MASSIVE RETALIATION: IS THE THREAT LESS THAN CREDIBLE?

MANPREET SETHI

Nuclear weapons are called Weapons of Mass Destruction (WMDs) owing to their damage potential and this makes them best suited for deterrence. Their use, except in a situation where the adversary does not possess nuclear weapons, can never result in the achievement of a political objective without incurring substantial harm to self. The weapons, therefore, serve the paramount objective of stopping use of similar weapons or the prospect of blackmail by holding out the threat of reciprocal retaliation to nullify any gains of first use.

In trying to understand the dynamics of how deterrence functions, several important questions need to be answered. How should one articulate the threat of retaliation? What deters better: the threat of punishment which would signal attacks on civilian targets to cause large scale, massive damage? Or, the threat of attacks on military targets that would relatively limit the damage to the population, but cause attrition to retaliatory nuclear forces?

Since credibility lies at the heart of deterrence, it is necessary that the kind of retaliation being promised should seem believable to the adversary. He must be convinced that the threat is capable of being carried out by the country making the threat. This could be made evident through the possession of the requisite capability and the indication of firm resolve to carry out the threat to cause the kind of damage that has been signalled. If

Dr. Manpreet Sethi is Senior Fellow at the Centre for Air Power Studies, New Delhi.

Since credibility lies at the heart of deterrence, it is necessary that the kind of retaliation being promised should seem believable to the adversary. He must be convinced that the threat is capable of being carried out by the country making the threat. This could be made evident through the possession of the requisite capability and the indication of firm resolve. the adversary believes that retaliation of the kind that has been promised is not likely to be executed by the maker of the threat, then the credibility of the deterrence would fall, increasing thereby the chances of deterrence breakdown. Hence, it is critical to promise the right kind of retaliation to ensure credible deterrence. Or, in other words, the credibility of the threat is central to the credibility of deterrence.

So, what makes for a credible threat – large scale, massive nuclear retaliation, or limited, restricted

nuclear retaliation? A debate on this issue started in India in 2003 soon after the Press Note issued by the Cabinet Committee on Security described the Indian response to a nuclear attack as being "massive and designed to inflict unacceptable damage". It may be recalled that an earlier draft nuclear doctrine made public on August 17, 1999, had qualified retaliation as "punitive" to inflict damage unacceptable to the aggressor.

The change in terminology was immediately noticed by nuclear analysts and legal eagles. Scrutiny of the revision began in earnest to check how it would add to, or detract from, the credibility of India's nuclear deterrence. Analysts have also tried to conjecture on the reasons for the change. It has been surmised that it came about as a result of the sense of frustration after Operation *Parakram*, the military operation that India had mounted in response to the attack on the Parliament in December 2001. The operation wound down without any worthwhile military objective being met. It was in the wake of this sentiment that the adoption of massive retaliation came about as one way of conveying greater toughness to the adversary through the use of the word 'massive' to describe the nature of retaliation. This may also be recalled to be the time when the neo-conservative Republicans were in power in the US and they were increasing the fashionability of more military oriented national security strategies. India may have been influenced by this trend too.

Whatevermayhavebeen the government's reasons to make this change in doctrinal language, its impact on the credibility of deterrence came to be widely described as being negative.¹ It has been expressed that the suggestion of massive retaliation constrains India's options to only "all or nothing". This dilemma has been felt to have become more acute with Pakistan having thrown in the gauntlet of 'Tactical Nuclear Weapons' (TNWs) into the nuclear rink. Writings have opined that India will not have the willingness

Writings have opined that India will not have the willingness or the courage to undertake massive retaliation if Pakistan were to use a low yield nuclear warhead on Indian military targets, whether on Indian territory or its own. It is argued that it is not in India's nature to inflict large scale civilian casualties.

or the courage to undertake massive retaliation if Pakistan were to use a low yield nuclear warhead on Indian military targets, whether on Indian territory or its own. It is argued that it is not in India's nature to inflict large scale civilian casualties. Pakistan certainly assumes that the damage caused by its use of TNWs would be too low to provoke India into undertaking massive retaliation. And even if India was so inclined, the international community would certainly restrain India from doing so. Thus, the asymmetry between the use of tactical nuclear weapons and a response in the form of massive retaliation is supposed to have made India's deterrence posture less than credible.

