Editors S. Rajagopal Sridhar K. Chari



NATIONAL INSTITUTE OF ADVANCED STUDIES Bangalore, India

Editors S. Rajagopal Sridhar K. Chari



NATIONAL INSTITUTE OF ADVANCED STUDIES Bangalore, India © National Institute of Advanced Studies, 2003

Published by National Institute of Advanced Studies Indian Institute of Science Campus Bangalore 560 012

Copies of this report can be ordered from:

The Controller National Institute of Advanced Studies Indian Institute of Science Campus Bangalore 560 012 Phone : 080-3604351 Email : mgp@hamsadvani.serc.iisc.ernet.in

NIAS Special Publication 1-2003

ISBN 81-87663-44-8

Typeset & Printed by Focus Communications 139, Cozy Apts., 8th Main, 12th Cross Malleswaram, Bangalore 560 003 Tel: 334 6692 We would like to thank the United States Institute of Peace, Washington D.C., for a generous grant for this project.

Prof. Roddam Narasimha, Director of the National Institute of Advanced Studies, has been a constant source of support, inspiration and guidance.

Gayathri Lokhande worked hard for the successful conduct of the project, and her assistance was invaluable.

Thanks are also due to Ms. Kala Sunder for her excellent job on transcribing tapes, for copy-editing, and to Focus Communications who put this book through the printing process.

Contents

Introduction S. Rajagopal and Sridhar K. Chari	1
The Nonproliferation Regimes and Nuclear Threat Reduction <i>Victor N. Mikhailov</i>	10
Nonproliferation Regimes and South Asia – Is There a Meeting Point? <i>Ronald F. Lehman II</i>	30
Maintaining a Threshold of Strategic Autonomy at Least Cost: Continuity in the Evolution of India's Nuclear Policies <i>R. Narasimha</i>	50
Role of Nuclear Doctrines and the State of the Armed Forces in South Asia Vladimir E. Novikov	72
Nuclear Weapons, Deterrence and Stability in the International System: South Asian Dynamics Sridhar K. Chari	87
Assessing China's Asian Role and Security Policies Sun Xiangli	109
Kargil War to Current Threat of War : Prospects for Stability Jasjit Singh	122
Discussion Marco Di Capua	138
International Terrorism and its Impact on South Asian Stability S. Gopal	147
A View from Bangladesh Waliur Rehman	160
Report on the Concluding Session	166
Conclusion S. Rajagopal and Sridhar K. Chari	170
List of Participants	176

Introduction

S. Rajagopal and Sridhar K. Chari

he South Asian region is dominated by the dynamics of the relationship between India and Pakistan. Like elsewhere, the September 11, 2001 attacks against the United States have had their impact on the region. The Taliban government of Afghanistan was indicted as a key breeder of jehadi terrorist activity, and for providing sanctuary to Osama Bin Laden, the man generally believed to have masterminded the September 11 attacks. The "War on Terrorism" was launched, and the Pakistan government, which had till then actively supported the Taliban government besides being one of only three countries to have recognised that government, abandoned, at least notionally, support to the Taliban, and became a key, "front-line ally" of the United States. Then came the December 13 attack on the Indian Parliament, where a suicide squad armed with grenades, explosives, and machine guns got within a few yards of the Prime Minister's office, with the intention of taking the Indian top leadership hostage. The attack was thwarted, but then began a half year long mobilisation of the Indian armed forces along the border, and the dangers of all-out war became very real.

Much, though, has not changed. The situation between India and Pakistan has been a volatile one ever since the two States came into being in 1947 – barring a few periods of relative calm. For Pakistan, Kashmir is the "unfinished agenda of partition", and the official stance has been that the State of Pakistan provides only moral and diplomatic support to what it likes to call a "legitimate freedom movement". There have been the wars of 1947-48, 1965, 1971, and the Kargil war of 1999, where infiltrators, including Pakistani army regulars, had encroached on the Indian side of the Line of Control in Kashmir.

India, on the other hand, stresses the support of the Muslim populace of the region to Kashmir's accession to India at the time of Independence, and the legality of the procedure adopted. Kashmir continues to have a special status in the Indian Constitution. India also points to the covert war employing infiltration across the Line of Control, and a concerted programme to promote terrorism on Indian soil, launched, it believes, by Pakistan in the early 1990s. This war has claimed more than 30,000 lives to date. India insists that (i) talks cannot take place in such a vitiated atmosphere, and (ii) that it cannot possibly negotiate Kashmir with Pakistan on the grounds that it is a Muslim majority region, when the Indian founding ethos was one of a pluralistic, secular, democratic society, as against that of Pakistan's, which was that of an Islamic republic. India, it must be remembered, has the second largest Muslim population in the world – around 13-15 percent of Indians are Muslims.

On the other hand, there have also been arrangements that have contributed to stability like the Indus River Waters Treaty on water sharing from the river Indus, and an agreement not to attack each other's nuclear facilities and to exchange information on them. Global agreements requiring advance intimation on the conducting of missile tests have been strictly adhered to by the Indian side. Some initiatives have not been reciprocated – like India according MFN status to Pakistan. In addition, there has been the Shimla Agreement of 1971, which enjoined upon the parties to respect the Line of Control dividing Kashmir, various peace initiatives like the unilateral cease fire in 2001 implemented by India, the trip to Lahore by the Indian Prime Minister in 1999, and the Agra Summit when the two leaders met in Agra, India, in 2001.

Among the key external components of the dynamics in South Asia, apart from the relationship of the United States with the countries in the region, has been China's role. India struggled to fight off an incursion by Chinese armed forces across its borders in 1962, and it continues to grapple with the fact that China has actively aided Pakistan militarily, including clandestine (but clearly established) supply of technology and materials for the Pakistani nuclear programme. Pakistan has also been aided in its missile programme by both China and North Korea, the latter again having close links with China.

Both the Indo-Chinese and Indo-US relationships have shown many positive signs of late, but Indo-Pak stability continues to elude the peoples of the sub-continent.

The idea behind the present project was to explore the "prospects for stability in a nuclear sub-continent" by bringing together key strategic thinkers from India, Russia, the United States and China to a roundtable conference, where diverse views could be aired, facts dissected, theories and concepts applied with rigour and hard-headed analysis, and perceptions and misperceptions discussed out in the open.

A roundtable conference organised at the National Institute of Advanced Studies, Bangalore, India, during September 2-4, 2002, saw the presentation of many insightful papers, and intense and productive discussions, that, we hope, will make a lasting contribution to policy and decision makers, and to international relations scholarship in general. These papers have been brought together in this volume, along with transcripts of the discussions, and we place these before the reader.

Victor N. Mikhailov (see appendix for list of participants and affiliations) brought to bear Russia's experience in dealing with nuclear issues, and its long-time strategic relationship with India, in looking at the situation in the sub-continent. He finds that India's principles of nouse against non-nuclear weapon states and no-first-use does demonstrate India's non-aggressive nuclear posture, but nevertheless sees the possibility of Indo-Pak conflict escalating to a nuclear level as a very real one. Civilian nuclear energy can contribute to humanity's welfare in the coming decades of dwindling conventional energy sources, and Russia's cooperation with both China and India has been fruitful in this regard. He however feels that there are avenues for further Indo-Russian cooperation, which should be explored with greater vigour. His basic thrust is that cooperation in the realm of civilian nuclear applications can make a contribution to stability – in many ways harking back to Eisenhower's "atoms for peace" theme.

He strongly supports the Non-Proliferation Treaty, but stresses Article 4, which mandates assistance to States engaged in civilian nuclear programmes. He believes the safeguards regime should be nondiscriminatory, in that all civilian nuclear activities in all countries, including nuclear weapon states, should be placed under safeguards. As he puts it, "there should be no 'superior and inferior' states in respect of the civilian atom." He also believes that proliferation concerns can be addressed if the technology-supplying country takes back the spent fuel from reactors.

While indicting the US for adopting what he calls double standards on civilian nuclear cooperation with Iran and North Korea, he considers the Strategic Offensive Reductions Treaty between Russia and the US as "in general promoting predictability and strategic stability in the world."

He however feels that America's "expanded interpretation" of establishing deterrence by threatening pre-emptive strikes on the territory of the potential adversary, cannot be the basis for strategic stability. As a Chinese strategist put it, every country has the right to defensive pre-emptive action in anticipation of a hostile act; but elevating what is a military tactic to the level of a strategic doctrine can only contribute to instability.¹ Mikhailov says: "The current situation in the world is very alarming. We are on the way to a new world order in which one country makes the decision to punish or pardon."

Roddam Narasimha, in looking at the "Evolution of India's Nuclear Policies", stresses that the country's central policy in this regard has been one of "seeking, preserving and protecting the country's strategic space and autonomy at the lowest possible cost." This policy, he notes, has held steady through successive prime ministers. With regard to the NPT, he presents a few options. One is that things may likely go on as usual, with five-year reviews, which are basically "non-events." As for India, it would be seen as a country outside the NPT but not presenting a disruptive threat to the world order. Another option, less likely, is a move towards actual disarmament. A third, the least likely, is that of the richer non-nuclear countries "making common cause with some of the restless signatories of the NPT, and forcing revisions in the treaty."

Ronald Lehman, in his paper on "Nonproliferation Regimes and South Asia: Is there a Meeting Point?" analyses stability and the question

^{1.} Li Hua, Institute for Applied Physics and Computational Mathematics, Beijing, speaking at the 8th ISODARCO-Beijing seminar on Arms Control at Beijing in October, 2002.

of common ground not only between India and Pakistan, but between India and the rest of the world, especially on the question of nuclear nonproliferation regimes. In theory, he says, Indian policy does overlap with the goals of the broader nonproliferation community, but in practice the NPT does not permit cooperation with non-parties. He indicts India for not presenting "any approach that provides sufficient incentives" for a change in the terms of the NPT, as most believe that to make an exception for India would undermine the treaty.

He notes that though India's "declared objectives over time are not entirely inconsistent with the declared objectives of the global nonproliferation regime," there is a rhetorical stalemate, which can be broken only with concrete steps.

India has sought a timetable for global disarmament and a commitment to zero. Indians have given little credit to the nuclear superpowers for the substantial reductions in nuclear weapons because of the large number of nuclear weapons that remain. Western arms control experts often respond by noting that India has not followed even in those areas such as the Intermediate Range Nuclear Missiles subject to the INF Treaty of 1987 under which Russia and the United States are all committed to zero and achieved it. Clearly, many Western analysts see India's disarmament policy as Fabian tactics, forestalling limits on India that might preclude a large, advanced nuclear deterrent for India.

On the question of stability itself, Lehman notes, "every effort to understand stability results in greater complexity (and perhaps unpredictability) under each layer of national security policy and military programs...perhaps the discovery, or as necessary, creation, of greater common ground will be the key."

In South Asia, he says, all parties identify peace as a common goal, threat reduction as the common tool, security as the common measurement, exploit engagement as a common process, and note that freedom and prosperity are common incentives. "And they act as if crisis is the common moment of truth. All of these rhetorical flourishes can be harnessed in support of stability and restraint. Then perhaps more substantial common ground will appear, and the means of greater cooperation and trade will be found."

Vladimir E. Novikov, in his paper on "The Role of Nuclear Doctrines and the State of the Armed Forces in South Asia," analyses the nuclear doctrines of the countries in the region. He finds that the doctrines of China, India and Pakistan "are worked out (or are being worked out) to parry quite concrete threats, though often the sources of these threats aren't called directly." He notes that China continues to develop its nuclear forces, and that from 1987 the Chinese military and politicians are using the term "limited deterrence" as against minimum deterrence.

While he finds that there is no need for Chinese strategic nuclear forces to be equal to the American or Russian, in the South Asian case, if India wished to deter China, India's strategic nuclear forces must be comparable to that of China. He feels that any Indian attempt to do this will provoke sharp reactions from China, and can result in more Chinese missiles being targeted against India, complicating bilateral relations between the two countries.

Like many analysts, he questions the robustness of deterrence in South Asia. There is no guarantee, he says, that after the beginning of military conflict, it will be possible to avoid steady escalation and the use of nuclear weapons.

He concludes, "India's nuclear status hasn't produced a sufficient deterrent effect on Pakistan." He echoes those who cite the attack on the Indian Parliament and continued terrorist strikes in Kashmir, as evidence of Pakistan not being deterred, and in fact contributing to continued instability.

In his paper on "Nuclear Weapons, Deterrence and Stability in the International System, and South Asian Dynamics" Sridhar K Chari looks at strategic stability and the international system by employing some theoretical constructs and models. He argues that while nuclear weapons can indeed contribute to successful deterrence, the international system will have to look more closely at aspects where deterrence in broad terms can be stated to "fail" and stresses the need to institutionalise mechanisms that do not fuel conditions where challenger states feel that the benefits exceed the costs of risking conflict. Double standards cannot be allowed to prevail, especially, for example, in the war against terrorism.

He considers a recent refinement of balance of power theory, which posits a balance of threat model. Under this model, states do not balance power, but seek to balance threats, given, of course, their set of resources, technological capabilities, and available alliances. The prospects for stability in South Asia lie first in the nations in the region seeing the need only to balance threats rather than balance capabilities, the latter being articulated in terms of abstract notions of power and strength on the world stage. Second, and more specifically, it lies in how much value Pakistan puts on the Kashmir question. In his paper, he looks at various relevant components in the strategic situation in South Asia, covering deterrence, no-first-use, the Kashmir conflict, and nationalism. His basic thrust is that India must augment its level-of-attack defence against Pakistani actions, and against aided and independent non-State groups which wish to destabilise the region, by employing the full range of its conventional capabilities, even as it strengthens diplomatic and political positioning.

Such a level-of-attack defence would aim to repulse by all means necessary whatever aggressive action Pakistan routinely takes, so that the costs of those actions are steadily raised, and the onus of escalation is placed clearly on the aggressor. That means augmenting everything from defence procurement and preparedness at the conventional level, intelligence, diplomatic and political initiatives, growing in economic strength, and at the end, a robust nuclear deterrent. Responding successfully at the level-of-attack does not mean that the defending state sits back passively afterwards – it does mean that it retains more options, including that of escalating if necessary. In other words, his argument is that level-of-attack defence, which is normally a tactical matter, must be raised to the level of a strategic doctrine, articulated across the spectrum of possibilities, with the goal of strengthening deterrence.

Dr Sun Xiangli, in her paper "Assessing China's Asian Role and Security Policies," while stressing the "traditional friendly relations with Pakistan" for several decades, believes that the Sino-Indian relationship has entered a new stage of cooperation and friendliness. While acknowledging that tensions between India and Pakistan have "complicated" China's relationship with both countries, she echoes the Chinese government stand that a stable and friendly South Asia is in the interests of China, and that China is following a policy of "neutrality" as far as India and Pakistan are concerned.

She concludes that China's Asian security policy, which stresses economic development, will not only promote stability, but "will be a model for South Asian countries." In his paper "Kargil War to Current Threat of War: Prospects for Stability", Air Commodore Jasjit Singh sets off Pakistan's offensivedefence strategy against India's defensive defence stance. "The Pakistani strategy, adopted first in 1989, envisaged the fighting of the next war on Indian soil, and Kargil came at a time when the covert war using terrorism in Kashmir was losing momentum."

He feels that India, in tackling the current threats from Pakistan, is prepared to "exploit the space between nuclear weapons and subconventional war by Pakistan through terrorism. There are risks of escalation and miscalculation, but India has the capacity and the strategy to ensure that escalation dominance is maintained."

In outlining the lessons from the Kargil war, which lasted 72 days, Singh notes that Pakistan had achieved total strategic and tactical surprise, and India "exercised restraint and accepted higher casualties by restricting war to the area of aggression while pursuing diplomatic initiatives to explain the facts to the international community. As a consequence, the United States played a crucial role and supported India, forcing Pakistan to accept withdrawal across the Line of Control."

During this conflict, escalation to "levels close to nuclear weapons use was not in the interests of either country and both implicitly recognised this," he feels.

S. Gopal, in his paper "International Terrorism and Its Impact on South Asian Stability," observes that the terrorist campaign in Kashmir, till 1993, was largely being waged by indigenous Kashmiri groups, albeit trained and armed by the Inter-Services Intelligence (ISI) of Pakistan. Almost all these groups, with the exception of the Hizbul Mujahideen of the Jamaat-e-Islami, have since largely given up violence and terrorism, and confined their activities to a political and propaganda campaign against the Government of India. Post 1993, Pakistan-based organisations have taken over, with the training and logistics infrastructure either in Pakistan or in Afghanistan.

• While the US air strikes post September 11 have destroyed this infrastructure in Afghanistan, the Pakistani set-up remains intact, and has even become a centre for Al Qaeda activities.

Gopal negates the idea of an Indian threat to Pakistan, stating that "the only issue which could be considered as a security threat for Pakistan is a belligerent India losing its patience and deciding to cross the border to end cross-border terrorism." December 13, 2001, the day on which Pakistani-based terrorists attacked the Indian Parliament, was indeed a defining moment for India, he argues, hinting that the next Indian response will and should be a much stronger one.

The discussions following the papers,² from which extensive excerpts have been reprinted, cover more ground. Besides making an interesting read that fleshes out many of the concepts under discussion, they sharply highlight many of the misperceptions that still persist and prove an obstacle to increasing stability in the region.

The conference was intended to have Pakistani participation. Unfortunately, this did not materialise. Their absence however was made up to a certain extent with the viewpoints presented by other foreign participants.

We invite the reader to sample these deliberations. A conclusion at the end will attempt to bring together the various threads of the discussions, and point to some directions in which the region and the international community can move with a view to enhancing stability.

^{2.} The papers have been printed here in the order in which they were delivered at the conference.

The Nonproliferation Regime and Nuclear Threat Reduction

V. N. Mikhailov

The Indian civilisation is one of the most ancient and respected in the world. It is always a great pleasure to communicate with people who belong to a nation that has preserved its traditions and culture in primordial beauty and carefully treats its historical heritage. Many ancient Indian literary works are well known in Russia and all over the world, especially medical tracts, the epic poems and the *Puranas*. On behalf of all Russian people who are fond of chess, I would like to express special gratitude to the Indian people for the *Puranas*, in which this wise game invented in India was mentioned for the first time. The *Puranas* also tell about missiles, *agni astra*, predecessors of powerful modern carriers that put satellites into near-earth orbit. So, in general, the Indian contribution to development of civilisation on our planet has been enormous.

