Nuclear South Asia: How it is different from Cold War

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Introduction

Three significant developments marked the end of the WWII and defined the post-war international system: the emergence of the United States and the Soviet Union (USSR) as the two superpowers in a bipolar structure of international system, the birth of the United Nations, and most importantly, the introduction of nuclear weapons as a tool in inter-state relations. With the establishment of the UN, the world powers set out to create a platform where states could work out problems that could potentially destabilize the international system. It was under the spirit of this initiative that the perils that accompanied the advent of nuclear weapons were addressed. Though characterized by extreme competition between the two super powers, the Cold War was punctuated by bilateral talks and efforts at multilateral forums like the UN to maintain the stability of the international system.

State to state communication remained an important feature of the Cold War, even in the adversarial environment, between the two strategic competitors. The Cold War also introduced new meanings to the terms strategy and deterrence. These terms became specific to nuclear weapons. A few more states also acquired nuclear weapons, as the usefulness of the atomic bomb, and the relationship between possession of atomic weapons, state power and prestige were better understood. Concepts associated with deterrence in the first nuclear age[1] (1945-1991) remained relevant in the second nuclear age, when other powers acquired nuclear weapons. A particular

predicament for nuclear experts and major powers emanated from the South Asian region where India and Pakistan tested nuclear weapons in the late 1990s. This paper aims to make an analysis of the dynamics of the strategic relationship between Cold War rivals and to what extent the two cases are comparable. The paper will also bring out the main features of the rivalries in both cases and how talks between the two South Asian rivals can provide a useful platform for tackling the South Asian conundrum and contribute to peace and stability in the region.

Nuclear Competition During the Cold War

For the purpose of this paper, the study will be limited to the US-USSR nuclear rivalry as only these two were direct rivals, and their rivalry defined politics on the global level. Other nuclear states, barring China, were American allies.

Ideological politico-economics were at the heart of the hostility between the US and USSR. The US championed liberal and capitalist economic values whereas the USSR, under the totalitarian government founded on Marxist-Leninist ideology was its opposite. In addition, the US, with its involvement in international politics had begun a shift from isolationism to an internationalist foreign policy outlook. It had consolidated its influence in Europe and expanded its sphere of influence to developing countries in Asia and Africa. The US also established military bases in western Europe and concluded defence agreements with several other Asian states. This policy is commonly referred to as the policy of containment of Soviet Russia. Stalin on the contrary, concerned with Soviet Russia's security in the Post-World War period, started a quest for a buffer zone of states in Eastern Europe. Most of these states

were ruled by communist regimes. Thus began a competition for worldwide hegemony between two blocs of opposing socio-political and economic views.

The rivalry between the two super powers however remained overwhelmingly ideological in nature and no territorial disputes were involved, save the division of Germany into West and East Germany.

Throughout the Cold War period, deterrence between the nuclear armed superpowers remained somewhat stable. Soon after the Hiroshima and Nagasaki atomic bombings came the realization that the nature of future major wars would change because of the massive destructive power of nuclear weapons, if an adversary was to acquire these weapons. Bernard Brodie famously said of the bomb in 1946, "Thus far the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them."[2] Nuclear weapons acquisition granted the US and USSR a new dimension of power, termed "structural power",[3] besides their conventional military and economic power, that enabled them to pursue their interests more assertively. Avoiding a direct military conflict became a core of both superpowers' strategic thinking. Both superpowers, however, continued to undermine the others interests through supporting proxy wars and increased their influence by acting as international systemic leaders.

Both the rivals were involved in a fierce arms race for the better part of the Cold War. Arms race is defined in Barry Buzan's words as a "self-stimulating military rivalry between states, in which their efforts to defend themselves militarily cause them to enhance the threats they pose to each other", resulting in arms race instability.[4] Both the superpowers till the late 1980s made qualitative as well as quantitative additions to their nuclear arsenals, with the competition spilling into several