This article examines the credibility quotient of Massive Retaliation (MR) as rooted in the Indian understanding of the purpose of nuclear weapons. It explores the circumstances in which the US adopted, and then abandoned, the strategy of massive retaliation since it found it less than credible. Should the same logic necessarily apply to India too? Are there any factors that make

For some critical analyses of this aspect, see Arka Biswas, "Credibility of India's Massive Retaliation", *Science, Technology and Security Forum*, January 7, 2017. Available at http://www. stsfor.org/content/credibility-indias-massive-retaliation; Firdaus Ahmed, "Will Modi Relook at 'Massive' Retaliation in India's Nuclear Doctrine?", *India Together*, June 25, 2014. Available at http://indiatogether.org/modi-relook-at-massive-retaliliation-in-nuclear-doctrine-op-ed; Shashank Joshi, "India's Nuclear Anxieties: The Debate Over Doctrine", *Arms Control Today*, May 2015.

MR more credible in the case of India as compared to how the US considered it? The paper suggests three such differences. Additionally, it attempts a definition of massive retaliation in the Indian context. Must MR be nothing less than "all you have got" to qualify for being massive? Is 'massive' a function of the nuclear ordnance dropped on the adversary, or of the damage caused? Can an impact that is massive even with the use of a minimum number of missiles and warheads also qualify as massive retaliation? Not much strategic analysis in India has devoted adequate attention to these questions. This paper is a modest attempt to give a distinctly Indian flavour and understanding to a much discredited concept in the Western nuclear discourse. As the paper argues, the Indian circumstances and nuclear challenges are unique, warranting a distinctly Indian strategy or an Indian definition of terminologies that may have long existed in global nuclear literature.

MASSIVE RETALIATION IN US NUCLEAR STRATEGY

The concept of MR was first introduced in the US' nuclear strategy in 1954 through a speech made by John Foster Dulles, secretary of state in the administration of President Dwight Eisenhower. This strategy envisaged massive, preemptive use of strategic weapons to deter and prevail. It offered an indiscriminatory threat of massive nuclear strike in response to any Communist aggression, small or big. As Dulles explained, "Our capacity to retaliate must be, and is, massive in order to deter all forms of aggression." He recommended, therefore, the build-up of a "deterrent of massive retaliatory power that would have the capacity to retaliate instantly, by means and at places of our choosing". This strategy relied on a "large, preordained strategic nuclear response against thousands of targets throughout the Communist world in the event of a Soviet aggression."²

The inference here was that the American response would not be confined to the point of attack. Rather, the fighting could well spread beyond the limits and methods selected by the adversary. Clearly, the signal was to deter the USSR by the threat of American action spilling far beyond what the adversary

² Francis Gavin, *Nuclear Statecraft: History and Strategy in America's Atomic Age* (Ithaca & London: Cornell University Press, 2012), p. 112.

might have imagined. The USSR was, thus, being cautioned from taking any aggressive step since the chances of escalation of a disproportionate nature were very high and would nullify any gains the Soviets hoped to achieve. So, the US' emphasis was on the high order of its own retaliation irrespective of the nature of the Soviet action. As US President Eisenhower opined, once political actions were replaced by military responses, "there are really no limits that can be set to the use of force." Drawing upon the game of poker, he argued, "In order to avoid beginning with the white chips and working up to the blue, we should place them on notice that our whole stack is in play."³ Vice President Nixon too seemed to weigh in with similar thoughts when he said in March 1954, "Rather than let the Communists *nibble us to death* all over the world in little wars, we would rely in the future primarily on our massive mobile retaliatory power which we could use at our discretion against the major source of aggression at times and places that we choose."⁴ Frustration over the stalemate in the Korean War had made the US lose its appetite for small wars which were perceived as being unpopular and expensive. Nuclear weapons, on the other hand, came to be projected as a real and usable military option that was far less costly and more efficient compared to rearming a large standing army and undertaking thousands of air raids.

Evidently then, the views expressed by President Eisenhower, his Vice President Nixon, and his Secretary of State Dulles leaned towards the projection of a policy that was far more muscular. However, this policy suffered from not being anchored in adequate capability and policy changes. As Freedman has explained, "This was not the Administration's actual policy as set out in NSC-162/2 but was an impression easily taken from Dulles' statements on reinforcing local defences by the further deterrent of massive retaliatory power. In order to provide some clarification on the issue, Dulles wrote an article in *Foreign Affairs* in April 1954 in which he acknowledged that "massive atomic and thermonuclear reaction is not the kind of power which could most usefully be evoked under all circumstances." He clarified that the new policy

^{3.} Ibid., p. 65.

^{4.} As cited by Lawrence Freedman, *The Evolution of Nuclear Strategy* (New York: Palgrave Macmillan, 2003), p. 81. Emphasis added.

In the US' formulation, MR indicated the country's readiness to launch nuclear weapons "at almost any Communist affront". This was seen as highly unlikely to happen in practice. was not "turning every local war into a world war", and that its objective was simply to prevent such wars by making them too risky.