Against the background of ancient Indian history the city of Bangalore, which is approximately two times younger than Moscow, looks as if it were a young but venerable scientist who has collected all the wisdom in the institutes, scientific centres and the Indian "Silicon Valley" located on the territory.

The Kudankulam NPP

Your state, Karnataka, borders on the east upon the state of Tamil Nadu, which is well known in the Russian Minatom. In Tamil Nadu, in the small town of Tirunelveli, the construction of the Kudankulam NPP started several months ago in cooperation with Russia. Russia supplies two light water cooled and moderated reactors (of the VVER type) that are up to high international standards in performance and safety. Light water cooled and moderated reactors represent the new course of the Indian nuclear power programme. It may well be that your state and your city will also receive electricity produced by these reactors. As a direct participant of this effort I am looking forward to this in the near future.

It has been a hard and long way from the day "The USSR- Republic of India Agreement on cooperation in construction of a nuclear power plant in India" was signed in 1988, to the present time, when we are pouring the first concrete in the foundation of the NPP.

After the demise of the Soviet Union, work on the project was halted. However in 1994, regardless of the tough situation in Russia in general and in the nuclear industry particularly, the Ministry I headed at that time restarted discussions on construction of the NPP with the Indian Atomic Energy Commission.

In 1994 after the Russian Prime Minister V. Chernomyrdin and I visited India, negotiations started, especially on the economic issues in the new document, "The Supplement to the Agreement of 1988". Despite the hardships of the transition period in Russia, after 1994, work on the project was progressing successfully thanks to our efforts. However, we ran up against US opposition to this project. In an odd way America was confusing the civilian atom and a nation's desire to possess nuclear weapons; it is still doing the same.

Presumably, the US Administration disliked the Kudankulam project due to a number of reasons. The first reason was its unwillingness to lose hold of new promising markets of nuclear power production. The second was "the persecution of atomic power engineering" during the Clinton era.

Right after taking office President Clinton's Administration adopted the course of atomic power engineering reduction, which has restrained development of American nuclear science and industry for almost a decade.

It is clear that while reducing the role of national atomic power production the US could not bear the dynamic development of foreign rivals. Now the United States has turned back to development of nuclear power production.

As for Russia, it looks upon cooperation in the civilian atom as an important direction of international cooperation. We have always been open to such cooperation with foreign nations, considering that to hamper the technical progress of developing countries is to discriminate against them somehow. It is clear that such cooperation should be within the framework of relevant treaties, agreements, and other regulating documents. Regarding the civilian atom, we remember that when signing the Non-Proliferation Treaty in 1968, nations with a well-developed nuclear power sector made commitments in Article IV of the Treaty to assist all other nations developing in that direction.

The US respected the letter and spirit of this Article when it was constructing the first Indian NPP – the Tarapur station. It is known that General Electric and Bechtel companies were building it from 1964 till 1970.

However, when 30 years later the construction of a new plant started with Russian participation, we had to struggle for the project.

In September 1997, when I was on a visit to India again in connection with the 50th anniversary of the country's independence and the 40th anniversary of the IAEA, major points of the new Agreement on the Kudankulam NPP had been almost settled. And in 1998, exactly 10 years after the basic Agreement had been signed with the USSR, the Russian Federation signed the Supplement to the Agreement.

In the first stage of the project (1996-2001), Russian institutes were developing the design of the plant meeting up-to-date safety requirements. The final decision on construction was made after all financial matters on credit had been settled and the Indian Government agencies had approved the design.

Russian specialists are to install two reactors of the VVER-1000 type with a total installed capacity of 2000 MW. It is the largest Russian project in India in recent years. Launching of construction of the two reactors also gave evidence of Russia's firm intention to continue mutually beneficial cooperation with India in the sphere of peaceful use of nuclear technology, including the nuclear fuel cycle. Our cooperation in the sphere of civilian nuclear power is based on the following legal documents:

- The USSR Republic of India Agreement of January 22, 1979 on Research and Engineering Cooperation in the field of civilian nuclear power;
- The USSR Republic of India Agreement of November 20, 1988 on Cooperation in the construction of a nuclear power plant in India;
- The Supplement of September 18, 1988 to the above Agreement on NPP construction;
- The Russian Federation Republic of India Memorandum of 2002 on Extension of Cooperation in the field of atomic power engineering.

The Kudankulam project is a landmark in Russian-Indian cooperation in the field of atomic power engineering. According to the Russian-Indian Agreement, the NPP is to be placed under IAEA safeguards. The same was the case with the Tarapur and the Rajasthan NPPs.

Civilian Nuclear Facilities under IAEA Safeguards

In general, the idea of placing civilian nuclear facilities under IAEA safeguards is worth further study. In this connection I would like to emphasise the positive example set by India in placing its NPPs under IAEA safeguards. Both Russia and the US should learn from this example.

Although the verification mechanism of the IAEA safeguards, if applied worldwide to all commercial NPPs and other civilian nuclear facilities would require significant investment, this effort is without any doubt urgent, due to the current threat of nuclear terrorism. Speaking about possible fissile material (FM) proliferation or building of a "dirty" bomb, one should keep in mind that it is much easier to steal FM from a commercial NPP than from a military nuclear site or a military base, which are always guarded much more carefully in all countries without exception.

As a rule, in Western countries, private companies produce reactors, FM and fuel assemblies; their desire to maximise profit is often harmful to the security of stockpiled materials. In Russia and India all atomic power facilities are state-owned. That is a major advantage.

In September 2000, at the special session of the UN attended by the leaders of almost all nations of the World ("The Millennium Summit"), President Putin proposed a practical way to implement our international strategy in the field of the peaceful atom under the auspices of the IAEA, based on currently available results of research and development. The essence of that proposal is the following: Step-by-step elimination of highly enriched uranium (with U-235 isotope content more that 20%) and pure plutonium Pu-239 from peaceful nuclear power engineering as a major barrier to proliferation of nuclear explosives. Such a nuclear fuel cycle completely separates atomic power for military use from that for peaceful purposes. All scientists should integrate their efforts in order to meet this challenge. And it is the IAEA that should become the body that not only defines modern requirements for nuclear security but also forms a structure to integrate various projects in the field of atomic power engineering.

Russia consistently stands for:

- Reinforcement of the nuclear weapons and nuclear technology non-proliferation regime based on enhancement of IAEA safeguards. All civilian nuclear activities in all countries including nuclear weapon states should be placed under IAEA safeguards;
- Broad international cooperation in development, production, and operation of advanced, safe, and profitable facilities, especially fast-neutron reactors;
- Disposal or civilian use of excess nuclear explosives from dismantled nuclear weapons;
- Development of atomic power production in the context of sustainable development of society.

As for relations with the United States of America, one should note that the Treaty on Cooperation in the field of the civilian atom signed as far back as in 1972 has been extended for a new period, while modified conditions require a new treaty with the US, that in addition would cover the issues of conversion of military facilities, the "Lab-to-Lab" and the Nuclear Cities initiatives, and so on.

Russian adherence to the Non-Proliferation Treaty (NPT) is well known. It was Russia that almost "saved" the NPT at several critical junctures. For example, in 1995, a tricky situation occurred during the NPT Review and Extension Conference. In the course of the prepcom meetings Iran stated its intention to withdraw from the NPT because Western nations denied it the right to obtain advanced civilian technologies in the context of the Bushehr NPP construction. The Russian-Iranian cooperation for completion of the Bushehr NPP construction almost saved the Treaty from breakdown during the Conference. Further, in 2000, we ratified two key Treaties, START II and the CTBT – just before the five-year NPT Review Conference in New York. This act inspired hesitating nations and kindled hopes of a nuclearfree age.

However, one should take into account that the Treaty generates a certain imbalance between nuclear weapon and non-nuclear weapon states; the terms of the NPT are not equal for all its participants. Nuclear weapon states enjoy the right to preserve their nuclear arsenals for an indefinite period whereas non-nuclear weapon states remain so for an indefinite time as well (as a result of the decision on indefinite extension of the Treaty).

We consider that constant efforts to strengthen the nonproliferation regime are necessary, including tightening control over transfer of nuclear materials and civilian nuclear technologies in nuclear weapon states as well.

There should be no "superior and inferior" states where the civilian atom is concerned.

Fresh NPP fuel exports to non-nuclear weapon states should be firmly tied to return of spent fuel to the supplying country. This practice should be the basis for international export controls. International entities such as the IAEA and the UN Security Council should be strengthened in order to achieve this goal.

US Double Standards: Iran, North Korea

The US has undoubtedly contributed much to the scientific and technological progress of the 20th century. However, it is evident that America applies double standards to other nations and is often willing to use military force in order to achieve its goals. The stir created on the issue of the Bushehr NPP construction in Iran is a vivid example of these double standards.

It is well known that in the 1960s and 1970s Iran was carrying out its programme of nuclear research and electric power production with the support of the United States and some other Western nations. The US-Iran cooperation started as far back as in 1957 after the signing of a bilateral agreement on civilian nuclear power within the framework of the American "Atoms for Peace" programme. Ten years later, in 1967, in accordance with that agreement, the US supplied the Teheran Nuclear Centre with a research reactor of 5 MW capacity and later with hot cameras for radioactive isotope extraction. It is characteristic that the US expressed no objection to Iran proceeding with a closed nuclear cycle then.

Moreover, the documents of the US National Security Council declassified at the end of the 1990s reveal that in negotiations with Iranian representatives the US planned:

- To agree to Iran producing fuel on its territory using nuclear materials supplied by the US;
- To agree to Iran building a spent nuclear fuel reprocessing plant on its territory based on the principle of multinational operation;
- To suggest that Pakistan could participate in operation of the reprocessing plant in Iran in exchange for Islamabad cancelling construction of its own plant.

The Shah of Iran negotiated with Western companies for supply of nuclear power plants from the US, Canada, Germany, and other countries. The choice was made in favour of Germany, and the Siemens Company started construction of two reactors with a capacity of 1.2 MW each on the littoral of the Persian Gulf, near Bushehr.

The Soviet Union showed understanding towards the Bushehr NPP construction by the Siemens Company because the Iranian leadership had taken the decision to sign the Non-Proliferation Treaty and join the IAEA.

The construction had been proceeding smoothly and by the end of 1979, 85% of the civil works had been completed when suddenly the German Government took a decision to halt construction and to take its specialists out of the country, which at that time was going through radical revolutionary changes under the leadership of Ayatollah Khomeini.

In 1989 M. S. Gorbachev and the Ayatollah signed the USSR-IRI long-term programme of cooperation, which directed the Ministry of Atomic Power and Industry (the Ministry of Medium Machine Building) to prepare agreements on cooperation in the field of the civilian atom and construction of an NPP in the IRI. The two agreements were signed - on the NPP in 1992 and on the civilian atom in 1995. In compliance with these agreements and in response to an official request from Iran, an IAEA member and NPT participant, Russia was to continue the NPP construction; to leave Iran which had no experience in NPP building and operation face-to-face with a complex problem without scientific and technical support would have been wrong according to the principles of the NPT and the IAEA, and also according to the rules of goodneighbourly relations.

The US gave an extremely negative response to this cooperation. The accusations were based on the nonproliferation regime, but all of them were groundless. Even experts of American non-governmental institutions such as the Carnegie Endowment, expressed their disagreement with the position of the US Administration. The majority of specialists consider the reputation of Iran as an NPT member to be irreproachable.

On the other hand the United States offered to supply the DPRK through the Korean Energy Development Organization (KEDO) reactors of the same type as the Russian light water reactors at the Bushehr station in exchange for North Korea retaining its IAEA membership and not withdrawing from the NPT.

It is interesting that America had been keeping silent from 1989 till 1994. At first it was the Soviet Union, then it became a country living on foreign loans, so "he who pays the piper calls the tune".

The US approach to international issues from the position of double standards is developing further. The Iran problem is only one episode in a long list.

The United States obstinately continues to retain its nuclear weapons on the territories of non-nuclear weapon states – the NATO members. We consider that to be equal to transfer of indirect control over nuclear weapons to non-nuclear weapon states, which "we regard as violation of the Non-Proliferation Treaty" as mentioned in Russian President Yeltsin's report at the Moscow Summit in 1996. The report also drew attention to the fact that nuclear submarines carrying MIRV nuclear weapons sail in the Ocean *far away from their territorial waters*. And all this is masked by political concern over the need for strict compliance with the WMD nonproliferation requirements. Whether America wants it or not, its actions prompt independent countries with ancient cultures to build indigenous nuclear weapons and to withdraw from the nonproliferation regime.

And how about this year's statement of the Deputy Secretary of State, G. Bolton, on the decision to call a halt to "negative nuclear assurances" to the NPT participants who in Washington's opinion belong to the "axis of evil"!

The situation with the Comprehensive Test Ban Treaty (CTBT) is also striking. Despite the availability of supercomputers, high-powered lasers and gamma installations which enable the US to maintain a reliable and safe nuclear arsenal, the US Senate voted against its ratification. In the last Nuclear Posture Review, the Administration proposed to maintain the Nevada test site in high readiness and to upgrade the infrastructure of the site, presumably for future real tests of new advanced nuclear weapons. This indicates the new Administration's high interest in nuclear weapons.

Currently, the US leadership pays special attention to space, that goes beyond missile defence deployment. The US Space Command plans to provide for full-scale integration of information capabilities of space, land, naval, and air forces.

We understand that today, the one who controls space is the master of the whole world.

Russia and India have spoken many times against the military use of space at the Disarmament Conference in Geneva. Our ambassador at the Conference, L. Skotnikov, introduced a draft document containing possible elements of an international, legally-binding agreement on prevention of weapon deployment in space, employment of force against, or challenging, objects in space.

I remember a phrase from the Indian Prime Minister Atal Behari Vajpayee's appeal to the nation on the occasion of the 54th anniversary of India's independence. It was presented in a poetic and religious form but at the same time it has a practical meaning as it demonstrates the longstanding position of India on the issue of weapons deployment in space. Vajpayee said that through millennia the Indian people have been repeating the mantra of peace: "*Pritvih Shantih, Antariksha Shantih, Vanaspatayah Shantih*", which translated from Sanksrit (which, by the way, has much in common with Russian) means the prayer "for peace on Earth, in Space and for all living beings".

In recent years the US has been showing an interest in nuclear warheads of low and super-low yield. These warheads are supposed to arm highly precise weapons and are capable of manoeuvering and destroying hardened, deeply buried, and mobile targets. While pushing funding for this type of nuclear weapons through Congress, the military gave an assurance that if used, their effect on the environment and the civilian population would be minimal. They are not like biological and chemical weapons that kill every living thing, but are so-called "humane" or "clean" weapons. But what will be the result? Will the residents of a tiny new "Hiroshima" feel any different if they are destroyed by a "mininuke" rather than by a 15-20 kiloton warhead?

Addressing the Challenge of Nuclear Terrorism

Our Minister of Defence, S. Ivanov, mentioned in one of his interviews that before considering the countermeasures to terrorism one should define from the point of view of international law whom to regard as terrorists, in order to avoid killing innocents in the course of antiterrorist operations. Our approach towards this issue is almost the same as the position of the European Union. The countermeasures against terrorism should be adequate to the threat. In this connection, the Berlin Declaration adopted at the 11th session of the Parliament Assembly of the OSCE two months ago (July 10, 2002) reminded all the OSCE participants that any measures that may restrict basic human rights and freedoms "in response to terrorism should fully comply with international law and relevant commitments of the OSCE and be regarded as exceptional, stopgap, and not permitting any despotism".

India and Russia have developed a framework for bilateral cooperation on countermeasures against international terrorism and on coordination of activities related to the national security of the two countries. The Joint Russia-India Task Force on Afghanistan was established. It started work in 2000, long before the start of the US anti-terrorist operation in that country. We have been working within the

framework of two joint coordinating groups: the task force on countermeasures against terrorism and the task force on regional security.

The theme of nuclear terrorism is in vogue now. Some irresponsible journalists and politicians try to cast Russia in an unfavourable light on this matter. But let's look into recent history.

Not many remember that long before the tragic events of September 11, 2001 in the United States, the 1996 Summit of the "Group of 8" on issues of nuclear security was held in Moscow. As Minister of the Minatom, I happened to take part in the organisation of the Summit. We used the occasion to express our point of view on the alleged unreliability of Russian safeguard systems for nuclear weapons and fissile materials to the leaders of the G8 states and to demonstrate the real state of security at Russian nuclear facilities to foreign specialists. In the course of the Summit, drafts of the following basic documents were prepared:

- On nuclear security issues;
- On the effort to address illicit circulation of nuclear materials;
- On ensuring safety and security of excess weapon-grade fissile materials no longer needed;
- On nuclear material protection, control, and accounting.

In his address at the Forum the Russian President maintained that all nuclear weapons of nuclear weapon states should be concentrated within their own borders. Unfortunately, other participants of the Summit did not support this suggestion.

However, on the whole, the meeting was marked by a constructive spirit of partnership. The parties succeeded in avoiding senseless exchange of complaints and concentrated their efforts on elaboration of new approaches towards future nuclear security issues. Basic nondiscriminatory principles of relations between the states of the international nuclear community were formulated; we still do advocate them. The Declaration of the Moscow Summit stated: "We adhere to the principle that security and safety of nuclear energy use should be of the highest priority. We are ready to cooperate with each other to promote nuclear energy use all over the world based on fundamental principles of nuclear security. Moreover, we declare our adherence to the measures that enable nuclear power engineering...to continue playing an important role in satisfying world energy demand in compliance with the objectives of sustainable development declared at the Conference in Rio de Janeiro in 1992". The Declaration contained recommendations on the issues of security of civilian nuclear reactors, nuclear waste disposal and nuclear material safety. The main attention was on the Non-Proliferation Treaty. In this respect, the IAEA was offered full cooperation in the fulfilment of its functions.