dimensions with the evolution of technology and the nature of strategic competition. For example, after the nuclear rivalry officially began in 1949, with the Soviet Union acquiring its own nuclear capability, the USSR and the US went into a drive to acquire credible delivery systems for new weapons. In the meanwhile, US set out to build its first hydrogen bomb, which was tested in 1952. The hydrogen bomb was approximately 1,000 times more powerful than traditional fission nuclear devices. The Soviet Union quickly followed suit, and conducted its own thermonuclear weapon test in 1953.[5] In the 1950s, tactical nuclear weapons were also introduced in the European theatre by both rivals. First authorized in 1953 in western Europe, this was aimed at strengthening the deterrent effect of US forces vis-a-vis the superior conventional forces of the USSR. The USSR responded in kind, and by 1965 had hundreds of its own tactical and theatre nuclear weapons deployed in Europe.[6] But in 1957, the USSR displayed its capability to strike the US from across the continent, by its first ICBM test in August, and the successful launching of satellite *Sputnik* in October 1957. The US too gained ICBM capability by the end of the decade. In the early 1960s, not only did the USSR test the largest nuclear device to date, (the Tsar Bomba,) the Cuban Missile Crisis also came to light.

The Cuban Missile Crisis of 1962 was the first incident that created a realization in the two competitors that skirting around a nuclear armed enemy would be mutually destructive down the line, and the first arms control treaty, the Partial Test Ban Treaty was signed the next year, in 1963. This, although not strictly a treaty for slowing or reducing nuclear weapons production, did pave the way for further talks regarding nuclear arms control in the international community. The détente that ensued between the two superpowers is believed to have been possible owing to the realization by both the superpowers, of how close they were

to mutual destruction in the wake of the Cuban Missile Crisis. The Cuban Missile Crisis is thought to have brought a serious change in the thinking of Washington regarding nuclear weapons. According to historian Arthur Schelsinger, "a world in which nations threaten each other with nuclear weapons now seemed to him (Kennedy) not just an irrational but an intolerable and impossible world."[7] Additional danger was posed by deployement of tactical nuclear weapons. Cuban Missile Crisis also provided an opportunity to strategists in the US and USSR, to reassess the situation. It was concluded that the use of these weapons would become inevitable if they remained deployed on the battlefield.

Caution generated by the Cuban Missile Crisis led both sides to bargain the Non-proliferation Treaty (NPT), where the nuclear armed states agreed to curtail horizontal proliferation of nuclear weapons and make efforts in "good faith" to the goal of ultimately disarming entirely. By mid 1960s, however, the Soviet Union had begun to deploy an antiballistic missile defence and the US had a lead in numbers of nuclear warheads owing to its development of Multiple Independently Targetable Reentry Vehicle (MIRV) programme.[8] This led the two countries to negotiate the ABM Treaty in 1972, as a by-product of SALT I talks, and in 1979, the second round of talks, SALT II, began.

Despite the NPT having come in force in 1970, the quantitative arms race between the two countries was at its peak in the 1980s, where both US and USSR kept adding nuclear warheads to their arsenals, with the combined arsenals of both reaching about 60,000 warheads. In 1987, the two rivals signed the Intermediate-Range Nuclear Forces (INF) Treaty to eliminate their respective ground-launched ballistic and cruise missiles with ranges between 500 and 5500 km, which led the two sides to decrease their stockpiles.

The futility of arms race eventually translated into the gradual reduction of nuclear weapons following the INF. In 1991, US President Bush and Soviet leader Gorbachev also signed the Treaty on the Reduction and Limitation of Strategic Offensive Arms (START I), which called for a 25-35 percent cut in the strategic warheads of both sides and entered into force later in 1994. Subsequently, in 1991, the US also declared a presidential nuclear initiative (PNI) involving the unilateral withdrawal from overseas bases and operational deployment of all land and sea-based tactical nuclear weapons.[9] In this way, the notion of deterrence by the superpowers in collaboration with their respective blocs developed into a security arrangement of the global international system, resulting in a deterrence "regime". Thus deterrence strategy became a "cornerstone of international politics" around which the rest of international politics was thought to revolve.[10]

NATURE OF CONFLICT IN SOUTH ASIA

India and Pakistan were created shortly after the end of WWII by the partitioning of the Indian subcontinent in 1947. After the partition, communal violence ensued which had a deep impact on the psyche of both nations and would define their relationship in the subsequent decades to come. The creation of the two countries was further complicated by dispute over state of Jammu and Kashmir. The issue of Kashmir has perpetuated an ongoing border conflict since 1947. The tensions between the two neighbours over this dispute and frequent fire exchanges, not to speak of the three major wars and one limited war, has led many analysts to believe it to be a potential nuclear flashpoint.

