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Dissecting the Idea of ‘Limited’ Nuclear War

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While nuclear weapons are designated as weapons of mass destruction, every now and then, the idea surfaces that the weapons can be custom-made and used in such a way as to restrict damage to limited levels. While there is no accepted definition of ‘limited nuclear war,’ it can be described as one in which a *limited number* of nuclear warheads with relatively *smaller yields* are employed to attack a *limited military targets* to impact a *limited geographical space* for *limited objectives*. Its purpose would be to signal deterrence by showing that levels of nuclear violence or the scope of nuclear use can be restricted by choosing military targets instead of cities, thereby making nuclear use more credible and even legally defensible. But can this be a workable proposition?

Origins of the Concept of Limited Nuclear War

The idea of limited nuclear war emerged to address the perceived limitations of deterrence premised on mutual assured destruction (MAD). As the increase in nuclear warhead numbers in the US and USSR established a balance of terror, it led to the view that attacks on cities would make nuclear war an unlimited war. This was seen as degrading one’s deterrence by making nuclear strikes less credible against smaller or less than existential provocations.

So, in an ostensible attempt to make the use of nuclear weapons more rationally feasible, analysts like Herman Kahn and Albert Wohlstetter in the 1960s and 1970s argued in favour of flexible nuclear use to conduct limited nuclear war. They contended that deterrence could be better signalled if a more effective use of nuclear weapons against military targets was made

possible. Such thinking was both enabled by and also led to technological advances in the miniaturisation of nuclear warheads and the growing precision and accuracy of missiles that offered counterforce targeting options to conduct a 'discriminate' nuclear war. MAD was replaced by these ideas of nuclear utilisation target selection, or NUTS.

The idea of limited nuclear use was presented as taking the war back to the battlefield. US Secretary of Defence Harold Brown, in the Annual Report of the Department of Defence to the Congress in 1981, said, "large-scale countervalue attacks may not be appropriate to deter the full range of potential Soviet threats... instead we could attack in a selective and measured way, a range of military, industrial, and political control targets, while retaining an assured destruction capacity in reserve."¹ It was also argued that a policy of attacking military targets that minimises unintended civilian fatalities would offer incentives for an adversary to reciprocate under similar restraints by attacking military targets, thereby reducing the chances of mass homicide on both sides. The purpose would be to showcase the destruction potential of nuclear weapons to shock and scare the adversary into agreeing to the termination of hostilities on one's terms, but not unleash the complete fury of strategic use.

These ideas drove US strategy for many decades and even led to capabilities that offered flexible option to the US President. Simultaneously through, there was a pushback by the likes of Bernard Brodie, Robert Jervis, and many others during the same period, which contributed to much churning in nuclear discourse. The idea of nuclear war received a quiet burial once Presidents Reagan and Gorbachev pronounced the uselessness of nuclear war in 1987 and given the subsequent change in political relations with the end of the Cold War.

Return of the Prodigal

After remaining dormant for about 15 years thereafter, the idea of limited nuclear war to "handle regional conflicts with small nuclear armed powers"² again sprung to life in the second half of the 2010s. Such an eventuality was particularly envisaged in the context of "a rogue state" that might not be deterred by thousands of American nuclear warheads and choose to cross the nuclear threshold even in a small, limited conventional conflict. To deter such eventualities, the US Nuclear Posture Review (NPR) 2018 announced, "Expanding flexible U.S. nuclear options now, to include low-yield options, is important for the preservation of credible deterrence against regional aggression."³ The NPR also found merit in threatening the limited use of nuclear weapons to deter

possible disruptive activities by Russia and China. Russia's ambiguity on the use of low-yield nuclear weapons in response to aggression with non-nuclear weapons, widely referred to as 'escalate to de-escalate,'⁴ was cited as the reason for Washington's search for a "range of limited and graduated options, including a variety of delivery systems and explosive yields."⁵ The US accuses Russia and China of having "introduced limited war techniques.... For Russia, 'jab and grab' land incursions; for China, the creeping militarization of maritime zones. Both techniques operate below the threshold of deterrence by punishment and seek to create territorial *faits accomplis* that lower the costs of revisionism."⁶

The latest US NPR of 2022 has retained the role of nuclear weapons to deter limited nuclear attacks with tailored deterrence. In order to make the threat of limited use look credible, a small number of existing SLBM warheads have been modified to provide a low-yield option so as to have a diverse set of capabilities "for responding to nuclear or non-nuclear strategic attack; and enhance deterrence by signalling to potential adversaries that their limited nuclear escalation offers no exploitable advantage..."⁷ All of this is being justified as being technologically feasible, causing less of a humanitarian disaster, and hence being more legally defensible. But is that true? Can a limited nuclear war be credibly fought and won between two nuclear armed states?