By the late 1950s, however, a number of critics of the idea of massive retaliation had begun to put forth considered arguments in many publications. William Kaufmann, for instance, edited a collection of essays, *Military Policy and National Security*, in which he raised the issue of the credibility of massive retaliation.

Speaking in the context of the USA, he opined that the adversary normally uses three sources of information to judge the likelihood of response: the statements and behaviour of the government; the attitudes of public opinion; and the government's performance in comparable contingencies. Based on this analysis, he found that it would be out of character for the US to retaliate massively and, hence, the adversary was likely to see the threat as incredible. In the US' formulation, MR indicated the country's readiness to launch nuclear weapons "*at almost any* Communist affront".⁵ This was seen as highly unlikely to happen in practice.

Massive retaliation, therefore, came to be described as being neither credible in action, nor an intelligent strategy. It came to be associated with the 'suicide or surrender' dilemma. As opined by one analyst, "The gross disproportionality between means and ends would prove inhibiting for moral and political reasons, and the threat of massive retaliation would suffer in credibility."⁶ Its lack of credibility was also pointed out in the context of the US' extended deterrence commitments. For instance, analysts expressed their incredulousness at the possibility that *any* Communist provocation in Europe would elicit a massive response from the US given that such a response would immediately place the US mainland in the Soviets' nuclear crosshairs. The Americans felt that the promise of such an action, without consideration of the consequences, could lead to policy paralysis. Meanwhile, the allies felt that the

^{5.} Gavin, n. 2, p. 30.

^{6.} Ibid., p. 6.

promise of such an action would unnecessarily drag them into a nuclear war even over 'minor' issues of peripheral concern to them. Therefore, neither the provider of the nuclear umbrella, nor the recipients found massive retaliation an intelligent strategy. Rather, both sides feared that it could incentivise the adversary into undertaking a massive first strike since the retaliation being promised in any case, irrespective of the first action, was going to be massive.

In order to enhance the credibility of the threat in the face of such criticism, scholars like Robert Osgood tried to popularise the idea of limited war in 1957. The objective was A direct consequence of finding ways to reduce reliance on MR was advocacy of a buildup of conventional forces. Additionally, emphasis was placed upon conceptualising, and planning for, the conduct of limited strategic retaliation. This emphasised flexibility in the choice of military targets and missions.

to reestablish the effective use of military force as a rational instrument of policy. This was sought to be done by suggesting that "means of deterrence be proportionate to the objectives at stake."⁷ Influenced by such views and exuding a new confidence with the emergence of second strike weapons in the form of submarine launched ballistic missiles and inter-continental ballistic missiles, and a determination to achieve numerical superiority, President Kennedy abandoned MR in favour of the more nuanced Flexible Response (FR). This included "an array of nuclear packages, calibrated military responses, and more robust conventional force options up and down the escalatory ladder."⁸ It was meant to provide decision-makers with less extreme and more sophisticated nuclear use options and the ability to deploy effective forces on any rung of the escalation ladder. A direct consequence of finding ways to reduce reliance on MR was advocacy of a build-up of conventional forces. Additionally, emphasis was placed upon conceptualising, and planning for, the conduct of limited strategic retaliation. This emphasised flexibility in the choice of military targets

^{7.} Robert Endicott Osgood, *Limited War: The Challenge to American Strategy* (University of Chicago Press, 1957), p. 26.

^{8.} Gavin, n.2, p. 4.

and missions. The idea was to conceive of politically and militarily plausible options that could contain a nuclear war in such a way that tens of millions of people would not be killed since that was considered immoral and, hence, of questionable credibility. So, the US proclaimed that it would not strike at Soviet cities but would attack military targets instead, preferably those away from population centres, such as missile sites, bomber bases or command and control centres. But, in case there was Soviet retaliation on American cities, then similar attacks would follow. So, city avoidance was central to the US' 'controlled' response. But, this turned out to be a one-way conversation of the US with itself since, after its military sites had been attacked, it was hardly imaginable that the USSR would not respond with nuclear weapons. In any case, it was established even then that distinction between targets was not easy and neither would the wind blowing in different directions help maintain the distinction between targets deliberately hit and those that came to bear the brunt of the radioactive fallout.

Yet, several proponents persisted with the concept of the feasibility of limited nuclear war and argued that such a deliberate attack could be undertaken by limiting the total amount of damage threatened, planned and done by choosing the targets accordingly. A limited nuclear attack was seen as showcasing a small sample of the destruction potential in order to precipitate bargaining towards an agreed termination of hostilities before they escalated into an uncontrolled orgy of destruction. In the 1960s, it was believed that "limited strategic war is a *possible* war; to fight and prepare for such a war is a *possible* strategy."⁹ Such a war was conceived of in the context of the "process of bargaining".¹⁰ Rather bizarrely, it was thought that "at one extreme along this dimension, there will be negotiations during the pre-attack phase; in the middle range of the entire spectrum is the case of continuous and intensive negotiations punctuated occasionally by a limited strategic attack."¹¹ The near impossibility of executing this in the real world was starkly brought out when a crisis actually came in the form of Soviet missiles in Cuba. Then, President

^{9.} Ibid., p. 6. Emphasis in original.