The conflict between India and Pakistan is different from the Cold War as it is not based on divergent political ideologies – both are democratic countries with capitalist economic systems and similar economic interests. The differences lie in the fact that one is a bigger state with ambitions to become a regional power and the other is comparatively a smaller state which feels it was unfavorably dealt with and left at a disadvantageous position to fend off for itself at the time of the partition. Jammu and Kashmir and some other Muslim majority territories were unjustly given in India's control by the British at the time of leaving the subcontinent in violation of partition criteria.

Peace has remained elusive and crisis imminent due to the ever-present border tensions, despite the development of nuclear weapons by both India and Pakistan. Border tensions flare up intermittently and have the risk of escalating. Escalation can in turn lead to the lowering of nuclear threshold, which may lead to inadvertent war on the border. More alarming is the recent signaling with regard to change in India's nuclear doctrine of "preemptive" nuclear first strike, which entails the use of a decisive, counterforce first strike in Pakistan, that may also considerably lower the nuclear threshold. (This debate will briefly be discussed under a later section of the paper).

Territorial contiguity has a strategic repercussion as well. The missile flight time between the two neighbours amounts to only a few minutes. The flight time of Shaheen III, for instance, from Chagai in Balochistan to New Delhi is 3.88 minutes, to Mumbai is 4.12 minutes and to Calcutta 7.25 minutes. Similarly, the time it would take for an Agni-II missile from Karnataka in South India to Islamabad would be 9.5 minutes, and 8.46 minutes to Lahore. In contrast, the missile flight times between major cities of Cold War competitors were up to thirty minutes, although Berlin divided both blocs into their Eastern and Western parts

and the prospect of a nuclear attack launched from Eastern Europe by Soviet Union in western Europe made retaliation by the US quite a conundrum. In a similar way, the corollary of the South Asian case is that there is lesser time for the two neighbours to rationally analyze the threat of an impending nuclear attack by the other and take decision accordingly, making the prospect of inadvertent nuclear exchange all the more likely.

Deterrence Driven by Asymmetrical Power Capabilities

Deterrence in South Asian rivals hinges on asymmetrical powers. (Comparison of two forces in table on next page.) This entails that Pakistan's nuclear deterrent was aimed at not only India's nuclear capability but also conventional force superiority.[11] This has resulted in a state of the stability-instability paradox.[12] A case in point is the Kargil Conflict of 1999. The lesson drawn from the conflict was that limited conventional war can break out and go on for a protracted period of time. Building on the concept of the stability-instability paradox, the two South Asian nuclear powers seem to have replicated Cold War concept of avoidance of large scale wars, which had a *potential* to escalate into nuclear exchange. During the Cold War, the US and USSR were involved in sundry conflicts abroad but the distance factor helped in alleviation of tensions as well as initiation of arms control measures. For example, SALT I talks between the US and USSR started with Vietnam in the backdrop. Similarly, START I talks started after USSR had already invaded Afghanistan. Such moves are hard to visualize in the India-Pakistan conflict given the sensitivity of the Kashmir issue.

Moreover, conventional military asymmetry also augments the strategic imbalance. The great differences in military

capabilities of the two countries "and the nuclear threshold have an inverse relationship: the greater the asymmetry, the lower the nuclear threshold."[13] As mentioned before, Indian conventional superiority is not decisive. Each country therefore has an advantage in initiating an offensive as it will have the benefit of surprise. India's Cold Start or Proactive Operations Doctrine is designed to employ that very advantage by making use of its IBGS and mechanized infantry, artillery, and armor to conduct a swift operation within 72-96 hours, denying Pakistan a speedy defence and foreign intervention.[14] As India's military superiority is not decisive and in the event of such an impending attack from India, Pakistan would also perceive an advantage in launching an offensive.[15]

Category	**India**	**Pakistan**
Active Personnel	1,325,000	620,000
Defence Budget	$51,000,000,000	$7,000,000,000
Total Aircraft	2,102	951
Fighters/Interceptors	676	301
Attack Aircraft	809	394
Transports	857	261
Tank Strength	4,426	2,924
Armored Fighting Vehicles	6,704	2,828
Total Naval Assets	295	197
Aircraft Carriers	3	1
Major Ports and Terminals	7	2