Fighting a Limited Nuclear War

Nuclear war-fighting envisages operations in a logical and controlled manner with the idea of escalation dominance and cool control during a pre-conceived limited counterforce attack. But, wargame after wargame has shown the difficulties in containing nuclear wars that started with calibrated use to run along pre-determined pathways. There are two sets of challenges that can be identified in the case of a limited nuclear war.

Operational Military Challenges

The first of these arises from the uncertainty about the adversary's willingness to play the game of limited nuclear war. In his 1981 book, *The Evolution of Nuclear Strategy*, Lawrence Freedman stated, "It takes two to keep a war limited."⁸ It can never be taken for granted that the adversary will read the signal of limited nuclear use as intended and respond likewise. In fact, the adversary might completely misread the intention, as can be seen in this statement by a Soviet Major General, "the assertion made by supporters of 'limited' nuclear war that it could be kept

within pre-planned limits and made 'controllable' is altogether false."⁹ The Soviets interpreted the American building of counterforce capabilities as a move towards a credible first strike.

Indeed, the adversary can never know or be sure that the intent is to keep the nuclear use limited and that the first volley will not be followed by more, especially since the first user would also be signalling readiness for more attacks to deter the adversary's retaliation. If the adversary chooses a more elaborate response than had been envisioned by the first user, could this then remain a limited exchange?

In fact, the probability of being able to undertake limited nuclear attacks with no or only limited blowback amounts to wishful thinking. Analytical studies on how to conduct limited nuclear wars can only make educated guesses on matters of critical planning. For instance, such a planner may be able to reasonably determine the physical effects of nuclear explosions based on the yield of weapons, the height at which they would burst, the amount of warning time the adversary may have, the time of the attack, etc. But, whether such calculations can completely factor in more complicated issues, such as the overall impact of the attack on the national psyche, or other immeasurable imponderables, such as "popular panic and administrative disorganisation," can never be ascertained. That a planned limited nuclear use will remain within expected parameters is virtually impossible to determine, and it would be foolish to base one's use of nuclear weapons on such an unknown.

A second practical difficulty in keeping the war limited can be seen in the context of the first user himself. Since the basic premise of limited nuclear war is to hit the adversary's military targets in the hope that he would respond likewise, could result in "battles of great confusion". Even if the casualties in these cases might be low, there is every chance that the troops would be left isolated, leaderless, with no or contaminated food and water supplies, even fighting equipment and spare parts, and with a low morale.

Political Challenges

The most serious danger that lurks in making the case that limited nuclear wars are fightable, containable, and even winnable is a heightened temptation to use nuclear weapons. It could lead to the belief that worthwhile military or political objectives are achievable through managed nuclear use. But, as stated earlier, there can be no guarantee that a nuclear exchange

between two nuclear weapon states will remain limited. It may. But then it may not, and that might prove to be a risk that is too risky. In fact, a perception that the adversary is indicating greater nuclear swagger by getting away with 'limited' nuclear use could generate a greater sense of vulnerability and raise the incentives for pre-emption. This would make a nuclear exchange more likely, not less likely. Therefore, the deterrence effects of showcasing limited nuclear use need to be evaluated with care.

In fact, besides increasing the chances of deterrence breakdown, the pursuit of nuclear war-fighting capabilities (even if ostensibly for the purpose of deterrence) through the greater accuracy of nuclear-tipped missiles, elaborate intelligence, surveillance, and reconnaissance infrastructure, and damage limitation defences would also be a financially exhausting exercise.

A third consequential challenge comes from the harm that limited nuclear war would cause to the taboo against the use of nuclear weapons. The conduct of nuclear use in which the first user is able to show a successful ability to keep nuclear war limited could set a precedent that others could be tempted to follow. It would 'conventionalise' the use of nuclear weapons and make it appear normal to use small nuclear weapons in 'limited' ways. If this were to happen against non-nuclear weapon states, such as Russian nuclear use against Ukraine or Chinese nuclear use against Taiwan, it could spur proliferation. Non-nuclear weapon states (NNWS) would face a renewed sense of insecurity. In such a scenario, one can expect them to want to acquire nuclear capabilities of their own. Meanwhile, a 'successful' nuclear exchange between two nuclear-armed states could open another Pandora's box.

Another related danger would be the higher possibility of nuclear terrorism by non-state actors. The availability of nuclear weapons and related material and infrastructure in more states could not only raise risks of nuclear security but also raise the chances that terrorists, too, might feel liberated from the taboo against the use of nuclear weapons. If states can find the limited use of nuclear weapons useful, so can non-state actors. Therefore, a limited nuclear exchange is likely to bring about a sense of complacency in nuclear use that could not be conducive for international security.