Besides the Declaration, the "Program of Addressing Illicit Circulation of Nuclear Materials" and the "Statement on the Comprehensive Test Ban Treaty" were adopted in Moscow. These documents still retain their importance.

At the final press conference, the Co-Chairman of the Moscow Summit, French President Jack Chirac, called it "an important step towards enhancement of tomorrow's world security". So it is not surprising that the nuclear sphere, which had been the symbol of confrontation between the West and the East for a long time, has now become the symbol of new cooperation and partnership based on peaceful utilisation of atomic energy. This should be the major factor in the future as well.

The Moscow Treaty on Strategic Offensive Reductions of 2002

The US-Russia Treaty on Strategic Offensive Reductions signed in May represents a positive solution to the problems that have piled up. Russia managed to cut the "knot" of the unrealised START II and to level potential unfavourable conditions of START III. It is clear that many of the problems were the result of our policy of concessions to America in the hope of saving the ABM Treaty of 1972 and in exchange for financial support for various transformations in Russia. When the Treaty on Strategic Offensive Reductions was ready for signing, the US Administration declared its intention to withdraw from the ABM Treaty. The world is still shocked by the US decision. Time will tell!

It is essential that the Moscow Treaty of 2002 is seen as legally binding; that goes beyond the initial American perception of a "new agreement" as merely a statement of intentions of the two presidents. It is not only the result of the persistent and diligent work of Russian diplomacy, but also the result of the American aide's realisation of the unalterable fact that disarmament agreements in this vitally important sphere cannot be achieved by "a simple handshake" between leaders of states. Any agreement should be fixed in a document, be legally binding, and verifiable. And therefore the obligations should be honoured. The transformation of the current American Administration's disarmament philosophy and its return to settled negotiation standards are also important parameters of the new Treaty, which sets the limit on the number of offensive nuclear warheads at the level of 1700-2200 units deployed on relevant strategic carriers. The rest of the 6000 existing warheads fall into the category of the so-called "reconstitution potential".

It is worth noting that previous treaties on strategic offensive arms reductions did not regulate the elimination of excess warheads; they also allowed availability of the "reconstitution potential". Actually, START II ratified by Russia allowed a significant level of "reconstitution potential". The same took place in START I (now simply the START Treaty).

The very title of the Treaty, "the Treaty on Strategic Offensive Reductions", assumes further discussion not only on reduction of deployed nuclear warheads but generally on scientific and technical aspects of strategic stability.

The Bilateral Implementation Commission established according to the Treaty will obviously address the problem of "reconstitution potential".

The new Treaty sets an example for other nuclear weapon states and helps to involve them in a multilateral nuclear disarmament process. It takes into account the commitment of the NPT participants to conduct negotiations on effective measures to end the arms race and implement disarmament. Taking all this into account, the Treaty on Strategic Offensive Reductions in general promotes predictability and strategic stability in the world.

Comparison of the Military and Nuclear Doctrines of the US and Russia

Over the past 50 years deterrence has been the world's guarantee of freedom from global conflicts. Surely it has been possible thanks to the nuclear potentials of the USSR and the US. And now Russia and the US are essentially responsible for a nuclear-free World, for a World without nuclear war. That is why we are going to dwell on the doctrines of these two states.

Russia and the US: In Russia there are two documents that set the guidelines of the state position on this matter – the Military Doctrine and the National Security Concept. In the US, after the Bush Administration took office, the new Quadrennial Defense Review and the Nuclear Posture Review appeared; they contain the basic provisions of the new US nuclear doctrine. A study of the documents made public so far reveals that the new Administration has supplemented the nuclear doctrine of the previous one by a number of provisions that cause some concern, for example, lowering the threshold of nuclear weapons deployment, including putting nuclear warheads with low yield into service.

Formally, there is no new doctrine. The new "Triune strategy" framework assumes fusing nuclear and non-nuclear strategic capabilities and hence the so-called New Triad appears. This mix of nuclear and non-nuclear capabilities based on the concept of consolidation of heterogeneous forces within the New Triad as declared by the US Administration confuses the international community on the issue. The mess appears especially in the minds of those who are far removed from issues of strategy and doctrine development.

Let us make a comparative study of Russia's approach and that of America towards maintenance of military and strategic stability, and the criteria of deterrence, based on important Russian and American unclassified documents of recent times.

Both Russia and the United States declared long ago their adherence to the principle of nuclear deterrence. However, they interpret the term differently. Russia's approach as described in the National Security Conception is based on the ability to cause predetermined damage to any state in response to aggression. America's "expanded" interpretation assumes deterrence first of all by means of pre-emptive strikes at the territory of a potential adversary. Nuclear warheads of low yield are the very same capabilities that could also be used in the first strike. Preemptive strike including use of nuclear weapons makes it feasible and easier for the US to repulse a radically weakened retaliatory attack by defensive capabilities (ballistic missile defence, air defence).

These parameters of the US nuclear policy are reflected in the new nuclear doctrine, which is under development by Washington. It is based on three postulates: prevention of challenge "to dissuade an adversary from implementing military programs and operations challenging the interests of the US, its friends and allies, deterrence of challenge and its elimination by means of forces that should be capable of resolutely defeating any adversary.... if deterrence fails".

From the US point of view, "pre-emptive defense" promotes peace, makes wars less probable and traditional deterrence needless.

The term "axis of evil" that completely denies "presumption of innocence", a term established in international legal practice, did not appear in the US all at once. As far back as in November 1997, the concept of "counter-proliferation" was presented in President Clinton's Directive. From the point of view of Western experts its major novelty was a significant expansion in the geographical range of sites subject to potential strikes, and also in the willingness to use nuclear weapons first, including addressing WMD proliferation by means of force.

These were the first steps of the previous Administration and Bush went further; in the Quadrennial Defense Review and the Nuclear Posture Review he suggested including in the doctrine and in the law the right of the United States to put military pressure upon countries allegedly capable of challenging the US and its allies in one way or another.

The essence of the American concept of "flexible deterrence", or "mutually assured security", or "pre-emptive nuclear strike" as it is called, consists first of all of denial of the current "antihumane" concept of "mutually assured destruction". The US insists that this concept does not comply with the spirit of the new relations with Russia. The document approved by Bush suggests maintaining stability mainly by means of the New Triad. It combines offensive and defensive systems and a flexible infrastructure that provides for prompt employment of offense and defense. The latter is of no less value and it is assigned to be the factor of deterrence and the means for carrying out "surgically precise" strikes. Arguably, such an approach cannot be the basis for a new scenario of strategic stability.

This is how the US builds a modern "empire" and manages it; as a result, under the new conditions of a unipolar world the longstanding idea of comprehensive disarmament changes in essence.

As a result of the formation of a unipolar world those countries that follow the US' lead and advocate its ideals of the "free world" benefit. Russia and India with their ancient cultures do not belong to this category.

Besides these reflections on the problems of maintaining strategic stability in the new environment, I would like to stress that the role of nuclear weapons is in no way reduced under the current conditions.

India: The concept of India's nuclear doctrine is summarised in three principles formulated by A. B. Vajpayee:

- 1. India maintains a minimal but persuasive nuclear deterrence.
- 2. India does not use nuclear weapons against non-nuclear weapon states and does not use them first against nuclear weapon states.
- 3. India complies with all non-discriminatory treaties and international regimes in the field of arms control and disarmament. It may sign the CTBT.

India's declared principle of non-use of nuclear weapons against non-nuclear weapon states is designed to allay the concern of (militarily and economically) less powerful states of the region and to facilitate economic and political cooperation with them. No-first-use of nuclear weapons against nuclear weapon states demonstrates India's "nonaggressive" position to the international community.

In conclusion let me "philosophise" a little bit in the spirit of your historical roots.

Summarising the above, one may note that the current situation in the world is very alarming. We are on the way to a New World Order in which one country makes the decision: "to punish or to pardon".

Double standards on the principle of the carrot and the stick are becoming the norm in international relations. And it is a financial oligarchy together with the United States of America as the parent country that rules over all.

Unfortunately, the present state ideology of the US is not the ideology of good but of evil.

However, humanity should eliminate weapons of mass destruction while moulding a New Philosophy based on the philosophies and religions of our forebears, especially on the most ancient of them – Confucianism, Hinduism, Buddhism, Christianity, Islam, and others. The strictest WMD nonproliferation regime based on universal regulations elaborated by the UN and verified by the IAEA should surely be the first step on this path. Humanity has suffered terrible disasters – Hiroshima and Nagasaki. Isn't it enough? Not rentiers as it is now but scientists, writers, and artists, people who belong to science and the arts, in one word the intelligentsia, should be the leading creative power of the modern world.

Of course, today the religious factor leads to serious local conflicts; it is very difficult to avoid them. However, armed intervention by peacekeeping forces and combat operations using advanced weapons only bring evil over our planet.

In the 19th and the 20th centuries there was an attempt to create a new philosophy of life, but it failed. The philosophy of Marxism-Leninism (socialism/communism) proved incorrect as it rejected the philosophy of a superior Mind. On the other hand, the established religions should not induce world chaos as each religion is based on important ideas of good and peace.

Every human being should have the chance to actualise his/her intellect and talent. Of course, hierarchy exists in every society, but everyone should enjoy the right to life in a peaceful home in the native land.

Each and every one of us, scientists, bears responsibility for that.

I am convinced that nuclear weapons – the creation of the scientific and technical progress of the 20th century – should become the weapons that secure peace. Subsequent generations will undoubtedly enter the 20th century in history as the Golden Age of soaring scientific and technical minds that mastered the energy of the atom.

Now that we have entered the 21st century, scientific and technical progress should become the guarantee of peace.

Civilian nuclear energy will be the means for improving the welfare of all people on Earth.

On the other hand, the military atom as an evil genius and djinn should be "kept in a bottle" and under no circumstances allowed to multiply.

Discussion

Narasimha: I think you argued that as far as civilian nuclear energy was concerned, as long as IAEA safeguards apply, expansion of nuclear energy in the world is a good thing. You talked about the Russian projects in India and Iran. I was wondering what you thought about the connection between civilian and military uses of nuclear energy.

Mikhailov: It is not natural for human beings to kill one another. Human beings started killing each other, fighting wars, some ten or fifteen thousand years ago. Wars do fuel progress of science and technology. All scientific and technological progress has a civilian and a military aspect. Technological progress has been particularly rapid in the last 100 to 200 years and in the course of time this difference between military and peaceful use may disappear, including in nuclear energy. I am not speaking about nuclear fission energy using neutrons alone. You know of isomers and isotopes emitting gamma radiation. We know of several isomers with a half-life of tens or hundreds of years. But this process can be accelerated to a millionth of a second. What I want to stress is that nuclear energy or fission energy is a wider term than fission using neutrons, which is what is in use today, both in the civilian and military spheres. In the foreseeable future, for the next several hundred years, nuclear weapons as we know them today, will not disappear. I do not wish to speculate about other types of nuclear weapons.

Why is it that scientific and technological progress also has military applications? This is a difficult question. I believe it is financial oligarchs, Capital, which do not recognise national borders, and the centre of Capital today is New York. Their appetites will grow. So, I believe that nuclear weapons will not disappear in the near future. That can only be a dream. But reduction of nuclear weapons is possible.

Jasjit Singh: If people start believing that nuclear weapons cannot disappear, they will not go away. So my question is only one – the difficulty that nuclear weapons are required by some countries for their own security – does this not provide the logic for other countries to seek nuclear weapons? Therefore, the attempt to deny technology – the export

controls – how long will they work, if you look at the longer perspective of twenty, thirty or forty years? Technology will keep improving, development will keep taking place. So I find it difficult to accept this very pessimistic view that they cannot go away, that it is a dream.

Mikhailov: I have indulged in a little philosophising in the Indian manner, in the last two pages of my paper. The answer to your question is there. Besides, we have a proverb in Russian – better the bitter truth than a sweet lie. Whatever we may say, nuclear weapons will not go away. I cannot talk about a thousand years hence, but not in this century.

Rajagopal: There is always a strong linkage made between civilian power and military use. I got the impression from this presentation that civilian power with safeguards would be the best way of ensuring progress and in a way contain military expansion in nuclear weapons. The actual experience has been that it is not so – in the case of Korea, Iran, perhaps Iraq – the safeguards have not been very successful. Now, is there a solution from the technology point of view? Can you have a fuel cycle which will produce non-proliferant fuels so that, in addition to safeguards, we use technology as a tool to de-link civilian power and nuclear weapons? Is there an interest in Russia in producing nonproliferant fuels, i.e. fuels that cannot be used in the production of nuclear weapons? Is there a technological solution which would give us more confidence and help in developing civilian power?

Mikhailov: Of course, despite IAEA guarantees, there are countries that violate these guarantees, as you mentioned. The solution is: first tighter controls and stricter punishment, but, I stress this, without use of military force. Punishment can be economic sanctions. Because of globalisation, no country can be isolated.

Secondly, about fuel. Fuel for nuclear power plants can be leased and as stated in my report, the supplying country must be obliged to take it back. A leasing contract. There should be no secret trade in nuclear fuel.

Thirdly, we should not change the NPT. All nuclear states must work to ensure stability and put all technology under IAEA safeguards.

I can give several examples of proliferation of nuclear fuel and technology by private companies – examples in Russia, the USA, Iran, Iraq.

Lehman : I thought a number of points need to be highlighted. Minister Mikhailov was right to emphasise the issue of dual use. It is inherent in the nuclear question but we need to recognise that the dual-use phenomenon is becoming increasingly important with respect to all technologies. Increasingly, technological advances empower even smaller countries and even individuals for good or for evil and in some cases give very small groups and individuals the power of destruction. So this is a challenge we all face and we must work together.

Mr Mikhailov has raised another important point as well. That sometimes it is better to accept one bitter truth than a thousand happy lies. That goes to the heart of one of the issues of verification and safeguards. I believe that nuclear energy in power has an important future but I also recognise the dual-use nature of nuclear technology. So our Centre at Livermore has been looking at the issue of proliferation resistance that Prof Rajagopal has raised. And it is clear that this is a complex problem and there are no purely technical solutions.

Let me make two or three bold statements. First, the problem is you have two standards. IAEA safeguards have to do with IAEA obligations on materials. But there is the obligation of a party to the NPT not to have a weapons programme. So they are complying with the IAEA here, but over there they have a weapons programme covertly. That is in violation of the NPT.

Nonproliferation Regimes and South Asia: Is there a Meeting Point?

Ronald F. Lehman II¹

he National Institute of Advanced Studies (NIAS) has selected an excellent time to consider the prospects for stability in South Asia. Concern around the world about instability in the subcontinent increased as both India and Pakistan became more vocal in referring to their nuclear weapons in the midst of crisis. Expert opinion is divided on whether such public statements are stabilizing or destabilizing, but all agree that nuclear saber rattling highlights the dangers involved. Many questions have arisen as to the relevance of the global nonproliferation regimes in this context.

NIAS has asked that I address here the question of whether there is a meeting point between the various global nonproliferation regimes and a "nuclear sub-continent." There are many aspects to that question, but the issue most raised by our Indian colleagues has been the prospects for nuclear technology cooperation. I was asked also to address key elements of the debate over what promotes stability. The purpose of these remarks is to provoke discussion, which is best done by getting to the heart of the matter. Toward that end, let me begin by summarizing my conclusions. I will then address several of the more detailed issues.

^{1.} The views expressed are those of the author and not necessarily those of the University of California, Lawrence Livermore National Laboratory, or the US Government.

Summary of Conclusions

All but a very few nations in and around South Asia are already parties to the three major global nonproliferation regimes. In theory, one can see the possibility of convergence between the global nonproliferation regimes and the stated policies of the few nations in South Asia remaining outside specific regimes. In practice, however, convergence in policy and practice over time may prove to be very difficult, particularly with respect to India and Pakistan in the nuclear area. Convergence at logical meeting points is intensely complicated by domestic forces, regional conflicts and divisions over policies and politics.

Nevertheless, given the volatility of South Asia today, additional tools for encouraging restraint and convergence are desirable. In the near-to-medium term, interim restraint regimes involving South Asia and perhaps nations from other regions might be achievable. They could be stepping stones toward more universal convergence later. Interim restraint measures, however, are most likely to be successful if they are large enough to be perceived as major contributions, but not so large that they are politically infeasible. They must be implemented in ways that are reassuring to all the parties involved by addressing immediate needs while protecting deeply held long-term policy goals.

This suggests policies to pursue measures that promote restraint while permitting parties to agree to disagree in some historically contentious areas. Partial steps conducive to longer-term, more comprehensive restraint may be possible, but more difficult compromises and/or changed circumstances would be necessary for significant convergence on all the global regimes and effective implementation of each.

The need to counter terrorism growing out of the attacks of September 2001 has heightened concern about the spread of weapons of mass destruction (WMD) and may offer some incentive and substance for greater cooperation that can encourage interim restraint and policy convergence. The United States and its Eurasian allies have not changed their basic approach to nonproliferation, nor are they likely to do so. They have, however, experienced some re-ordering of priorities within their basic policies after September 11. In previous years, these governments were likely to press the case for universal membership in global regimes to deal with general proliferation threats. They hoped that near universality would establish clear norms, reduce arms races, encourage stability, and reduce the risk of unauthorized access to WMD.

Today, the order of presentation of the same issues has, in many ways, been reversed. First priority is keeping WMD out of the hands of terrorists and preventing access to WMD by irresponsible groups or governments. A close second is reducing crises in regions in which WMD might become involved. Discouraging a provocative arms buildup remains important as does strengthening international law and norms, but there is reduced interest in engaging in sterile debate over longstanding differences during what is perceived as a period of great danger. Indeed, there is now a greater emphasis on specific steps in cooperation in threat reduction rather than codification in treaties of additional abstract norms.

This focus on the specific rather than the general may create new opportunities for engagement and cooperation. There have been such opportunities lost in the past, however, and the revisiting of old grievances further complicates matters. Still, in South Asia and in the rest of the world, significant changes are underway. Not all of these developments are positive, but recognition of these changes and the prospects for working together to deal with them may provide a basis for convergence.

