Brown or Yellow lives to be expendable and cheap.

STRATEGIES AND COUNTER STRATEGIES

The evolution of Indian nuclear capability has to strive for establishment of countervailing strategy to counter three potential existing threats. A nuclear Pakistan, US nuclear and conventional capabilities in the Indian Ocean area and China that is graduating from strategy of dissuasion to deterrence. Indian capability in order to be viable for at least 10 to 15 years, has to also take into account the possibility of both the Super powers possessing the so called Star Wars capability, which in real terms is non nuclear weapons based counter force capability.¹⁵ The methodology of our analysis will be to consider one threat at a time and see its counter. In conclusion the overlap will be eliminated.

THE PAKISTAN FACTOR

Solely dependent on her indigenous resources, Pakistan that is industrially backward and one tenth of India's size, would pose no security threat. *Table one* below indicates it clearly.

Table I

	INDIA	PAKISTAN
Population (millions)	712	87.13
Technical Manpower (millions)	2.3	0.1
Production of Heavy Vehicles	91,000	6,400 per annum (assembly only)

	INDIA	PAKISTAN
Iron and Steel (million tonnes)	27.9	0.5 (pig iron only)
Energy (Billion Kw hours)	138	17
GNP (Billion \$ US)	210	56

Sources: 1. 'National Atlas of India', National Atlas and thematic mapping Organisation, Depart of S & T, Govt of India Publications, Calcutta, 1983.

2. 'UN Statistical Year Book' for Asia and Far East 1982, Bangkok, 1983.

The startling fact however is that today she is on the verge of posing a nuclear threat to India. The Pakistani threat can be dissected into two components, Pakistani hostility and Pakistani threat. Hostility by itself cannot pose a threat in view of the very obvious Indo - Pak asymmetry, just as Cuban hostility does not pose a threat to the USA. It is the Pakistani role as a US proxy that poses a security threat to India. In the field of nuclear weapons the following facts speak for themselves,

- The US waived the Symington amendment that would lead to an automatic aid cut off in the event of nuclearisation. A virtual go ahead signal.¹⁶
- Export of cryptons, an electronic device that is necessary to construct the conventional explosive based trigger.¹⁷
- Supply of nuclear delivery capable F-16 in order to provide a reliable delivery platform.¹⁸
- Despite a reasonable doubt about the Sino - Pak Nuclear connection, the US has gone ahead with her China deal.¹⁹

The Pakistani hostility is inherent in the non viability of the theoretical foundations of the 'two nations theory' that is based on a phoney cultural and historical view, thus institutionalising the insecure feeling based on the permanent adversary and competitive role vis a vis a much larger India. To her credit there was a brief and abortive attempt by late PM Mr Z A Bhutto in 1972-73 when he sought to bring in a sense of realism in Pak psyche and Politics. The TV and the radio had constant ads on the need to give up the ostrich like attitude. The controlled media also gave a graphic account of the magnitude of defeat suffered by Pakistan in 1971, with the aim of shaking the

people to reality. Yet against the alliance of fundamentalist forces Bhutto had no real answer. There is a curious analogy to the German psyche, which rationalized defeat in both the world wars as having come about due to the Jewish machinations, ignoring the insurmountable geo-political forces ranged against her. There is a close parallel between the German - Jew and Pakistani - Indian self and mirror image perceptions. With such fundamental problems of long standing, one is tempted to see a parallelism in the solution as well.²⁰

The Pakistani eagerness to act as the US proxy is born out of the foundational weakness of the Pakistani state. The role enactment in both content and intent is not very different from the subsidiary alliance system of Lord Wellesley that had the Indian princes preferring British slavery to accommodation with native neighbours.

In concrete terms this dual Pakistani threat will be based on the available fleet of the 40 odd F-16 aircraft. These have a striking range of 925 Kms, thus threatening a minimum of 5-6 Indian urban concentrations. Assigning four aircraft per target (out of which 2 will be in reserve) armed with a 20-40 Kt device she can pose a threat to Delhi, Bombay High, Bombay, Pune, Ahmedabad and Hyderabad. Irrespective of the defensive measures, these aircraft have a more than 50 per cent chance of getting to their targets. With cent per cent reserve the success is assured. Even the dense Egyptian air defence in the Yom Kippur War of 1973 did not achieve an attrition rate higher than 20 per cent.