^{10.} Ibid., p. 16.

^{11.} Ibid, p. 16.

Kennedy discarded all the carefully constructed aspects of McNamara's flexible response doctrine to reinvoke massive retaliation. He warned the USSR that even a single missile launched from Cuba at any point in the Western hemisphere would "unleash the full retaliatory might of the US".¹²

President Nixon, in the early 1970s, reverted to the pursuit of greater counter-force capabilities for more flexible strategic options. He said, "I must not be, and my successor must not be, limited to the indiscriminate mass destruction of enemy civilians as the sole possible response to challenges..." The idea was to move from a single, all-out nuclear attack toward a policy of controlled discriminate war. James Schlesinger, his secretary of defence in 1973, was a strong votary of developing accurate missiles for counter-force targeting that allowed "selectivity and flexibility".¹³ He constructed a premise that if "the Soviets destroyed the US submarine base at Groton, Connecticut, we should be able to retaliate against a similar target such as their counterpart at Murmansk." Under the spell of the idea of limited nuclear war, US strategic thinkers did for a time consider the Soviet propensity for all-out war rather patronisingly by suggesting that "Soviet military doctrine does not seem to have reached as yet the third stage of the evolution of strategic thought with respect to nuclear weapons: that of finding subtler uses for the new technology than all out war."¹⁴ They believed that their approach was actually "seeking more humanitarian nuclear alternatives^{"15}, though it really was a push for a more lethal policy.

In fact, the question that quickly raised its head was whether it was possible at all to control and direct nuclear forces to execute a graduated or controlled nuclear response in a crisis? Many scholars pointed out that this would call for hugely sophisticated technological forces not just in nuclear numbers and types of weapons, but also planning and command and control capability. This obviously required the nation to invest in a large amount of first strike counter-force weapons of high precision and accuracy. It also

^{12.} Philip Windsor, *Strategic Thinking: An Introduction and Farewell* (Boulder, Colorado: Lynne Rienner, 2006), pp. 68-69.

^{13.} Robert C Aldridge, First Strike: The Pentagon's Strategy for Nuclear War (London: Pluto Press, 1983), p. 33.

Henry Kissinger, Nuclear Weapons and Foreign Policy (New York: Harper, 1957), p. 389. Emphasis added.

^{15.} Aldridge, n. 13, p. 31.

Is it possible at all to control and direct nuclear forces to execute a graduated or controlled nuclear response in a crisis? Many scholars pointed out that this would call for hugely sophisticated technological forces not just in nuclear numbers and types of weapons, but also planning and command and control capability. demanded second strike counter-force weapons to signal more damage inflicting capability. "When McNamara first asked the Joint Chiefs of Staff (JCS) to prepare a doctrine that permitted controlled response and negotiation pauses, they replied it could not be done"¹⁶ due to "technical constraints", as the US did not have the necessary planning and command control capability. "Only in a crudely descriptive and admittedly arbitrary sense would it be possible to say where limited strategic war ends and 'unlimited' general war begins".¹⁷ In fact, over the years, most military commanders have admitted that

"any nuclear war, however, limited the original scope might be, would very rapidly run out of control and speed up the escalation to Armageddon."¹⁸

Besides the huge financial and technological investment that this strategy needed, William Kaufmann, also underlined the *implausibility* of civilians surviving such a war. Reviewing Henry Kissinger's work on limited war with the use of tactical nuclear weapons, he wrote, "In his version of warfare, airmen do not get panicky and jettison their bombs, or hit the wrong targets, missiles do not go astray, and heavily populated areas – whether rural or urban – do not suffer thereby. Surely this is wishful thinking."¹⁹ It was clear that the use of TNWs would make the fog of war even more dense. Freedman rightly described these as "battles of great confusion; the casualties would be high; troops would be left isolated and leaderless; and morale would be hard to maintain. It would be difficult to ensure uncontaminated supplies of food and water or even of spare parts, The Army found it extremely

^{16.} Gavin, n.2, p. 34.

Klaus Knorr and Thornton Read eds., *Limited Strategic War* (London: Pall Mall Press, 1962), p. 5.

^{18.} Windsor, n. 12, p. 69.