In theory, India's stated policy overlaps that of the broader nonproliferation community. In practice, the terms of the NPT do not permit broad nuclear cooperation with non-Parties, and India has not presented any approach that provides sufficient incentives for the international nonproliferation community to change its rules on nuclear cooperation. Much of the nonproliferation community believes that to make an exception for India outside the NPT would undermine the nonproliferation commitments of those inside the Treaty.

One can imagine, however, steps that could be taken in the context of current conditions and new priorities that might encourage the creation of greater flexibility. This would require positive action in each priority area: countering WMD terrorism, export controls, stability enhancement, and reinforcement of nonproliferation norms. India would have to show great restraint in its own nuclear weapons program and greater respect for the nuclear nonproliferation norms around which most of the rest of the world is organised. India need not join the NPT, but it must end its rhetorical war against it. An interim restraint regime ending the unsafeguarded production of fissile material by relevant nations might be a useful step.

India must also address international concerns about military instabilities in South Asia. The question of stability cannot be divorced from WMD proliferation, but neither can it be divorced from conventional forces and, indeed, the international and domestic forces that drive escalation in a crisis. Over the years, experts have concentrated on different aspects of stability: crisis stability, arms race stability, geopolitical stability, domestic stability, and such. Any concept of stability that can realistically serve as a measure of propensity not to go to war has always involved some integration of all these forms of stability. Just as force exchange ratios, however important they might be, do not determine ultimately whether there is peace, so economic disparities, domestic turmoil, or broader global currents may play a major role in determining whether there is war.

Some Further Discussion

Time does not permit a full discussion of all of the aspects of nonproliferation regimes, much less a full discussion of stability. Several issues, however, do deserve to be revisited here in the context of changes in South Asia and around the world.

Differences between universality and convergence, membership and compliance

The issue of convergence overlaps with the issue of universality, but they are not the same. Convergence is about similarity of substantive views and behavior. Universality is more about membership. There is no agreed list of nonproliferation regimes, but the three regimes dealing with weapons of mass destruction that have the most extensive membership are the nuclear Non-Proliferation Treaty (NPT), the Biological Weapons Convention (BWC), and the Chemical Weapons Convention (CWC). Each of these has been the subject of major international campaigns to obtain universal membership in the name of promoting international norms and establishing international law.

Prospects for Stability in a Nuclear Subcontinent

Although the majority of nations party to these treaties are small and have no aspirations for WMD themselves, all nations with a significant potential for WMD are parties, or at least signatories, to one or more of these regimes. With the recent independence of East Timor, some 194 nations are now generally recognized as potential parties to these three treaties. Of these 194 states, 191, or 98%, are party to at least one of these treaties. One hundred eighty-eight, or 97%, are parties to the NPT. One hundred forty-seven, or 76%, have signed all three nonproliferation treaties, and 119, or 61%, are already parties to all three. Only three states are party to none.

The decision to join or not join a particular nonproliferation regime is a national decision, and the reasons for deciding not to join vary. For larger states with WMD potential, the normal rationale for nonmembership is security, although issues such as prestige, economic development, or special interests often are in play. Still, some regional variation in membership can be detected. Aside from microstates, the primary non-parties to the BWC are former Soviet republics, several African states, and a few countries in the Middle East. The significant non-parties to the CWC are primarily from the Middle East and North Africa. With the exception of Israel, the primary states associated with non-membership in the NPT are India and Pakistan. This has long resulted in a particular focus within the nuclear nonproliferation community on South Asia. Overall, however, South Asia is heavily subscribed to the global nonproliferation regimes with the exception of Myanmar, which has remained outside the BWC and CWC, and India and Pakistan's non-membership in the NPT.

Membership is not the same as compliance. Non-parties to the various nonproliferation regimes have shown some restraint, even as some parties to the treaties have violated the terms of those treaties. Significant doubt exists that Iran, Iraq, and North Korea are in compliance with their obligations under the NPT. A few other countries are suspect with respect to the BWC or CWC. To shore up the global regimes, other, less global regimes have come into being. Some of these regimes are export control oriented such as the Australia Group and the Nuclear Suppliers Group. Other regimes such as the Missile Technology Control Regime (MTCR) and the Wassenaar Agreement focus on other weapons systems. Supplemental agreements such as Open Skies and

various confidence-building or arms control agreements have been employed to strengthen nonproliferation efforts, and measures of unilateral restraint can also help.

In South Asia, such supplemental measures remain few and weak, but a number of countries including India have placed a special emphasis on their willingness to address concerns related to chemical, nuclear, and biological exports. A few confidence-building measures have been implemented, including with Pakistan. In principle, the countries of South Asia have been open to participation in a wide range of supplemental regimes. In practice, such regimes have been very difficult to implement because they become enmeshed with other international and domestic disputes. Yet, it is here, in the area of addressing specific problems in their real world context, that the hope for greater convergence may be found.

The dual-use nature of technology has made controlling the spread of chemical weapons a challenge. The prevention of the spread of biological weapons to hostile states or terrorist groups may be even more difficult. From a technological point of view, controlling the spread of nuclear weapons has seemed easier than controlling the spread of CW or BW. Furthermore, the existence of the NPT, with membership nearly as universal as United Nations membership, provides a legal framework that has made convergence of differing policies of diverse nations possible. At the same time, the NPT has been seen as an obstacle to some cooperative approaches to convergence in India and Pakistan on the nuclear question.

Is greater convergence possible in the nuclear area?

In a sense, the entire framework of the global nonproliferation regime, including the NPT, concerns convergence. At the risk of some oversimplification, parties without nuclear weapons agreed to forgo active nuclear weapons programs in exchange for access to the peaceful benefits of nuclear technology. Those with nuclear weapons agreed to aid in such peaceful cooperation even as they themselves worked toward the elimination of nuclear weapons by creating the conditions under which they would become unnecessary. Although considerable differences in policy existed among the parties to the NPT, and continue to exist, convergence was to be the result of a process aimed at bringing about change in real world political, economic, and technological conditions, not just policy.

Convergence that requires change in actual conditions is never easy. The near universality of the NPT today masks the reality that a number of significant nations remained outside the NPT for many years. These included Argentina, Brazil, China, France, and others who subsequently believed that their interests were best protected by joining. In part this was the result of changed security circumstances including the winding down of the Cold War. In part, it was the belief that successful participation in the global economy, including peaceful nuclear applications, would be aided by membership. From the security perspective, the non-nuclear parties assessed that nuclear weapons were not needed in the near-term under existing circumstances. Changed circumstances in the future that threatened their supreme national interests could be addressed then, perhaps through the withdrawal clause, if such adverse developments were to actually occur. Participation in the regime was seen as making the emergence of such threats less likely. At the same time, membership in the NPT permitted nuclear programs to advance more rapidly, primarily for peaceful purposes, but also facilitating future nuclear weapons options if such options should prove necessary.

For the two nuclear weapons states joining the NPT late, China and France, membership did not require them to immediately give up their nuclear weapons. The problem for countries like Argentina, Brazil, India, and Pakistan was that they had nuclear weapons programs that they did not wish to give up. For Argentina and Brazil, the programs were less far advanced and the security challenges very manageable. They joined the NPT. India and Pakistan, however, had very advanced nuclear programs and serious security considerations. They have not joined and are not likely to join for many years, if ever. Perhaps India would be willing to join the NPT if it were recognized formally within the Treaty as a nuclear weapons state, but the international community is unlikely to amend or supercede the Treaty in ways that could make that happen.

If convergence between the global nuclear nonproliferation regime and India and Pakistan within the NPT is not near at hand, is significant convergence possible outside the NPT? The answer is "Not easily." The primary economic incentive provided to non-nuclear weapons states to join the NPT is easy access to nuclear technology. The price for nonmembership is difficult access to nuclear technology and material. As the NPT has become more nearly universal, and as concerns have grown about the few remaining countries with heightened interest in nuclear weapons, parties to the NPT have tightened supplier guidelines, export controls, and domestic legislative conditionality. Cooperation with non-parties is more difficult now than in the early days of the NPT. At the same time, the political guerilla war by India and Pakistan against the NPT, even as they confront each other with growing nuclear arsenals, inhibits flexibility in nuclear cooperation. Legally, the area for cooperation is not large, and politically it is even smaller. This is true despite great interest in political, economic, and technological cooperation with India and Pakistan, including in the energy sector and even nuclear power.

Can the area for nuclear cooperation be expanded, either to promote convergence of nonproliferation policies or as a result of such convergence? Even if one cannot guarantee positive outcomes, one can see possibilities. In the case of India, its declared objectives over time are not entirely inconsistent with the declared objectives of the global nonproliferation regime. India's official line has been that India favors disarmament, but must build up its arsenals because others have not yet achieved the elimination of nuclear weapons. India has acquired nuclear weapons, but it will not intentionally help others acquire them. Although the specific argumentation is different, the core of its formal position is not greatly different from that of those nuclear weapons states that are party to the NPT. One large difference is that the five nuclear weapons states place a premium on a step-by-step process, whereas India in the past has called for one or a very few large steps within a "time-bound framework." Now that India has demanded public acknowledgement of its nuclear weapons, however, it is difficult even for most Indians to understand how the conditions for the elimination of nuclear weapons could be achieved without some step-by-step process.

A step-by-step process of restraint could prove beneficial to India as it manages its security environment. Also, as India becomes more of an economic and political player globally, measures of Indian restraint will enhance its influence with much of the world. Unfortunately, even a number of small steps demonstrating restraint in building its nuclear arsenal and controlling technology are unlikely to permit NPT parties to put together the international or domestic coalitions necessary to make big changes facilitating the nuclear cooperation that India demands. Positive responses to small restraints in the nuclear weapons area are likely to be asymmetrical, that is, something positive in political, economic, security, or technological areas other than significantly increased nuclear cooperation.

Moving beyond the old debate; creating opportunities based upon changed priorities

Short of the NPT membership, can one imagine approaches in India's interest that would challenge the global nonproliferation community to find ways to permit greater nuclear cooperation? Clearly, the emergence of India as a growing part of global technology and trade has increased pressures inside and outside of India to find more ways to avoid letting the nuclear question become a major obstacle to progress in other relations. The prospect that the economies of China and India may become the largest in the world has resulted in a renewed interest in nuclear power. Concern over global climate change has reinforced that interest. These and other factors are already increasing pressures, particularly in Russia and France, to look for market expansion even in the face of considerable domestic and international anti-nuclear activism. The strength of that opposition to nuclear power, as demonstrated by recent developments in Germany, should not be underestimated however, especially if proliferation concerns are seen as being neglected.

Renewed interest in nuclear power is not the only changing circumstance. The very real threat of WMD terrorism, whether by a state or a non-state entity, has forced the nonproliferation community to focus more on concrete measures rather than abstract principles. This may also make easier the prospects for nuclear cooperation, but again only if proliferation concerns are seen as being promoted. The same applies to free trade. In particular, relations could be greatly harmed with nations that are seen as facilitating, intentionally or unintentionally, the nuclear weapons programs of states such as Iraq, Iran, or North Korea. Pakistan's trade in missiles with North Korea has been of particular concern. Failure to maintain tight control over nuclear materials, peaceful or in weapons, would have as negative an effect. All of these are areas in which India may be able to reassure the nonproliferation community.

Nonproliferation Regimes and South Asia

Governments of India have long said that they favour nuclear disarmament, but only if all nations, including the nuclear weapon states, have no nuclear weapons. India has sought a timetable and a commitment to zero. Indians have given little credit to the nuclear superpowers for the substantial reductions in nuclear weapons because of the large number of nuclear weapons that remain. Western arms control experts often respond by noting that India has not followed even in those areas such as Intermediate Range Nuclear Missiles subject to the INF Treaty of 1987 under which Russia and the United States are all committed to zero and have achieved it. Clearly, many western analysts see India's disarmament policy as Fabian tactics, forestalling limits on India that might preclude a large, advanced nuclear deterrent for India. In a number of arms control and disarmament fields, the debates over who has or has not shown restraint or who is or is not serious about arms control or disarmament have become substitutes for meaningful cooperation in restraint. Even in areas such as the joint US-Indian sponsorship of the Fissile Material Cutoff Treaty (FMCT), cooperation and progress have been stymied by the continuation of old debates over deadlines, compensation for unequal technologies and knowledge, differential status over different time frames such as the phases of reductions for NWS, and supplementary measures such as export controls.

To break the back of this rhetorical stalemate, a focus on concrete steps necessary for the ultimate achievement of everyone's goals might be useful. A number of possibilities exist, but an approach that builds upon some early policy overlap might be particularly beneficial. The negotiation of the FMCT seems to be going nowhere in Geneva. Yet, a freeze on the production of unsafeguarded fissile material production would be an important step toward reducing nuclear arsenals. Developing the means to verify that there is no unsafeguarded fissile material would be essential to both deep reductions in nuclear arms and their ultimate elimination. One can continue to disagree on the size of the next steps or the time frame in which zero might be reached, but agree on an interim regime for ending the production of unsafeguarded fissile material. Such a regime could be among a smaller group of nations, particularly from among those who have such production. This is primarily the NWS plus the non-parties to the NPT. Cooperative arrangements to have confidence in compliance could be developed.

Such an approach may well serve India's national security interest while also being consistent with longstanding Indian policy. Yet, it would not be inconsistent with the policies of the broader nonproliferation community and would assist them in having greater confidence in their own arms reductions. In the context of such an initiative by India, the broader nonproliferation community might be more open to expanding areas for peaceful nuclear cooperation.

The issues associated with crisis stability and arms race avoidance deserve the additional discussion that you have requested. Many outside experts are unhappy with the debate in South Asia over the relationship of nuclear weapons and stability. In part, this reflects longstanding divisions within that foreign expert community that now have their parallels in the South Asian expert community. In part, it simply reflects uncertainty to this day about what deterrence is and how it works. Mathematicians and economists have contributed much to theory about stability in the Cold War, but it was never so simple even when it was called bi-polar. Thinking about stability is more complex now. Indeed, the contributions of historians, cultural anthropologists, and psychologists are as important and as inadequate as ever.

For just one example of the unsatisfactory discussion, consider the debate over "no-first-use". The first use or threatened first use of WMD during the Cold War was never simply in response to the WMD of others. Instead, the use or threat of use came about because of the threat of war due to circumstances and chains of events created by existing political conflicts that had escalated. Domestic links in the chain are often as important as the international, as was seen during the debate over the deployment of intermediate-range missiles in Eurasia in the 1970's and 1980's. Parallel dynamics exist in South Asia.

There are growing challenges to the ability of governments around the world to manage stability even if there is agreement that it is desirable. Stability is made even more complex in the post-9/11 era because technology is increasingly empowering smaller and smaller entities, groups, and individuals, for good and ill. The intensity of feeling among smaller groups is often greater and actions less moderated than in larger groups with similar concerns. The more traditional challenges to stability, however, remain vigorous, namely that political, economic, and social change are rapid almost everywhere. Very few interests are served by advocating no change in the interests of stability, but we must recognize that change itself can create instabilities, not the least of which are violent backlashes and reaction to change.

Every effort to understand stability results in greater complexity (and perhaps unpredictability) under each layer of national security policy and military program. For example, confidence in deterrence during the Cold War was often described as a combination of certainty and uncertainty: uncertainty that an attack would succeed, but certainty that the price would be too high. Military stability was often measured by confidence that our judgment in these factors would not change significantly. To further break down the components of stability, one can think in terms of an analogy from physics: stability as inertia. Relevant components of stability, as with inertia, turn out to be analogs to mass, balance, resistance, resilience, momentum, leverage, predictability, and complexity. Yet, the real study of stability has always required broader socio-political constructs, for example:

Crisis Stability

- Mobilization Stability
- First Strike Stability
- Escalation Control

Arms Race Stability

- Planning Stability and Surprise
- Measure/Countermeasure Stability
- Proliferation Stability

Military Stability

- Continuum of Deterrence
- Priorities: Probability versus Consequences
- Deterrence versus Defense
- Organizational Reliability, Security, and Control

Geo-strategic Stability

- Domestic Socio-Economic/Political Balance
- International Relationships: How Many? What Kind? All of these general concepts apply in specific ways in South Asia. It

would not be correct, however, to say that all the calculations are the same as elsewhere. Neither the equations to be balanced nor the values to be plugged into the equations are identical or even well understood. Some experts and policy makers in the region have been exploring these issues with great skill. The problem is that even when they have something to contribute they may have little timely influence, especially in a crisis. In that sense, South Asia is also like the rest of the world.

No substitute other than fortune exists for exploring the broader components of stability before each crisis. Because instabilities may result from unexpected escalation from smaller matters, or be exacerbated by the background or context, the development of guidelines or rules for crisis behaviour is essential well before the crisis in order to prevent war. Of course, a nation may choose war as a policy. Even then, a rational policy requires a careful prior consideration of escalatory outcomes.

One only hopes that the quest for stability and disarmament is not, in fact, hopeless because of inadequate common ground. Perhaps, the discovery or necessity of creation of greater common ground will be the key. All of the parties in South Asia, and those outside the region who are involved, see peace as a common goal. They advocate threat reduction as a common tool. They see security as a common measurement. They exploit engagement as a common process. They refer to linkage as a common backdrop. They note freedom and prosperity as common incentives. And they act as if crisis is the common moment of truth. All of these rhetorical flourishes can be harnessed in support of stability and restraint. Then perhaps more substantial common ground will appear, and the means for greater cooperation and trade will be found.

Discussion

Raja Ramanna: You showed a slide in which you talk of political and technological changes. You described technological change to a great extent. But I think a lot depends on the political side, particularly when the world has military dictators who take decisions and there is only one man you are dealing with: you are not dealing with people, which you

said is the more important thing. And I was rather surprised how friendly you have become with some dictators, too.

Lehman : It isn't for the first time. (Laughter)

Raja Ramanna: I'd like you to see that the important element is the political element ...

You said, of course, that compulsion or coercion can work, but that is not a satisfactory situation always. But all this can happen only with political changes.