Source: Global Firepower
http://www.globalfirepower.com/countries-comparison.asp

The Bomb's Role in State-making

Paul Bracken has proposed[16] that the second nuclear age is characterized by the role of the bomb as a tool of state-making of post colonial countries and a significant feature of the identities of these states. They are also called the third tier nuclear capable states, i.e. states that acquired nuclear weapons after the non-proliferation order had already come into force. Nuclear weapons acquisition was security driven in both US and USSR's cases in the early and late 1940s respectively. In contrast, third-tier nuclear states did not necessarily develop nuclear weapons solely for security reasons. For example, India's nuclear weapons programme started before it had developed disputes with China.[17] This is different from Cold War nuclear countries because after coming into force of the NPT and the division of the world into the recognized and so-called other nuclear states, acquiring nuclear weapon capabilities by states became an act of going against the grain. States that went ahead anyway and achieved nuclear power status displayed their perceptions of possessing these weapons as a feature of their prestige and security. Cold War rivals, being superpowers who *made* the norms, did not have to worry about going against the international nuclear norms, whereas for third-tier nuclear capable states, nuclear weapons signified the state's independence and sovereignty.

Bipolar Rivalry VS Triangular Relationship

A significant difference between the Cold War and South Asian case is the "n-player game" factor i.e. that the Cold War rivalry was dyadic in nature, despite five or six (if Israel is counted) other nuclear capable countries. There were essentially two main players who drove the nuclear competition. In South Asia,

the nuclear politics involve not only India and Pakistan but the China-India rivalry as well. The India-China contention stems from geopolitical grounds, pertaining to border disputes, the security of sea lanes of communications (SLOCs) and military assistance to third parties, especially China-Pakistan partnership on one side and India-US strategic relationship on the other.[18] To add further complexity, India perceives the China-Pakistan alliance as a threat to its security. According to Kampani, the security dilemma that exists between China and India is rooted in structural geopolitical rationales such as China and India's self-identification as emerging hegemonic rivals in the Asia-Pacific.[19] In the India-Pakistan context, then, the latter's partnership with China amounts to a security "trilemma", where actions taken by a state to defend against another state have the effect of making a third state feel insecure.

Moreover, New Delhi's development of longer-range ballistic missiles is more relevant to deterrence against Beijing than Islamabad. For instance, the Agni-5, with a range of more than 5,000 kilometers, does not serve the purpose of targeting Pakistan, but it does put all major Chinese cities within India's range.[20]

The China-India rivalry has three broad contours. First, the political aspect entails that both countries are the two major powers of Asia and hence natural competitors. Secondly, in strategic terms, each country is vying for power projection in the Indian Ocean Region (IOR) as well as the Pacific Ocean. Secure sea-lanes are an important element for security of the two. India has two unsinkable aircraft carriers, or islands southeast to its mainland territory: the Andaman and Nicobar Islands, which have strategic significance owing to their location near the choke point of Malacca Strait.[21] Its aircraft carrier, The *INS Vikramaditya* is fully operational.[22]India also

commissioned its nuclear capable submarine, INS Arihant, in August 2016. [23] China's strategy in the IOR is described by the metaphor "string of pearls", which refers to the establishment of China's economic projects in Indian Ocean littoral states. It holds that China is taking on economic and investment projects with Indian Ocean states i.e. Bangladesh, Myanmar, Sri Lanka and Pakistan, to secure ports or places where its military forces could subsequently set up naval facilities.[24] Moreover, as part of the People Liberation Army Navy's (PLAN) counter-piracy "far seas" operations, China maintains its presence in the Gulf of Aden to deal with frequent raids on cargo ships by pirates who have been active for some time. It has also deployed a submarine in the region. Although China does not have a military base in the IOR as yet, in November 2016, China publicly declared its intention to build military supporting facilities in Djibouti, where the sole US military base in all of Africa also exists.[25] China and India are also developing their respective Blue-water Navy forces, both of which are expected to expand their roles in the Indian Ocean.[26] Diego Garcia, a site for a British-American military base in the Indian Ocean, has significance as well. Under the Logistics Exchange Memorandum of Agreement (LEMOA) signed between US and India in August 2016, this may also mean that India would have access to Diego Garcia in the future and expand its power projection.