^{19.} As cited by Freedman, n.4, p. 104.

difficult to work out how to prepare soldiers for this sort of battle and to fight it with confidence."²⁰ As this realisation seeped in, it is hardly surprising that some time in the early 1980s, McGeorge Bundy made the claim that he and others in policy-making positions were assiduous propagators of the fallacy of usable nuclear superiority.²¹ Since then, US nuclear strategy has built its credibility around the concept of assuredness of retaliation to cause unacceptable damage. It neither refers to massive retaliation nor explicitly to FR. The signalling has been to indicate that no action that the US wanted deterred would go unanswered and the India has clarified that it would not be the first to introduce nuclear weapons and the decision is only to retaliate after nuclear use has been initiated by the adversary. Retaliation to cause punishment in such case certainly sounds more credible and legitimate to execute than the US threat of MR to any kind of provocation.

answer would depend on the US' choice at a given moment.

MASSIVE RETALIATION IN INDIA'S NUCLEAR STRATEGY

The USA abandoned MR on the premise that it sounded incredible to the adversary and unacceptable to its allies. Also, it was influenced by a wave of thinking that sought to make deterrence more credible by showcasing the possibility of limited nuclear war-fighting over city-busting. Does this logic of abandonment of MR and adoption of FR apply to India? Three basic differences in the US and Indian articulations are easily discernible.

The first of these relates to the issue of nuclear doctrines. The US had a first use nuclear doctrine. With this, MR was supposed to be in response to any provocation, anywhere, including a conventional attack far away from the US mainland. As explained earlier, this looked incredible to execute and did not appeal to either the domestic constituency or the allies. In contrast, India has a No First Use (NFU) doctrine. It clearly states that "nuclear retaliation to a first strike will be massive..." Two things are worth highlighting in this

^{20.} Ibid., p. 104.

^{21.} As cited by Gavin, n.2, p. 36.

statement. One, in nuclear parlance, first use is different from first strike. As typically understood, first strike would be a large, coordinated strike from the adversary hitting out at Indian counter-force and counter-value targets. It is unthinkable that retaliation to such a strike could be anything less than massive. The second aspect relates to the fact that India's action of massive retaliation would be in response to a situation in which own territory or troops would have first suffered a nuclear attack. India has clarified that it would not be the first to introduce nuclear weapons and the decision is only to retaliate after nuclear use has been initiated by the adversary. Retaliation to cause punishment in such case certainly sounds more credible and legitimate to execute than the US threat of MR to any kind of provocation even when it was at the conventional level and irrespective of its scale.

The second difference lies in the very approach of India and the US to the purpose of nuclear weapons. In the decades of its early build-up of nuclear capability, the USA considered these weapons as tools of war-fighting. Deterrence was, therefore, premised on the ability to engage militarily with nuclear weapons in order to fight and prevail in a nuclear exchange. This was also the reason that once MR was discredited for being incredulous, the US moved to the strategy of FR. If MR had made it difficult to use nuclear weapons, this new strategy made it easier to contemplate their use. In fact, the whole idea behind flexible response was to indicate the usability of these weapons by projecting the American ability to execute and prevail in a limited nuclear war.

Averse to this idea, India has maintained that the only purpose of nuclear weapons is deterrence, and it seeks to project deterrence through the threat of punishment, and not denial. Hence, it has eschewed warfighting doctrines. India believes that it is not possible to protect or defend the nation through the use of nuclear weapons since, with a nuclear armed adversary, nuclear retaliation will also be certain. A 'limited nuclear war' would be difficult, if not impossible, to contain and is an oxymoron. The US could contemplate (if only by some and for a short period) conduct of limited strategic exchanges primarily because these were anticipated in third countries. But, in the case of India, even a so- called limited war would be fought on its own territory, and even such a war would spell huge human, financial and environmental costs to the nation. The idea, therefore, is not to move to a flexible nuclear response, but to deter through the promise of a disproportionate response, as spelt out in the massive retaliation strategy. The purpose of India's nuclear strategy is to make the possibility of use of nuclear weapons as remote as possible. The US tried to enhance the credibility of its deterrence by highlighting the usability of these weapons in a controlled fashion. India, in contrast, seeks to deter by evoking the threat of MR, indicating that the prospect of use of such weapons would end in an unimaginable catastrophe.

The third difference between the US and India on the issue of MR pertains to the nature of the adversary. One of India's adversaries openly exercises brinkmanship as a strategy of deterrence. Pakistan is not interested in strategic stability precisely because its nuclear strategy is premised on deterring an Indian conventional attack that might be triggered by its continued support for terrorism. Since the purpose of Pakistani nuclear weapons is to deter India's conventional capability, it does so by keeping alive the prospect of easy and early use of nuclear weapons. It is a strategy of projected irrationality where the risk of escalation is used to de-escalate.