Lehman : I agree. I do want to suggest, though, that I don't think we understand the political changes very well. Indeed, if you look at the changes that are taking place around the world, in my country, in your country and other countries, it is phenomenal – the transnational interactions are phenomenal, the whole notion of what is a national company, even what is citizenship, is becoming very complex. I am not one who believes, by the way, that nation-states are going to disappear tomorrow. Indeed, if anything, we are going to discover that they are, in certain areas including security areas, probably going to be enhanced at least in the near term. But I do think it is important to understand this tremendous change that is taking place among individuals and human beings.

Di Capua: Actually one of the issues that greatly disturbed me about your talk and Academician Mikhailov's is that nobody has yet mentioned the word "economics". And in my view, the whole dialogue or discourse on nuclear power ought to be cast in terms of economics. In the US, it is not that Americans have fallen in love with nuclear power. The reality is that the investments are paid off and that nuclear power projects have become far more efficient: availabilities are from 77% - 92%. And those margins have made all the difference of making nuclear power acceptable to the economic community. If you look at China, for example, the reality is that the Chinese government had pretty well decided that in order to make economic growth in Southern China stick, they needed uninterruptible power supply. To some degree, if you look at economics, this is where the argument of nuclear power in Iran is not

really quite compelling, as they are sitting on a huge pool of oil that is very inexpensive. So the issue here, looking at the future, is to what degree we can weave these economic arguments into nuclear power and decide also on that basis (of acceptability and desirability of nuclear power) that some countries will need it and some countries won't. And I think this is part of the argument that has to be made.

Lehman : I agree. In this paper, in terms of proliferation resistance, we also emphasised not only the economic but also the environmental and other issues as well. A common sort of cost-benefit, risk assessment approach.

Rajagopal: I entirely agree with Dr Di Capua. The same situation prevails in India now. You know the power shortage situation we face and we want to accelerate the nuclear power contribution. In this context, both in terms of availability and capacity factors, we are somewhere around 86-87% and I wonder why the US is not able to appreciate this. It is in this context that I said we should try to de-link power and nuclear weapons. Now, I see a big opportunity for the US to participate in the Indian nuclear power programme. We are a developing country, we need power badly and we see this as a very good option in the geopolitical context of availability and cost of oil and gas, which pose problems. We have abundant thorium, so we think we should push ahead and I think the US should be part of this accelerating progress.

Jasjit Singh: I shall add my voice to the same thing. I think any study one has undertaken indicates that India's dependence on imported crude oil will jump from 33% twelve years ago to 94% in another 10 to 15 years, and all of it will have to come from the same region. And no one looks upon the Persian Gulf and Central Asia as a stable region. The availability of gas will also jump. We have the added problem of another state in between geographically, which has not been particularly friendly to us for decades. So, two or three things stand out and I want to ask Prof Lehman . One, what are the real obstacles to India's access to nuclear power? India will proceed on its own path. We have talked about that even in the case of weapons. The whole logic of what you are talking about, Ambassador, trying to create a new coalition of partnerships and

cooperation, gets damaged because of the poor economic interest here, which is affected by this process and it is a question of the time frame. It could be done 10-15 years later, it would not matter very much whether external sources of technology or capital are available or not available to India. That is my personal belief based on studies I do. So what are the real obstacles and what are the political and psychological obstacles to a very specific question, i.e. India's access to nuclear energy? Because the argument which we found a few years ago, which was linking energy and weapons, as Rajagopal said, is it relevant any more? I can't see this country rolling back its nuclear weapons programme and I think that realisation has dawned right across the world. The question is now of stability, restraint and other things, and the prospects of that actually increase by increasing cooperation in one of the most critical areas of India's future growth.

Lehman : Let me offer you my personal opinion. India can serve as an example although much of this may apply to others as well. India is not an enemy. Ties between the US, Western Europe and Japan, and India are growing. Economic ties in some cases are very strong. Personal and family ties are becoming very intense especially in some parts of the US and Canada, and certainly where I live. All of that means that technological and economic engagement in general is going to grow rapidly and that will influence our relations in a number of different ways. What that means is that we have already, in part, de-linked the weapons guestion from the other questions. That is to say, it is widely acknowledged that if India and Pakistan believe they have to have nuclear weapons, and they are not parties to the NPT, people ought to just agree to disagree, and move on. But that is not the same thing as saying, "Now we can go ahead and violate the NPT and all our obligations under international law and have nuclear trade with India". It can't happen. What can change that? First, on a small scale there may be a little wiggle room. In a changed political environment, some cooperation may be possible. If the US and NPT/NSG members get together and kind of agree that we'll take the following more liberal approach to India, that will open a little more room. But from India's point of view, that is relatively small. What India has to ask is, what does it want from the outside and what is it prepared to do about it? What is really required for big cooperation is international change in some policies. What might that be? Some kind of restraint regime on fissile material might be a component. The fissile material cut-off has its own history and its own problem. On the other hand, clearly, the notion of an interim restraint regime on fissile material might be of some value and it may well be that one can be crafted that may be of interest to not only India and Pakistan, but perhaps to all others who have unsafeguarded material. A freeze on the production of unsafeguarded material, interim or in some way, could be a component of some effort. But in the end, I think you need to recognise that most of the countries of the world are absolutely unwilling to re-open the NPT and its basic obligations against permitting greater nuclear cooperation with non-Parties.

This is not an easy thing. But you asked what could be done.

Narasimha: We are getting more specific. Let me ask for your reaction to a suggestion – a personal suggestion. You showed that diagram about the different kinds of action that could be taken and highlighted that middle area where a combination of self-restraint, negotiation, discussion and so on was the area where most progress might be made. I would like to ask you whether India could be a candidate, especially since we are now talking about nuclear energy. As Jasjit said, the chances that India will roll back its nuclear weapons programme are practically nil. Does that mean that we don't do anything at all or is there room for something to be done in between? Suppose there were to be a discussion, an exploration of the possibility of future nuclear power stations, especially those that could be done with foreign participation? Ambassador Mikhailov mentioned the Kudankulam power station. Suppose they are under IAEA safeguards, is that an option there in the middle of your chart that is worth exploring?

Lehman : I think all of these options are worth exploring. But let me repeat. Part of the problem is that certain constraints are by treaty. There is a tendency to say the US is in the lead, but in fact, a very large number of countries are committed to these constraints. The US alone will not have the power or the authority to radically change them. It would really require multilateral action for some of these efforts. But you rightly

pointed out there is a whole range of categories that have to be dealt with in the real world. There are issues like Tarapur that have a history from the past, there are issues about things in the future. My own judgment is that an unrestrained nuclear weapons build-up in South Asia means no cooperation of any significance beyond where we are today. The end. There are a lot of people who would love to sell nuclear reactors, who would love to make money. But it isn't going to happen. It just isn't. Whether or not people in the West misunderstood the real situation earlier this year, there is a widespread belief in policy circles around the world that India and Pakistan were close to war and that nobody wants to put in money or investment into any place that could go up in smoke so quickly. And certainly not to contribute to nuclear efforts in those areas. That is reality, the bitter truth. But what if we change that? What if we had a situation, where significant progress was being made in a number of areas? The obstacles to cooperation, which everybody believes is now ready and ripe, are policies or laws of various countries, perhaps even treaty obligations. Then you have created the conditions for change. But you have got to create those conditions. And right now, even though the relations between the rest of the world and India in particular are growing and improving rapidly, I don't see the conditions for change in fundamental laws and policies in the nonproliferation regime.

Jasjit Singh: I have always found it difficult to understand what in the NPT stops cooperation in nuclear energy for peaceful purposes. What stops it are other international laws, other regimes, and so on. And isn't it time they started looking at it very firmly, clearly, objectively to say, "What can be done?" Politically, you are right. The conditions and the perceptions of a lot of people don't exist right now. I'll come to that in a second. But looking at this whole question in terms of what is it that stops cooperation in nuclear energy, nuclear safety, provided those facilities remain under inspections, barring national law, which international regime stops it? And you'll find it is the Nuclear Suppliers Group. And not all countries there want to be so rigid. I think while it is expected that India must do something, probably Indians are expecting that there must be some movement on that side. So are we simply stuck waiting? We have a saying up North in Lucknow that in trying to request the other person to get on the train first, both people miss the train. That is one question.

Prospects for Stability in a Nuclear Subcontinent

My second question is the present condition of risk of conflict. I think we must look at the reasons for it. The US is at war because somebody came and bombed, with an airliner, some key areas of the US, and killed thousands and thousands of people. The US alone cannot be blamed for that although people are blaming the US for it. Whatever it is, anti-Islamic, anti-Muslim, anti-third world conditions. Here is my country, which has been a victim of the same terrorism. Thirty-one thousand people dead in Punjab, 29,000 something people dead in Jammu and Kashmir. If there is any doubt about this, here is a President of Pakistan who actually says, "Now, we have stopped all that. It was going on before and we can't stop it all the time and I cannot give a time frame for it". And so on. It's like the 1965 war. Here we were, we were attacked by a country and the US put an embargo on both with the justification that it hurts them more. That's not the point. I think we have to come back to the same set of norms we have been arguing about in a variety of ways. I think the question is, that barring a travel advisory, no serious action has been taken against India but nor has it been taken against Pakistan, for that matter. Concerns exist. Concerns exist much more for us. I think one needs to look very carefully, who was threatening nuclear weapons in the last six months. Otherwise, we are as usual equating India with Pakistan. I will have something to say about that tomorrow. The India-China nuclear position is very stable. Why do people see it as unstable vis-à-vis India-Pakistan? We need not point fingers, we need to come to the real reason.

Lehman : You raise a number of very important points and let me make a very brief comment on each. First, on how lawyers interpret the NPT. It may be that there is more wiggle room there than people think. But, if so, nobody will know until the conditions are clear, where somebody explores that, because right now I think the parties to the NPT have fairly rigid and tight standards of implementation. They would have to be given an incentive. And as for the Lucknow wisdom, I not only agree with you, I would argue that over the years we have missed the train numerous times. It has been a difficult process. All I am saying is that if there is room there, or if somebody can create room, we have to find a way to put together both sides of the package. I don't see that as being particularly easy, but I don't think it would be wrong at least to ask what it would look like or what might be of use to everybody if you did that. On the question or part of the question on Pakistan, of stability of relations, I think you are absolutely right that it is the border conditions that you have to look at. When India tested most recently, there were a lot of statements in the Indian press about who the enemy was. At that time the tremendous emphasis was on China. And many of your friends and many of my friends here in India, said again and again and again, "We don't care about Pakistan. They can't do anything. We are too big, we are too strong, too powerful". Well, I think that the analysis that I had at that time was more correct than that analysis. It agrees with what you just said. I don't see any sort of immediate crisis between India and China, although one can imagine something perhaps. But it seems fairly remote. On the other hand, between then and now, the prospects of something nonnuclear between India and Pakistan escalating to something nuclear, are real. And whatever one believes about the seriousness of the crisis earlier in the year, I don't think one can simply say, "Well, there wouldn't have been a nuclear crisis if the Pakistanis didn't talk about nuclear weapons". Because, remember, they don't see nuclear weapons the same way as some of the academics in India see them. They see them in a much more military way. And I think one of the great sources of instability in South Asia is the disconnect between the highly academic Indian approach to deterrence and the highly military approach of the Pakistanis. It is two different worlds and so asymmetrical that in a long crisis, it is not clear how that will play out.



Maintaining a Threshold of Strategic Autonomy at Least Cost: Continuity in the 'Evolution' of india's Nuclear Policies*

Roddam Narasimha

1. Introduction

India's current views on nuclear weapons are basically expressed through three vehicles: (i) the Draft Nuclear Doctrine published on 17 August 1999, (ii) the statements that India's representatives have continued to make on the ultimate objective of India's nuclear policies in various international fora (such as the UN General Assembly and the Committee on Disarmament), and (iii) speeches and pronouncements made by political leaders in the national parliament.

The approaches are basically in harmony with an Indian view of the future of nuclear weapons in the world. But to understand India's current policies, it is essential to see how they have 'evolved' over the last five decades or more, chiefly in response to events in the neighbourhood and elsewhere. The frequent statements that one hears about 'changes' in India's policies in recent years, and in particular with the 1998 tests, stem from a misunderstanding or misreading of Indian views; there is greater continuity in India's aims over all these years than is commonly realised,

^{*} This paper, based on a talk given at the 13th Amaldi Conference held at Rome on 30 November 2000, represents the author's personal views, and does not necessarily reflect in any sense the views of the Government of India. (A shorter version has appeared in the Proceedings of that Conference.) I am grateful to my colleague Prof. S Rajagopal for his comments on a draft of this paper. Numbers within square brackets [] refer to end notes.

as I shall argue in this presentation. (This is the reason for the quotes in the title.)

2. The Draft Indian Nuclear Doctrine

The Draft Indian Nuclear Doctrine was prepared by the National Security Advisory Board on a directive from the Government of India. As of today the country does not yet have an officially adopted doctrine, although several official declarations do exist, such as that on no first use [1]. The publication of a draft doctrine, inviting open public debate, seems unprecedented even in the democratic world. As part of that debate the Draft Doctrine has in fact been subjected to some very vocal criticism, chiefly by the two extremes of the spectrum of national opinion on nuclear issues: on the one side by those who consider the 1998 tests a serious mistake if not a crime, and a withdrawal from all the positions that Mahatma Gandhi had (supposedly) advocated [2]; and on the other by those who think that the Draft Doctrine is too naïve about the rest of the world and about the real issues involved in the use as well as threat of use of nuclear weapons. In spite of these criticisms, however, there is every reason to believe that the Draft represents a broad national consensus, and that it enjoys the support not only of most of the political leadership (cutting across party lines) and the scientific and military establishments, but also the general public [3]. It is therefore important to understand the implications of the Draft Doctrine and the historical basis for its current formulation, irrespective of the differences of opinion that will always remain in a democratic polity.

The set of principles underlying the Draft Indian Nuclear Doctrine can be summarised in a few short lines.

Section 1.3 says India will 'strenuously guard [its] right of autonomy of decision making in the developmental process and in strategic matters in a world where nuclear weapons for a select few are sought to be legitimised for an indefinite future, and where there is growing complexity and frequency in the use of force for political purposes.' In other words the central motivation for the proposed doctrine is preservation of strategic autonomy interpreted in a broad sense, at a time when it was seen as being gradually eroded through regional and global developments in the late 1980s and early 1990s. In this respect the Indian position is rather like that of France (which incidentally went so far as to say that 'abusive protectors' were also a matter of serious concern [4]). Very early in the document (Section 2.1), it is made clear that global nuclear disarmament (GND) is a primary issue. The rest of the doctrine is thus conditioned by the unfortunately continuing absence of any serious progress on such disarmament, especially among the P5 [5]. India sees itself as being compelled to pursue a policy of credible minimum nuclear deterrence towards potential adversaries, and perhaps even more immediately towards the forces of compellance that have operated for several decades and continue to do so [6].

Section 2.3 says: 'India's peacetime posture aims at convincing any potential aggressor that (a) any threat of use of nuclear weapons against India shall invoke measures to counter the threat, and (b) any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor'.

The doctrine goes on to say, in categorical terms, that India will not be the first to use nuclear arms (Section 2.4). Both China and (at a certain stage) Russia have also made such no-first-use (NFU) statements, but, in the latter case, they have also been withdrawn at some point of time or been made conditional [7]. On the whole, NFU seems like an Eastern idea. For there is a large body of opinion in the West that considers an NFU policy meaningless, on the grounds that there are difficult operational questions, like how one would ever be certain who actually made the (first) attack, or how one can verify or ensure that a country which has adopted NFU is actually going to operate on that principle. There can be no doubt that it would be worthwhile to discuss in detail the technical and strategic problems associated with a declaration of NFU. As far as India is concerned, its declaration of NFU is, first, an announcement that it has no aggressive designs on any other country in the world, and, secondly, a voluntary withdrawal from the possibility of using nuclear weapons as a tool of compellance. The policy is based on the expectation that it will be seen as stabilising, and as likely to discourage an arms race.

Basically, therefore, the thrust of the draft doctrine is not dominationist but defensive. The Draft Doctrine goes on to propose a policy of maintaining a credible minimum nuclear deterrent for the country. A great deal of discussion has taken place on what constitutes such a deterrent, and how its acceptance represents a movement of India away from its previous doctrine, a doctrine that (if it existed) had never been publicly stated, and was inferred by foreign analysts as characterised by non-weaponised, existential or recessed deterrence. There has also been much questioning of the mention of necessity for the triad of land-, air- and sea-based assets that the Draft Doctrine proposes. However the proposal for the triad is a logical consequence of the nofirst-use policy and the maintenance of a minimum credible deterrent; the ability to strike after sustaining a first attack requires sea-based assets, as the other two are vulnerable to a pre-emptive first strike especially with the spectacular advances that have taken place in space-based surveillance technologies.

In the evolution of India's nuclear policy one can identify events that triggered specific decisions. Among such events are the Chinese explosion of 1964 (following the Indo-Chinese conflict of 1962) which led to the first reconsideration of India's nuclear objectives [8]; the presence of the nuclear-powered and -armed USS Enterprise in the Bay of Bengal during the Bangladesh War of 1971; the increasing frequency of statements from political, military and scientific leaders in Pakistan, beginning around 1987 [9], announcing the availability of nuclear weapons with them; and the pressures exerted, chiefly by the US, against the conduct of any further nuclear or missile tests during much of the 1990s [10]. India has thus been particularly sensitive to what it sees as efforts to exert compellance, and its policy has generally 'evolved' in reaction to such efforts.

3. The 1998 Tests

There is considerable evidence that after the 1974 (Pokhran-I) test, the Government of India did not propose to proceed with weaponisation till the late 1980s. A plausible explanation is that the 1974 test was an advertisement of capability, which at that time was considered sufficient to restore the loss of strategic autonomy signalled by the presence of USS Enterprise in the Bay of Bengal; no further contraction of that autonomy seems to have been perceived during a decade or more following Pokhran-I. Beginning around 1987 however the situation was seen to be changing. The statements issuing from Pakistani leaders about their possession of nuclear weapons [9] culminated, in October 1990, in the expressed inability of President Bush to issue for Pakistan the certification that the Pressler Amendment calls for.