THE AMERICAN FACTOR

The US is a virtual regional power in the Indian ocean area since 1970s through her in situ capabilities which are as follows:-

- The rapid deployment force under USCENCOM comprising of 3.5 divisions including two air borne divisions. The 9th US Air Force comprising of F-16, F-15, A-10 and transport support complement.
- US Naval forces of Cent Com based at Pearl Harbour has 3 carrier groups as well as Marine forces worth a division plus.
- Bases at Diego Garcia and in the Philippines.²¹

A careful analysis of the exercise 'Bright Star 83' shows that this force is meant primarily for regional intervention and not for a counter against

direct Soviet threat. The presence of airborne divisions, slower aircraft like A-10 and F-4 shows the expectation of operating under a condition of air superiority, possible only in the regional context and not against the Soviets. The absence of sizable ground/surface to surface missiles is also a pointer in the same direction.

To reinforce the Pakistani nuclear weapons in the South Asian region the US has its 9th tactical wing and elements of Strategic Air Command based at Diego Garcia with B-52 bombers armed with nuclear weapons, the total estimated punch carried is worth nearly 500 MTs. The kind of aircraft placed in the Indian ocean areas do not stand a chance to penetrate or survive a Soviet opposition.

The actual US threat to India is thus peripheral in nature and effect. India has the option of countering this threat by posing a similar threat to the US mainland or posing a threat to the US capability deployed in the Indian ocean area. Given the peripheral nature of the US threat and interest and also given the fact that the US mainland is covered by the USSR besides presenting unsurmountable technical difficulties for the time being, counter to it will not be necessary. On the other hand a credible threat to the US Centcom will indirectly pose a threat to the vital US interests in the Middle East and thus redress the existing asymmetry between the two and thereby prompt the US towards responsible behaviour in the South Asian region.

To counter the vastly superior US counter force and surveillance capability, India will have to depend upon a mobile sea-based capability, based initially on the surface launched nuclear tipped missiles, which can later be upgraded to a subsurface system. Cruise missiles based on surface ships also offer a cost effective alternative.

The sea based capability has the tremendous advantage of survivability, mobility and avoidance of co-lateral damage in the case of counter force strikes. It in effect also divides the adversary's forces. Built in its very nature is an all azimuth omnibus capability that lends tactical as well as strategic flexibility. This will reduce the Indian vulnerability to acceptable levels as through the device of this linkage the Indian security gets linked up with the Global nuclear balance and hence to the threat of a general nuclear war, which remains unthinkable. There is a very obvious contradiction in this hypothesis and the view prevalent in the 50s and 60s when India strove hard to keep herself away from the super power rivalry. The changed perspective is the logical outcome of the super power's shift from uncertain retaliation strategies of the 50s, to deterrence of 60s, flexible response of 70s and MAD of the 80s.

THE CHINA FACTOR

The Chinese threat is qualitatively different from the two earlier mentioned ones. The border problem notwithstanding there is hardly any issue where there is a serious clash of interests. The Chinese action in both 1965 and 1971 of threatened intervention in South Asia are in the classical imperialist mode. There is also an obvious connection with the Sino - Soviet relationship. Thus the Chinese threats could be rightly attributed to the lack of Indian countervailing capability - a low risk venture with high payoff in terms of thwarting a potential Asian competitor.

The Chinese short term strategy not unlike the Americans relies on the proxy role of Pakistan and supplements the US efforts in that direction. The Sino Pak nuclear co-operation is a clear sign of it. As China has advanced to build an effective ICBM force targeted on the USSR, it will have greater freedom of manoeuvre.

In the long term perspective as China develops her maritime power she is likely to want to use the Indian ocean for placing her sea based deterrence. Thus in the short term she is likely to operate through Pak proxy while in the long term she may well pose a maritime threat to Southern parts of India and island territories.

The Indian counter to Pakistani proxy would take care of the short term threat while the all azimuth force to counter US threat will be able to cater to a limited targeting of NE China Peking - Shanghai belt where 60 per cent of the Chinese industrial capacity is located. On the other hand given the primitive nature of the Chinese air defence and problems of geography even an aircraft based threat to her nuclear facilities at Lanchow, would be an effective deterrence to her intervention in the South Asian sub-region.

CONCLUSION

Independence of decision making is a necessary pre-condition for economic development - Indian national goal. This can only come about in an atmosphere of security, wherein there is no threat to our survival. In a world that is closely knit due to the advances in technology of communications, weapon systems and international trade, there exists a situation of interdependence in the area of security. When the interdependence is asymmetrical and one sided amounting to dependence, there is a security threat leading to nations becoming objects of coercive diplomacy.

India faces nuclear threat of a US China proxy in Pak, through spill-over of US capability build up to protect US gulf interests and a Chinese long term maritime threat.