Thirdly, there is the factor of US-India strategic partnership, which is part of the broader US Pivot to Asia policy. This US strategy is aimed at propping India up as a balancer or challenger to growing Chinese power in Asia. As part of this third category, India is now looking to expand its presence in the South China Sea, where China and US are already involved in a fierce competition. The Asia-Pacific region has come to have more strategic importance for international community, in part

because of China's rise and the US rebalance to Asia. In August 2014, Indian External Affairs Minister Sushma Swaraj announced that the decades-long "Look East" policy, initiated in 1991-92, would become "Act East" policy". Under the Act East policy, New Delhi has increased its engagement in the Asia Pacific region. India and countries in the region have come together on a number of issues, ranging from joint military exercises to high-level visits, which illustrate the ever-increasing strength of political and military ties.[27]

Arms Race Minus Arms Control

CBMs are an important means for alleviating risks related to nuclear weapons and inadvertent breaking out of war. With the signing of Partial Test Ban Treaty in 1963, the impetus was put onto arms control and risk reduction measures to strengthen the strategic stability that existed between the US and USSR. The arms control treaties that followed have been discussed briefly in a previous section. In the case of India and Pakistan, only three nuclear CBMs exist and none of them pertain to arms control. These include the pre-nuclearization, 1988 agreement on Prohibition of Attack against Nuclear Installations and Facilities, and post-nuclearization; a 2005 agreement on advance notification of ballistic missile tests and a 2007 agreement on reducing the Risk from Accidents Relating to Nuclear Weapons. These have been effective till now, but fail to move further to incorporate more aspects that exist in the strategic relationship between the two countries. For example, in May 2016, India launched an SLBM test without prior notification to Islamabad.[28] Prior to the overt nuclearization of the two countries, Pakistan made a proposal for a Nuclear Weapons Free Zone in South Asia in 1974 and post-nuclearization, in 1998, also proposed a Strategic Restraint

Regime. Both of these proposals would have potentially curtailed or not started at all a nuclear arms race between the two rivals in South Asia, but were turned down by India.

Pakistan has made several proposals to India in the past, such as creating a nuclear weapon free zone in South Asia, simultaneous signing of Non-Proliferation Treaty (NPT), mutual acceptance of International Atomic Energy Agency (IAEA) safeguards, a mutual pledge to renounce development of nuclear weapons, bilateral inspection of each other's nuclear facilities, and signing a regional test ban treaty, but none of these proposals could get India's acceptance.[29] This has resulted in a situation where the two neighbours have now moved on to more advanced technologies such as cruise missiles and MIRVs (both tested by Pakistan in 2017) and BMD (the latest tested in a series by India in March 2017). Pursuit of advanced systems by both states bring to the fore a need for new measures for risk reduction in tandem with the contemporary developments of the two countries' nuclear force structures. The arms race between the US and USSR peaked in the 1980s.[30] A similar situation, i.e. that of an accelerated buildup of nuclear arms in both Pakistan and India, seems to be unfolding in the case of the South Asian rivalry, which Paul Bracken terms as "the first bounce of the nuclear ball", i.e. an arms buildup.[31]

The foregoing explains that unlike in the case of the US and the USSR, nuclear agreements in South Asia do not evolve into conditions for further agreements, but dilute over time, as more advanced technologies are introduced, and no mutually acceptable proposals for CBMs have emerged from the region after 2005.

One of the elements of the Cold War risk reduction, according to Michael Krepon, was mutual dissatisfaction with existing measures.[32] India and Pakistan do not prioritize arms control in

the first place, as for India it is a matter of prestige and competition with China, while for Pakistan, it is a matter of its security vis-a-vis India. As long as the current arms race fueled by these strategic anxieties remain on both sides of the border, arms control steps will remain on the back burner.