Prospects for Stability in a Nuclear Subcontinent

There were two other significant developments in the 1980s/90s. One of these was the end of the Cold War, which effectively removed the second pole in what had till then been a bi-polar world. The basis of a security arrangement that had developed between the Soviet Union and India was therefore undermined. The second was the indefinite extension of the Non-Proliferation Treaty (NPT) in 1995. This was widely seen in India as incontrovertible evidence that one cannot expect any serious move towards global nuclear disarmament from the P5, and added to the mounting frustration at the continuing failure of India's efforts at promoting it. The NPT was becoming a device for perpetuating a discriminatory regime that decreed that a new era had begun on I January 1967 (only those countries that conducted nuclear tests before that date being considered 'nuclear weapon states' in the Treaty) and would continue 'for ever' [11].

These developments led to a serous deterioration in India's security environment by the early 1990s.

What had therefore been basically an insurance policy till the late 1980s had to be converted to something more specific after that date. It is now well known [12] that Indian prime ministers in the 1980s and 90s (there were several, of different political hues) had all contemplated carrying out further nuclear tests. The Pokhran-II tests in 1998, therefore, did not represent a sudden change in political policy; at best they represented greater determination to go ahead with a policy with which previous governments, headed by leaders of other political parties, had generally been in agreement, but had been unable to implement, presumably because of international pressure. (The one exception was the government of Morarji Desai, which during its tenure of 1977-80 took a categorical public stand against a nuclear weapon programme for India [13].)

4. Indian efforts to promote nuclear disarmament

It is in retrospect astonishing how long India has tried to get nuclear disarmament accepted before concluding in the mid-1990s that success was unlikely. I count at least 14 separate efforts before the UN and its agencies [14], and cannot avoid the feeling that this incessant campaign represented another instance of the triumph of hope over experience.

As recently as 18 October 2000 Ambassador Rakesh Sood, India's permanent representative at the Conference on Disarmament in Geneva, moved a resolution before the UN General Assembly [15] saying, in part, 'An international convention on the prohibition of the use of nuclear weapons would be an important step in a phased programme towards the complete elimination of nuclear weapons with a specified framework.' As Mr. Sood pointed out, 'There is a requirement for a legally binding instrument prohibiting the use or threat of use of nuclear weapons. A vote in favour of this resolution (at the beginning of the new millennium) would also be a vote of confidence that the international community can take decisive steps towards the goal of freeing the world of nuclear weapons.' That confidence still seems unjustified.

There is no doubt that, outside the Western strategic leadership, there is an undercurrent of desire across the world to move in the direction of global nuclear disarmament. For example the International Court of Justice ruled in 1996 [16] that the use or threatened use of nuclear weapons was generally illegal (although it could not determine whether there would be an exception to this general finding in the extreme circumstance of self-defence when the very survival of a state was at stake). The Canberra Commission [17], the Committee on International Security and Arms Control of the US National Academy of Sciences [18], and many other reputed bodies have all argued the necessity for moving towards nuclear zero.

However, there is much evidence to indicate that, within the Western strategic establishment, there is no serious effort at such disarmament. Thus, the Conference of NATO countries on 24 April 1999 in Washington DC, celebrating the fiftieth anniversary of NATO, has made it clear that nuclear disarmament does not figure anywhere on its agenda [19]. Indeed the NATO statement argues that although large-scale conventional aggression against the alliance is highly unlikely, 'nuclear weapons remain essential to preserve peace'. (Disturbingly, the statement went so far as to accept the necessity for 'mounting and sustaining operations outside the Allies' territory, where there may be little or no host-nation support.')

It is in this connection most discouraging that even the much-lauded Pugwash movement has such an ambiguous record on nuclear disarmament. B M Udgaonkar, a distinguished Indian physicist who actively participated in the movement over a period of 12 years, and was elected to its Council and Executive in 1987, has recently recorded [20] how he 'joined Pugwash with great expectations', but found that 'it was an educative but disillusioning experience', because it often exhibited 'blinkered', 'North-centric' views, more concerned with arms control rather than disarmament, and with non-proliferation rather than elimination of nuclear weapons.

These developments suggest that it is not chiefly deterrence against each other that is driving nuclear policies among the P5, but compellance on other states. It is this dimension of global nuclear policy that has been of particular concern in India.

One is sometimes forced to the conclusion that the NPT, as it stands now, cannot be expected to move towards global disarmament, unless there is either considerable further proliferation or a major accident, say a military Chernobyl. The only encouraging development in an otherwise bleak scenario is the emergence of the group of countries known as the New Agenda Coalition (to which I shall return).

5. The Nuclear Treaties

I would like to share some thoughts on the subject of the various nuclear treaties.

With respect to the CTBT, India declared a (voluntary) moratorium soon after the 1998 tests [1]. However, discussion of the CTBT is becoming irrelevant. The failure to obtain Congressional ratification in Washington shows that the US leadership is deeply divided on the virtues of, CTBT, and that a majority of the Senators view the Treaty as not in the US national interest. Furthermore, the US seems to be pursuing new weapon development vigorously, through such programmes as advanced computer simulations, the National Ignition Facility, etc. [21]. Thus, even if old-fashioned physical tests were to be abandoned by the US, it does not imply any change in the US assessment of the strategic value of further weapon development. Finally, the provisions in CTBT for withdrawal from the Treaty are so generous [22] that it is difficult to see it as imposing any serious obligations on the P5. The CTBT is therefore a secondary issue, overshadowed by the bigger one concerning the nature of the international nuclear order that one visualises. The NPT is a far more serious issue. At first sight, its success in collecting 187 signatures seems impressive. However, on what India would consider crucial issues, the Treaty must be seen to be a failure. There are now 11 countries in the world that have nuclear programmes [23]. Of these Asia accounts for seven (seven and a half, if you award half of Russia to Asia); and, of the seven, five have benefited from proliferation activity of some kind [24]. Three of the four non-signatories are also in Asia. To say the least, therefore, Articles I and II of the Treaty (which are concerned with undertakings on non-proliferation [25]) have been ineffective. Whatever 'bargain' the NPT may have been able to strike (as Western policy-makers claim [26]) in other parts of the world), the Treaty seems to be seriously flawed in its appreciation of what drives nuclear policies in Asian countries.

Article VI presents the most serious problems. The pursuit of 'negotiations in good faith on effective measures relating to . . . nuclear disarmament', enjoined by this article, has not been evident at all. In all of the 30 years since the Treaty entered into force (which it did on 5 March 1970), there has been no real progress towards nuclear disarmament. The START negotiations have been stalled most of the time. Arms reduction negotiations have taken on an entirely different character since the US decided to go ahead with the development of national as well as theatre missile defence. Whatever arms reductions have taken place seem more in the nature of technological spring-cleaning, where unnecessary weapons are retired, than a genuine move towards disarmament; such reductions are welcome only because they reduce the risk of accident or inadvertent use, but otherwise have no serious political or military benefits for the rest of the world.

At the NPT Review Conference held on 24 April 2000, Ambassador Green of Mexico, speaking formally on behalf also of Brazil, Egypt, Ireland, New Zealand, South Africa, and Sweden (but informally for a very large part of the rest of the world as well), said [27]:

'In short, we are witnessing a re-rationalisation of nuclear weapons in an age when the context which gave rise to the original proliferation of nuclear weapons among the five nuclear weapon states has long disappeared'.

The NPT therefore does not provide a credible instrument for GND (it was perhaps never intended to).

The NPT has other problems as well from an Indian viewpoint (and possibly from that of some other countries also). There is first of all its proclamation of the new era that begins on 1 January 1967. The indefinite extension of NPT in 1995, without any binding obligations on the P5, is another indicator of the effort to perpetuate an older world order, with its roots in the end of the Second World War, in a world that has changed substantially since 1945, and is now changing ever more rapidly. Article VIII, which describes how amendments to the Treaty may be made, gives such widespread veto powers that its objective appears to be to ensure that amendments will almost never be possible [25].

For all these reasons the NPT is seriously flawed, and it is difficult to see how any democratically elected government in India will ever be able to accept it. One can imagine (although with some difficulty) an intellectual descendent of Morarji Desai who, as Prime Minister, may renounce nuclear weapons; but I find it impossible to imagine any Prime Minister who will sign the NPT (Morarji's descendent would, if anything, be even more vehement than the others in denouncing it).

I shall not spend too much time on FMCT, as India has said it would be willing to enter into discussions on the subject, but without an overarching and more acceptable view of the global nuclear order, discussions on FMCT may go the way of CTBT.

One possible set of measures that has been advocated in India [28] has the following features:

- Time-bound nuclear disarmament
- Cut-off only prospective
- Limited scope
- Discharged spent fuel to be treated as stockpile
- Tritium to be included
- Use for military purposes to be banned
- Non-discriminatory verification and safeguards regime to be instituted

These measures provide a basis for discussion, although the issue of time-bound nuclear disarmament will be contentious, as we have discussed above with respect to the NPT.

6. Conclusions

From the date of Bhabha's famous letter to J R D Tata in 1944 proposing a programme of nuclear research [29], India's nuclear programme is now nearly 60 years old. In some ways the programme may be seen to have moved slowly. The reasons for this include the rate of funding [30], the technology denial regimes imposed especially after the Pokhran-I tests of 1974, the desire to be totally self-reliant [31], and, finally but very importantly, a reluctance to pursue military nuclearisation except when circumstances have forced it on the country. Whatever steps the country has taken during these years, including the recent programme of weaponisation, have constituted no more than what has been perceived as the minimum required to ensure that its autonomy is protected above a certain well-defined but unarticulated threshold [32]. The various names that have been coined by Western analysts at various times to describe India's policies of the time are, in this view, no more than temporary labels for a central policy that has always been the same – namely one of seeking, preserving and protecting the country's strategic space and autonomy at the lowest possible cost. It is remarkable that this policy has remained so steady under at least 11 of the 12 prime ministers (of different political persuasions) that India has had since 1947; the policy must therefore be seen as basically Indian, going beyond the policies of any political party that may win power in Delhi.

Perhaps it is worthwhile to inject a philosophical note at this point, especially as there is frequent puzzlement among Western commentators about how a country can simultaneously argue for global disarmament and conduct nuclear weapon tests. It appears to me that the explanation lies in the fact that Indian ways of thinking tend to be context-sensitive, whereas the norm in the West is context-free. Although actual differences in operation may not be widely different, the mode of articulation appears to be, and this quite often gives room for much unnecessary confusion on both sides This is not the place to argue this point further, but the brilliant essay of A.K. Ramanujan [33] is recommended for anybody who wishes to pursue this line of thought.

Seen in this light, it is unlikely that India will ever be able to accept the NPT as it is now written, dividing the world for ever into those countries which tested before 1967 and the rest. A version of the Treaty that is not discriminatory, eliminating the veto power that the P5 have now and introducing an amendment procedure that would be far more democratic, preserving however the regional bargains that the Treaty does appear to represent to certain neighbour-groups among the signatories, might be more acceptable not only to India but (I suspect) to the vast majority of its current signatories. However, the political, military and diplomatic investment that has gone into the NPT in its present form has been so heavy that to expect such drastic changes seems at present to be unrealistic.

So what then is to be done? Let us look at some of the options.

- As far as the parties to the Treaty are concerned, they may well go on as usual, with 5-year reviews which are basically non-events, ignoring India's reservations. This would rely on India continuing to show the restraint that has been characteristic of its nuclear policies [34], and concluding that India outside NPT does not present a serious disruptive threat to the global order now frozen into the Treaty.
- 2. The forces behind the New Agenda Coalition may multiply, and, if one or more nuclear weapon states like India support it, a vigorous movement could be built up towards: de-mating and de-targeting of all nuclear weapons; a declaration of no-first-use by all nuclear weapon states; and the constitution of a representative and respected international 'jury' that investigates all reported instances of nuclear compellance. If these moves gain strength, or if there is what Frank Blackaby, former director of the Swedish Peace Research Institute SIPRI, has called a 'peasants' revolt' [35], the contemplation of global nuclear disarmament may begin to look less unrealistic, and a nuclear weapons convention may become practical.
- 3. The richer non-nuclear countries make common cause with some of the restless signatories of the NPT, and force revisions in the Treaty.

Option 3 is most unlikely, because the Treaty as now cast is heavily veto-prone and so virtually proof against amendment. Option 2 is what I would personally wish to see happen. Option 1 is what I suspect the world will most likely settle down to, unless (or until) it experiences further proliferation or some weapon-related catastrophe. Option 1 could become more palatable to all parties if serious account can be taken of Indian views during the FMCT negotiations that India has agreed to participate in.

End Notes

- 1. The no-first-use decision was announced in Parliament by the Prime Minister soon after the May 1998 tests. Various other less formal policy statements abound. For example, Prime Minister Vajpayee said in an interview to the New York Herald Tribune on 21 September 2000, 'A unilateral moratorium on explosive tests, a policy of "no-first- use", a tight export control regime and a willingness to engage with other countries on all aspects of international security are the principles of India's nuclear policy.'
- 2. While Gandhi held that 'non-violence is infinitely superior to violence', it is not so widely known that he placed fearlessness above non-violence: 'If anyone afraid at heart cannot, while remaining unarmed, rid himself of that fear, he should arm himself with a stick [!] or an even more deadly weapon'. Gandhi also said, 'The mouse is not non-violent towards the cat. . . . He alone has the power to practise the dharma of ahimsa who, although fully capable of inflicting violence, does not inflict it'. Gandhi also considered that 'The most brutal act of the British government was to have disarmed and thus emasculated the Indian people'.[R. Mukherjee, 1993. The Penguin Gandhi Reader]
- 3. Results of various opinion polls are quoted in A Mattoo (ed. 1999) India's Nuclear Deterrent. Har-Anand, New Delhi.
- 4. Bruno Tertrais 1998 The French nuclear deterrent after the cold war. RAND Report P-8012.
- 5. As Prime Minister Vajpayee stated, 'The refusal of the nuclear weapon states to consider the elimination of nuclear weapons . . . continues to be the single biggest threat to international peace and security. . . . It is because of the continuing threat posed to India by the deployment of these weapons . . . that India has been forced to carry out these tests.'
- 6. A list of 42 occasions when threats of nuclear weapon use were held forth has been provided in J. Singh & T. Bernauer (1993 Security of Third World Countries, pp 64-66; Dartmouth, Aldershot (UK)). Here is a statement from a 1995 Pugwash meeting: 'In the last 50 years the use of nuclear weapons was explicitly threatened occasionally, implicitly threatened continuously, seriously contemplated more often than will ever be admitted and narrowly averted more than once.' A former US Secretary of State (Alexander Haig) was quoted as having said, 'Fission and fusion explosives are tools used daily all over the world in US diplomacy.' (See B N Udgaonkar 1999 Current Science 76:154-166.)
- 7. Soon after its first nuclear test in 1964, the Chinese government declared that 'China will never be the first to use nuclear weapons at any time and under any circumstance'. On 4 September 1994, the Presidents of China and Russia undertook not to be the first to use nuclear weapons against each other or target their nuclear weapons at each other. The retention of the first-use option has often been justified on the grounds that it 'equalises' the position of the party that is in a relatively disadvantageous position, e.g. in conventional arms; the West used this argument with respect to the Soviet Union at the height of the Cold War, and Pakistan has done the same with respect to India. Russia now retains the first-use option for similar reasons.
- K. Subrahmanyam has written extensively about this and related issues in the Indian press. See in particular the Kargil Review Committee's report (which we shall refer to as KRC): 1999 From Surprise to Reckoning, Sage, New Delhi, and Raj Chengappa 2000 Weapons of Peace, Harper Collins, New Delhi. The reconsideration is discussed in KRC: 201.

Prospects for Stability in a Nuclear Subcontinent

- 9. In January 1987, the Pakistani nuclear scientist Dr A Q Khan told the Indian journalist Kuldip Nayyar that Pakistan possessed nuclear weapons. In 1992, Foreign Secretary Shahryar Khan, in an interview to the Washington Post, acknowledged that Islamabad had the components and know-how to assemble at least one nuclear explosive 'device.' In 1993 Pakistan acquired M-11 missiles from China. According to Mr Abdul Sattar and Mr Agha Shahi, former Foreign Ministers of Pakistan, and Air Chief Marshal Zulfikar Ali Khan, Pakistan used its possession of nuclear capabilities to its advantage in the mid-80s, in 1987 at the time of Operation Brasstacks, and in April-May 1990 the last confirmed in KRC. (The Pakistani leaders' claims were contained in an article in the News International of 5 October 1999.) On 6 April 1998, Pakistan carried out a test of the Ghauri missile; the Pokhran II tests followed 35 days later.
- The pressures brought on Indian PMs by US are listed in KRC:204. Nixon's consideration of the possibility of using nuclear weapons during 1971 is mentioned in KRC: 202. See also K Subrahmanyam: India's Nuclear policy 1964-98 (A personal recollection), in: Jasjit Singh (ed. 1999) Nuclear India, Knowledge World, New Delhi.
- 11. Article IX, Clause 3 of the NPT says: 'For the purposes of this Treaty, a nuclear weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.'
- 12. See note 8.
- 13. Morarji Desai's UN announcements are referred to in KRC: 203.
- According to the author's reckoning, India's moves on nuclear disarmament/ elimination of nuclear weapons began in 1948, and continued through 1950, 1954-59, 1960, 1964, 1965, 1978, 1982, 1984-88, 1986, 1988, 1996, 1997, 1998, apart from various other moves around 1990.
- 15. Indian Express, 19 October 2000.
- 16. The Executive Summary of the ICJ opinion (1996) is reproduced in Appendix 2, Baylis & O'Neill 2000. Alternative Nuclear Futures, Oxford Uni. Press.
- 17. The Canberra Commission report is summarised in Appendix 4 of Baylis & O'Neill 2000 (see n.16).
- CISAC (1997) The Future of US Nuclear Weapons Policy. National Academy Press, Washington D.C.
- 19. NATO (1999) The Alliance's Strategic Concept Press Release, 24 April. 11
- 20. B.M. Udgaonkar 2001 The international dimension of national security: some observations. Strategic Analysis 24: 1773-1794. Udgaonkar incidentally also points out: It has been widely recognised that in a nuclear war situation, the six co-user NATO States where tactical nuclear weapons of the USA (about 150- 200 in number) are deployed, and whose pilots are being trained in the use of nuclear weapons, would become de facto nuclear weapon States and can for this reason among others be regarded as semi-nuclear-weapon States. As Van der Sijde has observed, this is, in fact, not in accordance with the NPT, and this situation has understandably come under increasing attack by signatories of the NPT. Udgaonkar also quotes Zbigniew Brzezinski as saying (The Times of India, 16 May 1998) that 'US policy all along has been that of selective and preferential proliferation'.
- 21. The widely divergent views on the role of the National Ignition Facility are discussed by H. Gusterson 1995 NIF-ty exercise machine, The Bulletin of the Atomic Scientists, www.bullatomisci.org. In testimony before a House committee, Victor Reis, Assistant Secretary for Defense Programs in the Department of Energy, said '[NIF] will help to improve computer modelling of nuclear weapons, transfer sophisticated technologies to the weapons program, and help to maintain and enhance our nuclear weapons expertise.' NIF has also been described as an "enormous exercise machine" that would allow designers to keep working out so that they would be available as a team and mentally exercised should

they ever be needed again.' Reis also said, '... the stewards [are] really more important than the equipment.'