In order to counter the above, Indian capability build up has to aim for:

- Nuclear war fighting capability vis-a-vis Pakistan in order to terminate her proxy role.
- Deterrence capability vis-a-vis China.
- Dissuasion capability vis-a-vis US through targeting the forces in being in Indian ocean area.

The Indian capability so built will be sea based, IRBMs with ERWs against Pakistan. The total megatonnage needed for the other two tasks will be 1500 Megatonnes in size so as to link the Indian security with global well being. The threshold is based on a US Academy of sciences report to the UN presented in 1984 on the issue of nuclear winter.

The emphasis on capability is also valid on account of control. Most modern conflicts can be attributed to the loss of control over the process. The strategy of uncertainty being followed by India since 1974 has two components ie, uncertainty of capability and that of intent. When capability is uncertain there is an inbuilt element of weakness of will. (intended or otherwise) Thus if credibility is to be considered as a strategic factor, strategy of uncertainty is strategy of bluff. There is an ever-present danger of the adversary calling the bluff and miscalculating in case there is a double bluff. On either count there is a danger of loss of control and a nuclear conflict breaking out. Once the capability is uncertain, then the vital decision making devolves on the capability builders, bureaucrats and technicians-leading to diffusion and loss of control. Once a viable capability is built up and the uncertainty is confined to 'intent', the control passes back to the highest decision maker. Only then can the conflict resolution through bargaining can begin to take place. In the former case it does not even begin, begging the question, bargaining for what? and with whom?

The adoption of creating adequate capability will give teeth to the peaceful intentions. On historical evidence and based on the universalistic humanism based meta values of Indian civilization, the world has nothing to fear. A strong India is the sole guarantee that the world does not pass totally into the hands of those who have genocides and resettlements of millions of hapless victims to their credit in the balance sheet of history.

Notes and References

1. Shama Sastry Dr R (trans) "*Kautilya's Arthashastra*", Wesleyan Mission Press, Mysore, 1923.
2. Morgenthau Hans J "*Politics Among Nations*" Alfred A Knof Inc, New York, fifth Ed, 1972. pp 16-24.
3. Keohane Robert O and Ny Joseph S "*Power and Interdependence*" Little Brown & Co Boston & Toronto, 1977. P.8.
4. "*UN Statistical Year Book 1980*" & International Iron & Steel Institute, report 1980, London.
5. *Times of India* 18 & 21 Sep 1965. Quoting PM's statement in the Parliament on 17 & 20 Sep 65 respectively.
6. *Times of India* 11 Jan 1986 quoting a 5 Jan 86 New Delhi report in which the Indian defence ministry source made the allegation regarding Chinese threat, denied routinely by the Chinese foreign ministry spokesman on 10 Jan 86. The denial only gives credibility to the original report.
7. Schubert J & Lapp R A "*Radiation*", William Heinmman Ltd London, 1957.
Kothari D S (Ed) "*Nuclear Explosions & their Effects*," Govt of India Pub Div, New Delhi, 1959.
8. Mankekar D R "*Pakistan Cut to Size*" Indian Book Coy, New Delhi, 1972, P.69, quoting Indian Ambassador to US.
9. The Indian reaction was confined to the foreign minister cutting short his visit to Peking.
10. Hobbes Thomas "*Leviathan*" E P Dutton & Co, New York, 1950, P. 105.
11. Wright Quincy "*Study of War*", Chicago University Press, Chicago & London, 1967, P. 619.
12. Mujumdar R C (Ed) "*The Vedic Age*" Bhartiya Vidya Bhavan Fourth impression, Bombay, 1965. P. 501 quoting the Upanishidas dating back to around 2000 B.C.
13. Schell Jonathan "*The Fate of the Earth*", Avon Books, New York, 1982.
14. "*Foreign Affairs Vol 34 No 3*" April 1956, pp 349-366.
15. "*Scientific American Vol 251 No 4*" Oct 1984.
16. "*Strategic Analysis Vol VII No 8*, Nov 1983, New Delhi, P. 582.
17. Op cit.
"*Military Balance 1985-86*", IISS, London, 1985, p.p. 134-185
18. "*Times of India*" 12 July 1985, B.1
19. "*New York Times*," 23 July 1985. Editorial on US China Nuclear deal.
20. Fundamental hostilities are enduring and come out at an unguarded moments. A British commentator describing the 1985 Wimbledon final, could not help but remark on the frightening efficiency & cool of a 17 year old German, Becker.
21. Kingston Gen. '*US central command*' in Forum Summer 1985, Vol 10, Issue 1.