Nuclear Restraint versus Brinksmanship

The two superpowers had prioritized nuclear restraint during the Cold War and made efforts to avoid nuclear brinksmanship through several agreements. The Cold War rivalry was marked by incidents of near military brushes and encounters that could have escalated into full blown war. For example, the first agreement between the US and USSR to mitigate such a possibility was the "IncSea" accord.[33] The agreement between the two countries on the "Prevention of Incidents On and Over the High Seas" outlined means to alleviate the possibilities of a collision or accident by several measures for example signaling to avoid miscommunication, refraining from simulating attacks and prior notification when conducting exercises.[34]

Similar measures are hardly applicable in the case of two neighbours such as India and Pakistan who share volatile borders and have also fought wars in the past. Moreover, provocative actions, such as India's October 2016 "surgical strikes" along the LoC (a claim denied by Pakistan) have the potential to lead to escalation of tensions. Additionally, since the past year, the Pakistan-India relations have been characterized by provocative rhetoric from the Indian side, for example by the recent declarations from prominent academics and political people[35] about the possible change in the Indian posture of No First Use.

Command and control issues

Robust nuclear command and control systems are believed to be an important feature for risk reduction and maintenance of a stable deterrent equation, by reducing risk of inadvertent nuclear war, and which was a constant source of concern for both Cold War rivals. Command and control is also prioritized by South Asian rivals, as it is not optional, but a necessity for stability and credibility in the deterrence equation between competitors. In both cases, what is common is that all countries have had to address and evolve their command and control issues with the evolution in their nuclear doctrines and technologies.

As an example, until the early 1960s, the US C_3 force did not require a lot of flexibility before the strategic missiles came into play. Ballistic missiles posed the challenge of a reduced reaction time by the US as compared to how it was when the only delivery system available was strategic bombers. With US doctrine of Massive Retaliation, which called for unconstrained all-out attacks, a streamlined command and control structure capable of quickly and efficiently relaying the President's orders to go to war was required.[36] With the coming into power of John F. Kennedy, who was uncomfortable with the inflexibility of Massive Retaliation, then Secretary of Defence, Robert McNamara formulated a new strategy of "Flexible Response". The strategy was aimed at limited counter-force strikes to deter aggression and to open up space for bargaining for war termination. This was a strategy of deterrence by war-fighting. The problem with this was that restraint during nuclear exchange was very hard to ensure and thus a review of the command and control was required. This led to a reversion to a similar model to massive retaliation, MAD (Mutually Assured Destruction), in 1964-5.[37]

In the Soviet case, there existed a strong desire to maintain political control of the nuclear weapons command and control process. The leadership of the Soviet Armed Forces was vested in the Politburo and the Defence Council, the latter of which was responsible for controlling Soviet strategic armed forces i.e. the five main services which were the Strategic Rocket Forces, Ground Forces, Navy, Air Defence Forces, and Air Forces. The strategic nuclear forces were directly controlled by them and assigned strike missions as required.

India and Pakistan have similar command and control structures.[38] Pakistan's National Command Authority (NCA) is responsible for decision-making regarding nuclear weapons employment, while India's Nuclear Command Authority serves that similar purpose. But, unsurprisingly, some issues remain. For example, assertive control over TNWs hinders the deterrence required by Pakistan to ward off a limited conventional force attack by India in case war breaks out and pre-delegation increases the risks of accidental or inadvertent use. However, a similar problem during Cold War, i.e. the pre-delegation of authority to use nuclear weapons, also existed then. An incident from the Cold War outlines the dangers involved in the inadvertent use of nuclear weapons by commanders at sea, where the decision to carry out a nuclear strike came down to a vote between three Soviet naval officers, and one voted not to do so, preventing the nuclear attack altogether.[39]

Another issue that has garnered much attention is nuclear terrorism. Following the political crisis of 2007, the main concerns regarding Pakistani nuclear weapons were nuclear leakage and radical groups or individuals gaining control over Pakistan's nuclear assets. Time after time concerns have been

raised about radical individuals within Pakistan taking control of nuclear programme, but that is highly unlikely.[40]

However, it is more dangerous when nuclear weapons capabilities become hostage to belligerent rhetoric, as in recent narrative emerging in India's political circles. This is evident in the thinking, for example, of top authorities such as former Indian National Security Advisor Shivshankar Menon, which he reflected in his book *Choices: Inside the Making of Indian Foreign Policy* about India's declared policy of NFU (No First Use) and its practical value in the face of a nuclear armed adversary which has a First Use doctrine against it as thus, "Circumstances are conceivable in which India might find it useful to strike first, for instance, against an NWS that had declared it would certainly use its weapons, and if India were certain that adversary's launch was imminent."[41] There was also the matter of Manohar Parrikar, currently Chief Minister of Goa and Indian Minister for Defence from 2014 to March 2017, who questioned the viability of India's doctrine of NFU last year, and suggested it ought to be revisited. He dismissed it as his personal opinion later,[42] but the essence of the matter remains, that people with such thinking exist within the India nuclear strategy-related decision-making body.