In the face of such an adversary, MR becomes India's resort to brinkmanship. It holds out the promise of disproportionate escalation in order to prevent Pakistan from exploiting its threat of nuclear use. India seeks to deter nuclear use by maximising the fear of extreme nuclear escalation, or in other words, through the promise of the worst. Just as Pakistan claims it has only a *one rung escalation ladder* which it will be compelled to climb in the case of an Indian conventional attack, India's MR signals a *one rung nuclear escalation ladder*. By doing so, India dismisses the prospect of climbing one level of nuclear war-fighting at a time.

Given the above three reasons, India's MR strategy does not look all that incredulous. However, one other issue needs to be discussed to establish this further. This is in relation to the development of the Nasr, the very short range (60 km) ballistic missile that Pakistan claims to be nuclear capable and for use in the battlefield. According to some Indian strategic analysts, the possibility If Pakistan was not to exercise brinkmanship, it would lead to stability at the nuclear level and this would constrain its ability to use terrorism. That is possible only if a sense of fear of escalation to the nuclear level is kept alive at all times. And TNWs fit perfectly into this strategy as an instrument of brinkmanship. of Pakistan's use of TNWs would raise a "serious decision dilemma" for India since "it could make it hard for Indian leaders to find justification for infliction of disproportionate damage to avenge against what limited damage the TNWs could inflict."²²

There is an assumption in this argument that must be dissected. It seems to indicate that India's strategic nature is such that it could not bring itself to inflict massive casualties on the adversary in case the damage caused to its own troops/territory was of a limited nature. So, Pakistan's use of TNW would be too small to provoke India into carrying out massive retaliation and the

Indian leadership would find it hard to "react by wiping out a few cities in Pakistan – besides opening up the escalatory ladder of nuclear exchange culminating into mutual destruction".²³ This then leads to the "incredulity of India's policy of one massive leap of massive response". It is even opined that this actually emboldens Pakistan to engage in nuclear brinkmanship.

This conclusion, however, is an inaccurate view of Pakistan's nuclear strategy that is anyway built on the idea of brinkmanship. If Pakistan was not to exercise brinkmanship, it would lead to stability at the nuclear level and this would constrain its ability to use terrorism. That is possible only if a sense of fear of escalation to the nuclear level is kept alive at all times. And TNWs fit perfectly into this strategy as an instrument of brinkmanship.

^{22.} Gen N C Vij, "Strengthening India's Nuclear Deterrence", in India, VIF Perspective: Issues and Trends, 2017 (New Delhi: Wisdom Trees, 2017), p. 7. Similar views may be found in Ajai Shukla, "After a Pakistani TNW Strike, India Can Go for Pakistan's Nuclear Arsenal: Former NSA Shivshankar Menon", Broadsword, http://ajaishukla.blogspot.in/2017/03/after-pakistanitnw-strike-india-will.html, March18, 2017; and Arka Biswas, "Incredibility of India's Massive Retaliation: An Appraisal on Capability, Cost and Intention", Comparative Strategy, vol.36, no.5, pp 445-456.

^{23.} Ibid., p. 7.

As far as India is concerned, Pakistan can voice any assumptions on India's response, but it can never be really sure that India would not respond with massive retaliation. For sure, the response would depend on many factors such as the personality of the leadership at that time, the international context, India's economic position and international stature, etc. But, the question to ask is whether Pakistan could find it prudent to test India with the use of one or a few TNWs? As succinctly put by a former National Security Advisor (NSA) to the Government of India: It would be incorrect to presume that a limited conventional operation by India to punish Pakistan for an act of terrorism could provoke Pakistan's use of TNW. This is certainly what the Pakistan military planners would like to have India and the world believe, but had this been true, Pakistan would not be investing as much as it is on modernising its conventional military.

If Pakistan were to use tactical nuclear

weapons against India, even against Indian forces in Pakistan, it would effectively be opening the door to a massive Indian first strike, having crossed India's declared red lines. There would be little incentive, once Pakistan had taken hostilities to the nuclear level, for India to limit its response, since that would only invite further escalation by Pakistan.... Pakistani tactical nuclear weapon use would effectively free India to undertake a comprehensive first strike against Pakistan.²⁴

In fact, it would be incorrect to presume that a limited conventional operation by India to punish Pakistan for an act of terrorism could provoke Pakistan's use of TNW. This is certainly what the Pakistan military planners would like to have India and the world believe, but had this been true, Pakistan would not be investing as much as it is on modernising its conventional military. It well realises that the war would have to be executed in the conventional realm if the country has to survive after the conflict. Therefore,

^{24.} Shivshankar Menon, *Choices: Inside the Making of India Policy* (Brookings Institution, 2016), p. 174.

it is Pakistan's compulsion to brandish its TNWs to deter India, so long as it continues to use terrorism. This must not lead India to make the wrong inference that the "space left for prosecution of a conventional offensive had purportedly shrunk to inconsequential levels, and, therefore, [it] is left with no option but to sequester India's conventional power and continue to stoically suffer the consequences of Pakistan's proxy war"²⁵. Pakistan's projection of TNW use need not deter India's requirement, if it so arises, to use conventional force to punish Pakistan's use of terrorism.