- 22. Withdrawal requires six months' notice. Article IX of the CTBT says: 2. Each State Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardised its supreme interests. 3. Withdrawal shall be effected by giving notice six months in advance to all other States Parties, the Executive Council, the Depositary and the United Nations Security Council. Notice of withdrawal shall include a statement of the extraordinary event or events which a State Party regards as jeopardising its supreme interests.
- 23. Proceedings of the XIII Amaldi Conference.
- 24. As the recent book Saddam's Bomb-maker by Khidhir Hamza shows, the source of proliferation can often be traced to one or more of the P5.
- 25. Here are relevant extracts from the Non-Proliferation Treaty. Article I: Each nuclear-weapon State party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons of explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any nonnuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices. Article II: Each nonnuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices. Article VI: Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control. Article VIII: 2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.
- 26. See e.g. the essay by M. Quinlan (pp.45-55) in J. Baylis and R.O'Neill (2000, [16]), justifying the basis of the present global nuclear order, including the 'bargain' that the NPT is supposed to represent, and NFU as a 'poor idea'; and the essay by M. McGwire in the same book (pp 144-166), rebutting Quinlan's arguments.
- 27. R. Green 2000 Statement by Ambassador Rosario Green. NPT Review Conference 2000, 24 April, New York.
- 28. India's options on FMCT are discussed by S. Rajagopal 1999 Fissile Material Cut-off Treaty and Options for India, NIAS Working Paper WP1-99.
- 29. Regarding Bhabha's letter to J.R.D. Tata, see C V Sundaram, L V Krishnan, T S Iyengar 1998 Atomic Energy in India: 50 Years, Dept. of Atomic Energy, Govt. of India.
- 30. The budget estimates for the Indian atomic programme in 2000-01 were Rs. 1077 cr (US \$ 234 M) for R&D, Rs. 1335 cr (US \$ 290 M) for Industry and Minerals, and Rs.2530 cr (US \$ 550 M) for power generation, making altogether a sum of Rs. 4943 cr (US \$ 1.07 B). Like

other strategic technology development programmes in India, the nuclear one also runs on funding that, certainly by international standards, is relatively low; in compensation the funding has been steady over several decades, and has been supported by virtually every party that came to power at the Centre. This 'low, slow and steady' policy has been dictated by an economy in which capital is expensive and human skills inexpensive.

- 31. The Indian nuclear programme is indeed the most autonomous or self-reliant in the world; see e.g. the Venn diagram provided by C.E. Paine and M.G. Mckinzie 1999 US Science-based stockpile stewardship programme, Journal of Science and Global Society 7:151-193. See also M. Zuberi 1999 Building the bomb: collaboration for self-reliance and the counter-example of India, J. United Services Instn. India 129:29-49.
- 32. It is interesting here to note the perceptive comment of Rathjens (2001 Physics Today, February: 55-56, in a review of George Perkovich's book India's Nuclear Bomb, U. Calif. Press, Berkeley 1999): 'In contrast to the policies of all other nuclear weapons states, thanks substantially to Mahatma Gandhi's legacy, those of India have been significantly influenced by moral considerations. Indians have also been greatly influenced by their history under the yoke of British colonialism...'
- 33. The current flavour in American theorising about Indian nuclear policies is the casteaffiliation of leading figures, but this ignores the very significant contributions to India's nuclear thinking made by non-Hindu leaders. I wish to suggest that greater social and cultural insight into Indian policies may be derived by the recognition that Indian ways of thinking are predominantly context-sensitive (e.g. A.K. Ramanujan 1990 Is there an Indian way of thinking? In: Mc Kim Marriott (ed.) India through Hindu Categories: 41-58, Sage, New Delhi; or V. Dharwadker (gen. ed. 1999) The Collected Essays of A. K. Ramanujan: 34-51, Oxford Uni. Press, New Delhi). As Ramanujan points out, 'cultures . . . have overall tendencies . . . to idealise, and think in terms of either the context-free or context-sensitive kind of rules. Actual behaviour may be more complex, though the rules they think with are a crucial factor in guiding the behaviour. In cultures like India's, the context-sensitive kind of rule is the preferred formulation'. Consequently, Indian policies tend to be algorithmic, typically with 'If x, do y' statements, more easily displayed as block diagrams rather than through simple binary declarations. The mutual puzzlement between India and the West can often be traced to their preferences for context-sensitive and context-free modes of thinking. However, modes of operation tend in practice to be closer than preferred modes of thinking and articulation might suggest. See also the perceptive Introduction by Wendy Doniger and BK Smith 1991 The Laws of Manu, Penguin Books, U.K.
- 34. A paper laid on the table of the Lok Sabha on 27 May 1998 (reproduced in Mattoo 1999 [3]) quoted from the Bhagavad-Gita (as Oppenheimer had done more than 50 years earlier), but the verse selected (6.3) was different, and may be translated (my words) as follows: Action, it is said, is the means To reach the heights of yogic strength; Once reached, though, it is said, again Restraint is the proper course.
- 35. F. Blackaby (1997 Time for a peasants' revolt. Bull. Atomic Scientists 53 (7, Nov- Dec), www.thebulletin.org) proposes a 'peasants' revolt', in which the non-nuclear weapon states (at least 30 of them, preferably more than a hundred) issue a warning of withdrawal from the NPT.

Appendix

Since the time that this paper was prepared, the Cabinet Committee on Security, meeting on 4 January 2003, decided to 'share with the public ... information regarding the [Indian] nuclear doctrine and operational arrangements governing India's nuclear assets'. The following is extracted from a Press Release from the Prime Minster's Office (www.pib.nic.in):

- 2. India's nuclear doctrine can be summarised as follows:
 - i. Building and maintaining a credible minimum deterrent;
 - ii. A posture of "No First Use": nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere;
 - iii. Nuclear retaliation to a first strike will be massive and designed to inflict unacceptable damage;
 - iv. Nuclear retaliatory attacks can only be authorised by the civilian political leadership through the Nuclear Command Authority;
 - v. Non-use of nuclear weapons against non-nuclear weapon states;
 - vi. However, in the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons;
 - vii. A continuance of strict controls on export of nuclear and missile related materials and technologies, participation in the Fissile Material Cutoff Treaty negotiations, and continued observance of the moratorium on nuclear tests;
 - viii. Continued commitment to the goal of a nuclear weapon free world, through global, verifiable and non-discriminatory nuclear disarmament.
- 3. The Nuclear Command Authority comprises a Political Council and an Executive Council. The Political Council is chaired by the Prime Minister. It is the sole body which can authorize the use of nuclear weapons.
- 4. The Executive Council is chaired by the National Security Advisor. It executes the directives given to it by the Political Council.
- 5. The CCS reviewed the existing command and control structures, the state of readiness, the targetting strategy for a retaliatory attack, and operating procedures for various stages of alert and launch. The Committee expressed satisfaction with the overall preparedness. The CCS approved the appointment of a

Commander-in-Chief, Strategic Forces Command, to manage and administer all Strategic Forces.

6. The CCS also reviewed and approved the arrangements for alternate chains of command for retaliatory nuclear strikes in all eventualities.

Discussion

Lehman : While I strongly support the NPT, I have long believed that we needed to change the way in which we deal with the problem with respect to India, that the traditional approach, whatever the desirability of having universal adherence to the NPT, is simply counter-productive. Indeed, I think, many of us have believed that one could make progress while agreeing to disagree on the future of the NPT. But one thing is absolutely clear to me: that the continuation of warfare by India against the NPT leaves no hope for progress and cooperation. I think any future cooperation can live with an agreement to disagree. I don't think it is possible, with active hostility, to torpedo the NPT.

Narasimha: Well, no, in fact, the Option One I described, as probably the one that will continue, did not predicate open hostility to NPT from India. I only said India will just not accept it. I just don't see how India can accept it. So, implicit in what I said was that India will accept the fact that there is a treaty, signed by a large number of people and will say, "O.K. You go ahead. If that is what you subscribe to, go ahead, but please understand that I am out of it. There is no way that I can join it." I don't see that in recent years India has been in any explicit way hostile to it. As I see the Indian position now, it recognises that the NPT is there, it is unlikely to be unraveled and as far as the US is concerned, it would not like it to unravel. As far as the disarmament that is mentioned in Article VI is concerned, I think that there might have been some logic at some stage, some hope that something would happen there, but it would be unrealistic now to expect that any great movement will occur there. So,

that is, in fact, the point I am trying to make. I think that India will accept that the NPT is there, and I hope that the rest of the world accepts that India is not there in the NPT. So can we sit down and see if there are imaginative ways of doing some things together where these are not the issues to be discussed? That is what I am trying to ask.

Mikhailov: Russia strongly supports the NPT and adheres to it. Besides, our position is that we have strengthened the controls under the aegis of the IAEA. I understand Mr. Lehman 's position that this treaty cannot be changed but the US are violating it by deploying nuclear materials on the territory of non-nuclear states. There is another aspect. Every state that possesses nuclear energy (weapons) bears responsibility for that, but even a terrorist organisation possesses nuclear units. That is not very good. We are now facing the problem of international terrorism, which has been developing over the past 50-100 years. We are now facing the strengthening of this huge organisation. It has become international. It is immaterial which factor dominates, ethnic or religious. If a country may use a nuclear weapon, even a small-yield strike, a terrorist won't hesitate to use it either. Because terrorists are watching the national policies of leading countries. A nuclear state must realise that a retaliatory strike may be disastrous, even if a small nuclear weapon is involved. And I would like to underline that a nuclear state must set a good example for other countries and if there should be a Hiroshima or a Nagasaki, a retaliatory strike could be a disaster.

Narasimha: As far as terrorism is concerned, I fully agree that states must take some responsibility for it. But the problem here, and that is what I think you were hinting at, is that the terrorist groups may be international. We may not be able to associate them with any single country. Which country was responsible for 9/11? We won't be able to identify a single country which was responsible for it. So, that, I think, is one of the problems with terrorism. The issue that I was highlighting was that, the fact that they are not identified with one state although they might have patrons among several states, gives a different character to terrorist operations. This is extremely worrisome.

Regarding the IAEA controls, India has been a member of the International Atomic Energy Agency and, as far as I know, everything

that is laid down there and India has signed up for, has been rigorously followed. I don't think the question is about IAEA at all. The question is about NPT, not IAEA. These are different issues. India has been closely involved with the IAEA for a very long time. Mr. Rajagopal and my colleagues have been directly involved in IAEA and they can tell you in detail about it. About IAEA controls, well, they are for those things that are accepted and agreed to at the IAEA by the people who are members of the IAEA, yes, certainly, I don't think that is an issue at all. The issue is really about NPT, not IAEA.

About Minister Mikhailov's statement about the US deploying nuclear weapons on non-nuclear states and its relation to NPT, I request Ambassador Lehman to answer that. But before that, would either of you (Dr Ramanna and Prof Rajagopal) like to say anything about the IAEA?

Raja Ramanna: I do not have anything to say about IAEA particularly, but the IAEA takes its orders from its various committees and we have all agreed that certain reactors have been put under their control and they come regularly and check Tarapur, for instance. But there are reactors which were built entirely by ourselves and we did not think that these had to come under safeguards, because we had not signed those agreements which necessitated getting the IAEA and other inspectors to look at everything that is in our establishment. There were at that time things like industrial secrets, which are even more severe than atomic secrets. Our industries themselves were not keen that people should come from outside and demand information.

Rajagopal: What I wanted to emphasise is we strictly apply IAEA safeguards whenever we have accepted them. For instance, when Russia gave heavy water for the Rajasthan Atomic Power Plant, we put it under IAEA safeguards. Tarapur too was under IAEA safeguards. As Dr. Ramanna said, where we had produced totally indigenous equipment, reactors, systems, we did not find the need to put them under safeguards. But I think the fact remains that though we have not agreed to full-scope safeguards, we are an example of best adherence to NPT. There are countries who have signed the NPT and violated it. I think that is one of the causes of instability.

Jasjit Singh: Every country has to decide what the purpose of nuclear weapons is. What is the aim of nuclear deterrence? My understanding, my belief is that for India there is only one logical reason – to deter nuclear weapons. There are countries, circumstances, attempts, for example, in NATO, to deter conventional forces. This is so in the case of Pakistan to deter war, to deter conventional capabilities. So you are on to a totally different scenario, a totally different doctrine. So long as it is deterrence rests with the second strike. (Ron, correct me if I am wrong. You have dealt with this much more.) If it rests on the second strike capability, then I don't think we need a first strike to initiate a war. Retaliation is a second strike.

The world accepted the Chinese political statement of no-first-use as a statement, and did not dissect it to see what they mean by no-first-use. The Indian doctrine is being dissected right, left and centre, as it ought to be. In fact, I think, this is the way to stability in the future, not only in South Asia, but in the rest of the world. Because, you have to then make up your mind what it is that you are looking at. If the other country is a nuclear state, and you wish to deter that nuclear state, you have to go on to second strike because the first strike cannot. The first strike can only add to complications. You launch a warning, you launch an attack, a massive infrastructure, a massive command and control system, thousands of warheads, all sorts of delivery systems and then you are on to that, which is exactly what the US and the Soviet Union did. If France and the UK didn't do it, it is because they were linked into the overall strategic equation. The Chinese followed a different model altogether, which is not to say they were not able to deter. I don't remember after 1964 any US naval ships sailing through the Straits of Taiwan. While in 1996 also, at the time of the crisis in Taiwan, certainly, the US sent aircraft carriers into the region. But not in the way it would happen pre-1964. So I think we are into something slightly different from what our own experiences for the last 50-60 years have been and therefore we need to look at that.

The other thing, merely to reinforce what Roddam said, the moment you go into no-first-use, there is no question of pre-emption. The risk of preemption is the biggest factor of instability in any nuclear equation. We can discuss that.

My last point is slightly different. I think there is a need to recognise that nuclear disarmament is a national security, national defence goal. India's security will be enhanced if there are no nuclear weapons impinging on India's security. Unfortunately, there are and they can't go away in a purely sub-regional context. If Pakistan were the only concern, the answer is very simple. Sign the NPT or the nuclear weapons-free zone. And the Pakistan army will remain one-fourth the size of the Indian army. The reason why they have gone nuclear is because we will always be superior in conventional terms. I feel those are the realities we must look at when we discuss stability in this region, or stability with nuclear weapons in the coming decades.

Sun Xiangli: I have a comment and a question. The comment is about the NPT. Before 1992, both China and France did not join the NPT. Both criticised this regime as discriminatory. But in 1991 the Chinese government decided to join the NPT. My understanding is that the reason why China joined is because it recognised that in this world, the NPT regime is useful for stability and peace. True, it is discriminatory, but it is also a compromise between nuclear weapon states and non-nuclear weapon states. In this regime, the non-nuclear weapon states give up their rights to develop nuclear weapons with two preconditions: the first is, nuclear weapon states make progress in nuclear disarmament; the second condition is: nuclear weapon states must give non-nuclear weapon states security assurance, negative and positive. Unfortunately, these preconditions are not met very well, so far. That is the problem. I think it is the major reason why so many non-nuclear weapons states are not satisfied with the NPT and some non-nuclear weapon states want to have nuclear weapons. So I think all nuclear states must re-think the NPT regime and make joint efforts. In today's world, especially after the September 11 terrorist attacks in the US, the NPT regime can be a good regime against nuclear terrorism. So I think we should make more efforts to strengthen this regime. Also, it has some discriminatory characteristics. And I would point out that nuclear weapon states, especially nuclear superpowers, should take the lead in nuclear disarmament, i.e. make deep cuts, deep nuclear disarmament. And give strong positive security assurance to non-nuclear weapon states. Only these two preconditions are not enough, I think. There is a third condition

we should add to strengthen the NPT: try to reduce conventional weapons. I mean, why do some non-nuclear weapon states have a strong motivation to have their own nuclear weapons? Maybe they do not fear the nuclear weapons of the nuclear superpowers. What they fear most are conventional weapons. So if we want to reduce this motivation, we also must change world politics, i.e. resolve disputes or secure consensus by military force. That is why some non-nuclear weapon states want to have nuclear weapons. Only with changes in international politics, especially if a collective security regime is set up, can the motivation of non-nuclear weapon states to develop nuclear weapons be reduced. I think all countries in the world should re-think the NPT regime and make more efforts to strengthen it.