In the South Asian context, Indian rhetoric, coupled with its unwillingness to deal with Pakistan on an equal footing is a major hindrance to prospects of arms control in the region. One can assess by the fact that regional proposals concerning nuclear weapons are rejected by India because of a serious divergence in objectives: for India, prestige remains an important motive for expanding its nuclear forces and becoming a big nuclear power, while for Pakistan, security remains its sole objective. This makes the South Asian rivalry different from the Cold War as in the latter, both powers eventually learnt the

futility of involvement in an arms race and investing resources in a type of weapon that is not intended for use, and understood the significance of reducing chances of escalation, provocation, and war.

Conclusion

This article highlighted ways in which the deterrence relationship between the South Asian rivals is different from Cold War rivals. It is a product of a mix of factors such as geography, historical aspects of the rivalry, power asymmetries, divergent motives where nuclear weapons programmes are concerned, volatile borders, the lack of an arms control regime, threats perceptions and politically oriented provocative rhetoric. These factors suggest that not only is the South Asian rivalry not strictly comparable to the Cold War, but also that the arms control measures that sustained the nuclear rivalry between Cold War rivals as well as helped reduce the risks for nuclear war, are unlikely, or at least very difficult, to be applicable in the South Asian relationship. Moreover, in fact, many important strategic arms control treaties that were agreed upon even between the US and USSR during the Cold War have come to unravel at the end of the Cold War as the nature of the globally-dominating, bipolar relationship between the US and USSR ended and new and multiple threats emerged in the 21st century. The withdrawal of the US from ABM treaty, which was a major victory for the Cold War rivals at the time it was agreed upon, presents one such erosion of the nuclear arms control system. The follow-up treaties to START I, i.e. START II and START III never entered into force and never concluded. In fact, according to a Reuters report on February 9, 2017, in US President Donald Trump's first telephone call to Russian President Vladimir Putin, the latter raised the question of

extension of the New START. President Trump did not respond favorably, and alleged instead that the treaty was "one of several bad deals negotiated by the Obama administration".[43] Most importantly, the NPT, which was aimed ultimately at complete and general disarmament, has come to a deadlock.

Moreover, although similarities such as faith in the deterrence theory, which Henry Kissinger termed an “esoteric intellectual exercise” and the importance of managing and maintaining command and control over nuclear forces has been retained in the “Second Nuclear Age”, the era that began with the emergence of the US as the sole superpower of the world. Effective command and control, however, is insufficient to maintain deterrence stability as, interestingly, the biggest danger comes from the current US President Donald Trump, who is infamous not only for his mercurial nature and general lack of understanding of strategic issues, but also has the authority to launch a nuclear war. Therefore, though robust command and control systems are a necessity for Nuclear Weapons states, it is the presence of such trigger-happy individuals in authority that poses a greater challenge to the system of nuclear deterrence. Recently, Trump also declared a need to modernize and expand the country’s nuclear forces - such moves may have a spiral effect and induce other states to follow suit and also build their nuclear capabilities. The India-US strategic partnership in that regard poses a great challenge for Pakistan.

The second nuclear age had brought to the fore new challenges that were not fully answered by the lessons drawn on the Cold War era principles. The world is again arguably shifting towards multipolarity which further complicates the application of the Cold War deterrence model. As a result of more power poles being created, the nuclear rivalry has also become more

diversified and spread out. In South Asia alone, for example, as it has been pointed out, the nuclear relationship has three and not two players. Therefore, although general lessons can be drawn on both sides of the South Asian nuclear armed neighbours from the progress made by the Cold War rivals in areas where cooperation can ameliorate the security dilemma and to provide security on each side, they cannot be translated as such into the former situation.

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Endnotes:

[1] Note: Paul Bracken terms the era of the Cold War, marked by the introduction of the nuclear weapons in 1945 and the ensuing nuclear arms race between the two superpower rivals US and USSR following 1949, as the First Nuclear Age.

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