Now, to answer the argument that India must also build TNWs to respond to Pakistan with similar capability because this would seemingly deter Pakistan better than the threat of MR, it only bears reminding that fighting a war with TNWs is not as easy as it is made to sound. Much of this has been explained in the previous section but just by way of a reminder and to explain the uniqueness of difficulties in the regional context, two points can be highlighted. Firstly, a limited nuclear use could be contemplated, with great difficulty though, if the targets were isolated and their locations known. But in the case of ground warfare, it is more likely that there will be several targets, known and unknown, in a theatre. With industrial facilities, ports and air bases located near fairly big cities, even a counter-force strike could get out of hand and amount to an all-out war.

Secondly, the conduct of a strategic limited war "would make special demands on strategic command and control systems, including sensors that tell the decision-maker what is, and has been, happening."²⁶ This burden on Command and Control (C2) increases as the numbers, dispersal and mobility of strategic weapons increases. Not only is speedy processing of information a critical requirement—so is the need for the politico-military C2 to remain unified. Questions have been raised "will it be at all possible, in this kind of war, to prevent unauthorized acts by military commanders, or to protect the entire structure from top to bottom, both civilian and military components, from interference by unauthorized persons?"²⁷

^{25.} Vij, n. 22, p. 8.

^{26.} Ibid., p. 25.

^{27.} Ibid., p. 26.

Thirdly, as pointed out by Freedman, "Tactical nuclear war, by the very nature of the weapons, has a built in escalation mechanism. It is hardly consistent to argue that nuclear weapons will inevitably be introduced because they are more efficient than conventional weapons and then assume that, once nuclear combat begins, both sides will be content to employ only the least efficient nuclear weapons."²⁸ TNWs hope to achieve minimum destruction. But their use would certainly engender an unstable situation with a potential for enormous destruction. As Therese Delpech wrote, "Limited wars without escalation may look attractive, but the guarantee that they will remain so is limited as well."²⁹

Given this inevitability of escalation inherent in the use of TNWs that could decimate Paksitan, it is strange that analysts in India are willing to take the threat of Pakistan's use of nuclear weapons in the battlefield as credible but they find it incredible that India, even after being struck by nuclear weapons—a use which would have breached a huge psychological threshold—will not be able to carry out MR! In following massive retaliation, India has signalled that it refuses to play the game of tactical/limited nuclear war. Even if the adversary is threatening the use of 'clean, counter-force, low-yield weapons', India should express that it would have no option but to respond with its 'dirty, counter-value weapons'. This makes for credible deterrence.

Yet another criticism of India's massive retaliation is levelled on account of the possibility that since India is threatening massive retaliation even in the case of use of TNWs, Pakistan could be tempted to conduct a large first strike, in the first instance. So, by suggesting massive retaliation, India could end up inviting a massive first strike and suffer more in the process. This argument completely ignores a very important dimension of the current nuclear reality. There is a sort of a taboo against the use of nuclear weapons that has been in force since 1945. The unacceptability of nuclear use has only strengthened over time and while no legal restriction has been accepted by the nuclear possessing states on the use of nuclear weapons, the psychological weight of such a decision cannot be trivial. Even to approve the use of one weapon is unimaginable and

^{28.} Freedman, n.4, p. 77.

^{29.} Therese Delpech, Nuclear Deterrence in the 21st Century: Lessons from the Cold War for a New Era of Strategic Piracy (Santa Monica, CA: Rand, 2012), p. 50.

It may be possible to define massive not just in terms of the amount of arsenal used against the adversary, but in terms of the impact or damage caused thereby. And, massive damage can be caused by using only a few nuclear warheads, intelligently dropped on prudently chosen targets. to believe that a large scale, coordinated, premeditated nuclear strike could be ordered by a rational leader is even more remote. So, India's MR might actually be pushing away the possibility of nuclear use and, thereby, strengthening the case for deterrence, which is the stated objective of its nuclear weapons.

Jervis wrote in 1984 that "states may be able to increase the chance of peace only by increasing the chance that war, if it comes, will be total. To decrease the probability of enormous destruction may increase the probability of aggression and limited wars."