Evaluating India's Choices

India has a nuclear strategy based on deterrence by punishment. It does not believe that nuclear war-fighting can be contained with any certainty and, therefore, has refused to go down that path. It deters all kinds of purported uses of nuclear weapons, irrespective of how the adversary describes them, with its own ability to cause unacceptable damage through massive retaliation.

Does this make for an unlawful or immoral strategy? As far as legalities are concerned, it may be recalled that the Advisory Opinion rendered by the International Court of Justice in 1996 in response to whether the use of nuclear weapons can be lawful was unable to take a clear stand on this and had left it to the nations to make the judgement on whether they needed to use these weapons for self-defence. On the second issue of morality, while massive retaliation may conflict with the principles of distinction (of combatants and non-combatants), proportionality, or controllability of international humanitarian law, its articulation in India's doctrine is premised on creating the maximum chance of non-use of the weapon. This, in fact, is buttressed by two other doctrinal attributes: maintaining a narrow role for nuclear weapons solely to nuclear deterrence and accepting 'no first-use' (NFU).

It is the fear of massive damage that is likely to be found more unacceptable by an adversary than the idea that 'small' nuclear wars can be tolerated. The latter, in fact, would likely enhance the chances of use. While the first use of the weapon might be carefully calibrated to cause minimal collateral damage, there can be no guarantee that the recipient of such an attack would follow along similar lines. Therefore, even a small use could eventually breach legal and moral constraints.

The world today is grappling with many nuclear risks. These range from stressed inter-state relations to unbridled nuclear modernisations and expansions, the deployment of dual-use delivery systems and nuclear entanglement, and eroding faith in taboos. It would be disastrous if the idea of limited nuclear war as a feasible proposition were to be added to this list. The more nations move towards the idea of being able to contain a small nuclear war, the closer we will move towards routinising their use. Eventually, when a small nuclear use turns into a big one or a limited use into a little less limited one, would be anybody's guess.

India should seize this moment to reinforce faith in its own nuclear convictions and remind others that nuclear weapons are not ordinary or even a 'little more' than ordinary weapons. These are *extraordinary* weapons of mass destruction. Deterrence is their main purpose, and that comes best with the ability to cause unacceptable damage. Making that damage acceptable by meting it out in controlled quantities, whether as a first or second user, is a dangerous and foolish idea that is more likely to cause deterrence breakdown.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes:

¹ As cited in Louis Rene Beres, "Tilting towards Thanatos: America's 'Countervailing' Nuclear Strategy" in Klaus Knorr, ed., *Power, Strategy and Security* (New Delhi: Asian Books, 1987), p. 83.

² Jeffrey A Larsen, "Limited War and the Advent of Nuclear Weapons", in Jeffrey A Larsen and Kerry M Kartchner ed., *On Limited Nuclear War in the 21st Century* (Stanford, Calif: Stanford University Press, 2014).

³ Office of the Secretary of Defence, *Nuclear Posture Review*, Feb 2018. Retrieved from <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEARPOSTURE-REVIEW-FINAL-REPORT.PDF>, pp. 17-18

⁴ There is much confusion about whether Russia has ever claimed this as its nuclear strategy. For an insight into this debate see Olga Oliker and Andrey Baklitsky, "The Nuclear Posture Review and Russia De-escalation: A Dangerous Solution to a Non-existent Problem", *War on the Rocks*, Feb 20, 2018. Available at <https://warontherocks.com/2018/02/nuclear-posture-review-russian-de-escalation-dangerous-solution-nonexistent-problem/>

⁵ NPR, n. 3, p. 30-31

⁶ A Wess Mitchell, "The Case for Deterrence by Denial", *The American Interest*, Aug 12, 2015. Available at <https://www.the-american-interest.com/2015/08/12/the-case-for-deterrence-by-denial/>.

⁷ Office of the US Secretary of Defence, *Nuclear Posture Review*, October 2022.

⁸ Lawrence Freedman, *The Evolution of Nuclear Strategy*, Third edition, (New York: Palgrave Macmillan, 2003), p. 104.

⁹ As cited in Klaus Knorr, (ed.), *Power, Strategy and Security*, (New Delhi: Asian Books, 1987), p. 85.

Recommended Readings:

- Bernard Brodie, *Strategy in the Missile Age* (RAND: Santa Monica, California, 1959)
- Herman Kahn, *On Escalation: Metaphors and Scenarios* (Praeger: New York, 1965)
- Robert Jervis, *The Illogic of Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1984)
- Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton, NJ: Princeton University Press, 1989)
- Walter Slocombe, "The Countervailing Strategy", *International Security*, vol. 5, no. 4, Spring 1981