Critics of the war-fighting doctrine argue that decreasing the horrors of nuclear war may tempt states to attack under the mistaken assumption that the costs of the resulting war would be tolerable. Where a situation involves the use of nuclear weapons, it cannot be so, and India's massive retaliation is only underlining the obvious.

DEFINING MASSIVE

As a word in the English language, massive conveys the sense of huge, considerable or gigantic. Used as an adjective with retaliation, it is meant to indicate a very large response. Speaking casually, strategists have used this to describe an all-out response, with a bulk of the nation's nuclear arsenal being used in order to cause unacceptable damage to the adversary.

However, it may be possible to define massive not just in terms of the amount of arsenal used against the adversary, but in terms of the impact or damage caused thereby. And, massive damage can be caused by using only a few nuclear warheads, intelligently dropped on prudently chosen targets that lead to a collapse of the social, economic, political and psychological fabric of a nation. In such case, while the number of weapons used may not qualify as massive, the impact certainly would. Even a modest number of single warhead missiles on counter-value targets would result in horrific consequences, given

the density of population in our region. Therefore, the good news for India's massive retaliation, and one that significantly raises its credibility, is that causing massive retaliation is not very difficult. A moderate nuclear attack will also result in massive casualties and material damage. In fact, most scenarios envisaging the use of nuclear weapons would bring the region to this pass.

Yet another definition of massive retaliation describes it as necessarily hitting out at counter-value targets. For sure, the damage to life and property would be unimaginable and massive. But India could also launch massive retaliation against Pakistan's nuclear arsenal, or against counter-force targets, to massively attrite its retaliatory capability. As stated by Shivshankar Menon, "Pakistan's tactical nuclear weapons use would effectively free India to undertake a comprehensive first strike against Pakistan." So, massive may take many forms, depending on the circumstances, and it has not taken away flexibility from the Indian hands. The promise, or threat, that underlies deterrence is that of unacceptable damage.

CONCLUSION

For weapons of deterrence to meet their objective, it becomes crucial that the adversary *believes* that they would be used if certain thresholds are crossed: making someone believe that a course of action that will be followed depends on the making of threats. The nature of the threat and the manner in which it is made, both are important. A large part of deterrence is based on clear and precise communication of the threats that would follow. As put by one analyst, "It makes no sense to surprise an opponent with unanticipated retaliation when a clear signal could have deterred unwanted activity in the first place."³⁰ Equally important is leadership, and the perception of the firmness of the leader. Therese Delpech was right when she stated, "A reputation for firmness on principles, good judgment and reliability does more to deter than sophisticated nuclear warheads and missiles."³¹

Massive retaliation may be an atrocious strategy to follow once deterrence breaks down, but then it is a paradox that deterrence is built on the threat

^{30.} James J Wirtz, "Deterring the Weak: Problems and Prospects", *Proliferation Papers*, IFRI Security Studies Centre, Fall 2012, p. 7.

^{31.} Delpech, n. 29, p. 88.

Massive retaliation may be an atrocious strategy to follow once deterrence breaks down, but then it is a paradox that deterrence is built on the threat of Armageddon. The effectiveness of the deterrent resides in its certainty and horror. Any attempt to reduce either of these would also reduce the power to deter. of Armageddon. The effectiveness of the deterrent resides in its certainty and horror. Any attempt to reduce either of these would also reduce the power to deter. Making a credible war-fighting strategy with nuclear weapons is not only difficult but also impossible to guarantee that it would remain limited. Not surprisingly, Shyam Saran, former National Security Advisory Board (NSAB) chairman described limited nuclear war as a "contradiction in terms". Believing otherwise, in fact, would actually put India into an arms race, and given the limited technological and financial resources

available with the country, that cannot be the best of options.

Meanwhile, MR – or the promise of the worst – has a better chance at deterrence. If perception management is the key to good deterrence, then it would be better to let the adversary believe that there are no half way responses that India has invested in. This would also be financially less taxing and technologically far more within reach. It also seeks to deter the possibility of the use of nuclear weapons which is what India desires in the first place. India considers the use of nuclear weapons unacceptable and unexceptionable. Hence, to any use of the weapon, it has only one response to offer – that is, one of MR. Changing this to anything else would run the risk of encouraging the adversary to test India's resolve at lower levels. In fact, signalling that India would respond to the use of smaller nuclear weapons at the lower level with similar types of its own would indicate that India was okay with the idea of fighting a low order nuclear battle. India does not want that at all. It seeks to deter the very use of nuclear weapons and that can best be done with the threat of massive retaliation, complemented with a strong show of firm resolve and operational preparedness.