My question is about India's doctrine. I have read some materials and the draft doctrine and I find that I agree that to keep the nuclear arsenal at a minimum or lowest level is a wise option for nuclear weapon states. You can save money, limited resources, have minimal deterrence and stability. But I also find some signs that India maybe has more than minimum deterrence. For example, in the draft, it is said that India wanted to develop a control, command, early warning system. This complicated C3I system is useful for first strike, for an aggressive nuclear deterrence. I wonder what is the real meaning, purpose, of India developing a C3I. And how do you comment on the BMD? I remember when the American delegation visited India, some Indian officials expressed support to the BMD programme. Would you comment on this?

Narasimha: I believe the Indian commitment to a minimum deterrent is very serious and genuine, for the reasons that you mentioned. In fact, I believe that the policy that China has followed is the policy that India also is following. So in a way, we would say the Chinese have been pioneers in following this kind of policy and this is something India has adopted too. Now, the mention of C3I and so on in the doctrine should not be seen as anything that leads to weapons being on alert and so on. I don't think India has tried that at all. We can discuss that later. As far as I know there is no intention in India to have its weapons on hair trigger alert, as during the Cold War.



The Role of Nuclear Doctrines and the State of the Armed Forces in South Asia

Vladimir E. Novikov

t seems impossible to correctly assess the role of nuclear doctrines in the development of the situation in South Asia without an analysis of the nuclear doctrines of the main players – China, India, and Pakistan. It is necessary to take into account the following:

- 1. Available official data about the nuclear doctrines of these countries can be different from the real situation;
- 2. At the present time the nuclear doctrines of these countries are surrounded by secrecy of a higher level than those of the USA or Russia. This seems rather understandable, considering that the nuclear forces of India and Pakistan are in the initial period of their development and the problem of vulnerability (or survival) is rather acute for them, which is partly true also for China;
- 3. Often, the players understand the various terms differently.

Proceeding from the assumption that nuclear armaments and more and more nuclear forces are being created for defending national interests (real or perceived), the analysis of any nuclear doctrine must be based on an analysis of the national interests (real or declared) of the country, the character of potential threats to its national security and the political, economic, military, scientific and technical, human and natural resource potential required to parry these threats. Meanwhile, it is very important to estimate correctly (with respect to quantity and quality) the character of the threat, its source, and the degree of possibility of its realisation. For experts in the sphere of military doctrines the concrete character of the threat is very important and I would like to express my respect for the American experts who worked out and published the Nuclear Posture Review, although the sources of threats are rather unclear. Only a very rich country can afford to create the means to parry such threats.

In my opinion, the nuclear doctrines of China, India, and Pakistan have been worked out (or are being worked out) to parry quite concrete threats, though often the sources of these threats are not named directly. That is why further I propose to try to analyse the military doctrines of these three countries, proceeding from my reading of these threats.

As it appears, the analysis must begin with the nuclear doctrine of China. The Taiwan crisis of 1954-1955 can be considered one of the reasons for the decision of the People's Republic of China to create nuclear forces. The USSR at that time tried to avoid becoming involved in direct military confrontation with the USA. The Soviet Union in fact refused to support China militarily, though the United States threatened to use nuclear weapons against their main adversary in Asia in the event of an attempted intervention in Taiwan. In April 1956 Mao declared: "In the contemporary world if we don't want to be threatened we need to do everything possible to obtain our nuclear bomb". In my opinion, one of the main reasons for the appearance of nuclear weapons in any country is formulated in this statement.

As a result of the implementation of this decision, the PRC first tested a nuclear device in 1964 and four years later (in 1968), a thermonuclear device.

It is noteworthy that in 1964, China, having understood that the price of nuclear confrontation with the two superpowers at the same time would be unacceptable, proclaimed the thesis of no-first-use of nuclear weapons and tried to break the nuclear monopoly of the USSR and the USA. China has concentrated all its efforts on the creation of sufficiently effective nuclear forces and by the early 1980s China's nuclear forces already had a retaliatory strike capability which gave Beijing minimal deterrence.

Proceeding from all this, we have the formula of minimal deterrence. Minimal deterrence is understood as the possibility of carrying out a retaliatory strike. It is necessary to underline that under specific conditions, even a few nuclear warheads can produce a deterrence effect. But it is possible only under the condition that all these warheads would be guaranteed to hit specific targets, and that the damage would be big enough. It is not always possible to ensure these two aims at the same time.

The PRC continued to intensively develop its nuclear forces and since 1987 the Chinese military and politicians have been using the term "limited deterrence", which is the *intermediate stage* between the minimal and maximal levels of deterrence. In the opinion of Chinese experts, limited deterrence allows the PRC to restrain the US and Russia in the event of their involvement in a regional conflict *near Chinese borders*. Proceeding from this the definition of maximal deterrence can be formulated. Maximal deterrence is understood as such quantitative and qualitative parameters of nuclear forces, which ensure deterrence of a potential adversary (in this specific case the US and Russia) *in any possible confrontation*.

In order to ascertain the reliability of the doctrine of limited deterrence, the PRC in March 1996 carried out large-scale complex manoeuvres in the Taiwan Straits, having launched missiles in the waters near Taiwan. It is noteworthy that the American side never mentioned the possibility of a nuclear strike against the PRC (unlike during the Taiwan crisis of 1954-1955). This allowed the Chinese side to draw a conclusion on the effectiveness of the limited deterrence doctrine by confirming the fact that the American leadership was realistically taking into account the possibility of a retaliatory strike against the US. And it demonstrated that China has the survivable potential of retaliatory strike.

It seems that by developing its overall power, China will try to create a power base that will eliminate the possibility of even a shadow of influence of unfriendly powers on any sphere of life of Chinese society (the syndrome of national humiliation in the period of partition of the country into spheres of influence of imperialist powers). In other words, China will try to reach a level of maximal deterrence towards the US and Russia. For achieving this aim there is no need for Chinese strategic nuclear forces to be equal to American or Russian strategic nuclear forces.

In this connection the option of development of the armed forces based on the triad's nuclear missile component seems to be preferable, because it avoids excessively high expenses on defence, but can use the most advanced technology of ordinary armaments – intelligent armaments of high precision. Though China has never formulated its strategic doctrine in detail, the following main aims would be in the sphere of strategic nuclear forces:

- 1. Sustaining its great power status.
- 2. Prevention of any form of influence of other nuclear powers on the policy of the PRC, by means of nuclear deterrence.
- 3. Sustaining political superiority over rival countries of the PRC in the APR.

In our opinion China can achieve these aims. China already has the third nuclear arsenal, built on the triad principle. The PRC has nearly 450 units of nuclear weapons, including warheads of 2040 kT and thermonuclear warheads of 15 MT. From the point of view of deterrence of superpowers the weakest point of the triad is the small number (from 10 to 30) of intercontinental ballistic missiles with a range of up to 12,000 km (class DF-5) and only two submarines armed with ballistic missiles with nuclear warheads of class "Sia" (12 launchers).

It is necessary to underline that the present level of Chinese strategic nuclear forces seems to be more than sufficient for deterrence of regional powers. It is necessary to take into account that the growth of Chinese strategic forces is very probable, that this tendency is stable, and that it will proceed at the same time as modernisation of strategic nuclear forces. In particular, in the immediate future, the PRC is planning to put into service from 4 to 6 small submarines armed with ballistic missiles with nuclear warheads, to replace missiles using liquid fuel with missiles using solid fuel, including ballistic missiles on submarines (JL-2) and to providing missiles with MIRV.

In the new millennium, sustaining great power status will hardly be directly linked to availability of nuclear weapons and their continuing development or modernisation. No less important a role will be played by the economic potential of the country. I think economic growth will not pose a problem for the PRC.

It seems that China's nuclear forces can be, in the middle-term perspective, an effective enough tool for deterrence of other nuclear powers from the point of view of their influence on the PRC policy. The question of the influence of US anti-missile defence on China's capacity to restrain the US also needs to be studied.

Concerning the question of sustaining political superiority over rival countries in South Asia, it seems very difficult to give an unequivocal answer to this question. In South Asia only India can be considered a major rival of the PRC. That is why it seems useful to make an analysis of the Indian nuclear doctrine.

It is necessary to underline that it is not an analysis of the doctrine itself, but of its draft, published by India's Ministry of External Affairs, 17 April 1999. In what measure the draft will conform to the real doctrine will become clear in the future.

The analysis of the draft leads to the conclusion that we are given a set of general statements of the doctrine of nuclear power, which has declared the principles of no-first-use of nuclear weapons. Deterrence is based on a retaliatory nuclear strike capability causing unacceptable damage. In this connection it is very important to try to make it clear, who, in the first place, is to be deterred by the Indian nuclear force. In my opinion it is the PRC, because for deterring Pakistan, which would not use nuclear weapons, the conventional armed forces of India would be more than sufficient.

Some statements of the doctrine give rise to a number of questions. The Preamble (n.1, 2) proclaims as India's main aim the achievement of economic, political, social, scientific and technological development of the country within the framework of a peaceful and democratic process. The aim is very good, but it contains the first cause of potential contradictions. In what measure does this aim correspond to the interests of other countries, China, for example? Further (n.1.3.) it speaks of "independence in decision-making within the framework of the process of development and in questions of strategic order" and the necessity of guaranteeing "India's security". Security from Pakistan supposes a certain kind of structure of strategic nuclear forces, security from the PRC another; security from the US a structure different from these two.

In the chapter "Aims" (n.2.1.) it is proclaimed that the "strategic interests of India require the creation of a system of effective, reliable nuclear deterrence and capacity of hitting a retaliatory strike in case of its failure" and n.2.3. states, "India must follow the doctrine of minimal reliable nuclear deterrence". Proceeding from the definition of minimal nuclear deterrence, we shall see that in the case of use by China of nuclear weapons against India, the retaliatory strike must cause irremediable

damage. A question arises: "How big must India's nuclear forces be to cause irremediable damage to China?" I think that in this case the strategic nuclear forces of India must be comparable to those of China. But that means that India must have hundreds of nuclear weapons and their vectors. It creates the preconditions for beginning a nuclear arms race, nuclear confrontation between India and China, which can negatively influence the strategic stability not only in the region, but also on a global level.

The amount of irremediable damage is also unclear. Even in the Soviet-American confrontation it was assessed rather subjectively: primary parameters were given and after that the necessary number of nuclear weapons was defined.

It is rather difficult to answer the question: "What is unacceptable damage for China?" In my opinion it must be rather significant, in view of China's territorial size, economic and human potential. It means that the use of a large number of powerful nuclear warheads is necessary. Then arises the necessity of elaboration and production of thermonuclear warheads, which almost certainly will necessitate nuclear tests and lead to the growth of tension, reaction of Pakistan (and the PRC) and destabilisation of the situation in the region.

India, in the opinion of the authors of the draft doctrine, to have an effective policy of nuclear deterrence must sustain (n.2.6):

- a) Enough viable and battle-ready nuclear forces,
- b) A reliable command and control system,
- c) Effective intelligence and early warning and notification capability,
- d) An overall system of planning battle operations and preparations in accordance with this strategy,
- e) The political will to use nuclear forces and armaments.

Nuclear forces will be based on the triad, composed of mobile ground launching pads, air force and navy.

I would like to underline once more a very important principle, essential for the nuclear doctrine of any country. If deterring Pakistan is the basis for creation of India's "minimal reliable system of nuclear deterrence", the kind of strategic nuclear forces required for deterring China will be different. In this last case the "retaliatory strike" policy and "survivability" of the Indian arsenal acquire critical importance. I can not imagine that India's nuclear forces are being created only for deterrence of Pakistan and I am practically sure that India's strategic nuclear forces in perspective are designed for deterrence of China. This gives rise to a number of difficult questions, which need to be answered by the Indian side.

In particular, the question of financing a programme for creating adequate strategic nuclear forces will need to work out:

- 1) Technologies of production of nuclear weapons;
- 2) Production facilities for creation of nuclear arsenals of quality comparable to those of the potential adversary;
- 3) Elaboration of a system of early warning and control;
- 4) Elaboration (or acquisition) of corresponding vectors within the framework of the triad.

According to some data these aims will need yearly expenses of \$1.5 billion over a 10-year period. But taking into account the size of China's military budget and its expenses on development of strategic nuclear forces, this sum may be insufficient. The question of further scientific research and development in the nuclear sphere, which will be necessary for production of nuclear warheads, is far from clear, neither is the question of new tests (are they necessary or not?) for elaboration of an automatic system of command for nuclear forces, and many others.

Taking the above into account, it seems to me that in the middle-term perspective, Indian strategic nuclear forces will hardly have the characteristics of China's nuclear deterrence, and will almost surely provoke a sharp reaction from China. It can result in an increase in the number of Chinese nuclear missiles pointed at India, thus complicating relations between the two countries, and leading to destabilisation of the situation in the region. One of the most undesirable scenarios can include the temptation for China to eliminate the possibility of an Indian retaliatory strike by launching a pre-emptive strike.

As I see it, the possibility of this last scenario is rather low. China is interested in continuing the rapid growth of its overall might, above all its economic might. Its aim is to reach parity with the United States of America. In the absence of a direct threat to China's national interests from India, the Chinese leadership will try hard to avoid a military hysteria in its relations with India. But Delhi must not hope that China will not take corresponding measures to parry an "Indian nuclear threat". India must certainly not forget Pakistan's nuclear weapons. In this connection it is useful to try to make an analysis of Pakistan's nuclear doctrine.

As it is known, there is no information in the open press even about the draft of Pakistan's nuclear doctrine. That is why I shall try to describe a hypothetical Pakistani nuclear doctrine and structure of its nuclear strategic forces, proceeding from the thesis that creation of Indian strategic nuclear forces is an objective reality which will continue in the foreseeable future, and that Pakistan will have to take corresponding measures.

It is necessary to take into account that India is four times larger than Pakistan in territory, almost seven times in population and at least twice as large in terms of ground forces. In the air force and navy its superiority is even more important (4 : 1). So, Pakistan will have to "compensate" this disproportion by building up its nuclear potential, particularly by accelerating the production of nuclear materials for military use, continuously improving warheads, increasing the number of vectors. Besides that, it has to work out the distribution of responsibility in the system of control and command, develop an ordinary and extraordinary plan of nuclear operations, train and manage military personnel for operating nuclear weapons. Finally, it needs to necessarily deploy nuclear detachments and carry out manoeuvres. It seems that such a large-scale activity can be observed by the Indian side, which would take counter-measures, and the nuclear competition would continue.

To elaborate Pakistan's nuclear doctrine, it is necessary to assess the number of nuclear warheads that Pakistan possibly possesses. In comparison with India, Pakistan's reserves of military nuclear materials (enriched uranium) are obviously limited. The same can be said about the possibility of increasing their production. In this case the problem arises of survival of a small nuclear potential for hitting a retaliatory strike (in the case of a pre-emptive strike).

According to the majority of assessments Pakistan may have from 18 to 25 nuclear warheads using uranium. This number is obviously insufficient even for a pre-emptive strike on Indian reserves of nuclear weapons as their number is much larger (the assessments are from 90 to 180 warheads, using plutonium) deployed over a large territory, and access to them is more difficult.

Besides, it is necessary to take into account that Pakistan can rely

only on two types of vectors - missiles and aviation. Supposing that the entire Indian arsenal can be used against Pakistan, the proportion of India's warheads to Pakistan's can be from 4: 1 to 8: 1. Under these conditions Pakistan's leadership can hardly rely on the concept of retaliatory strike, and that almost automatically leads to use of the pre-emptive strike as a retaliatory measure on the massive use by India even of conventional weapons.

In this connection it is very important to know what state of readiness Pakistan's missiles must have for "deterrence" of the Indian military threat. Keeping missiles in a state of low readiness is possible only under three conditions:

- 1. Pakistan will have strategic warning about the mobilisation of India's ground forces some days before a large-scale offensive.
- 2. India, without any visible reason, will not hit a sudden preemptive strike.
- 3. India will not be able to hit a sudden pre-emptive strike against Pakistan's arsenals of nuclear weapons using conventional weapons.

One can not be sure that all these conditions will be observed. So, Pakistan will have to plan its actions proceeding from the worst-case scenario, which means keeping missiles in a high degree of readiness. This will impact negatively on military stability during periods of future crisis.

It would be logical to suppose that Pakistan must build its nuclear potential as a first strike force, though its use is possible only in an extreme case, as the last sort. Here the question arises about definition of this extreme case, a kind of "red line". Without any doubt, Pakistan's military will operatively define the "red line" as a threshold situation, in which preparations for a nuclear strike begin. The definition of these thresholds will become the most closely guarded state secret. It is necessary also to take into account the fact that the first strike strategy does not need public declaration, and is therefore free from political obligations. It uses to maximum advantage the unpredictability of the reaction of the weakest, which can result in a catastrophic nuclear strike against Indian cities. That alone can ensure an unacceptable damage.

At the same time, there remains the possibility of a pre-emptive nuclear strike against isolated targets with minimal damage to population, with the aim of demonstrating Pakistan's readiness for fullscale exchange of nuclear strikes and stopping the full-scale actions of India's conventional forces.

It appears that such a doctrine of nuclear deterrence can produce some effect, but it can hardly be considered effective. It cannot be assumed that after an isolated nuclear strike India will not launch a nuclear strike using its strategic nuclear forces. Surely, Indian experts will take into account the consequences of the use of Pakistan's nuclear weapons against Indian cities, but there is no guarantee that at the beginning of the military conflict it will be possible to avoid escalation of the conflict and use of nuclear weapons.

In this connection the analysis of the development of the Kargil crisis and its consequences, the first large-scale military confrontation between two nuclear weapon states, is of great interest.

We can agree with the experts that the main lesson of the Kargil crisis was the unexpected readiness of Pakistan to accept the risk of a full-scale war for Kashmir, which could lead to the exchange of nuclear strikes. It is necessary to underline that India has demonstrated self-control by not allowing battle actions across the "Line of Control". In general, the conclusion may be drawn that India's nuclear status has not produced a sufficiently deterrent effect on Pakistan. Many recent events (the attack on the Indian Parliament, terrorist actions in Kashmir) have made the situation extremely grave, pushing the Indian side to take preventive action, strengthening the position of those who wanted to accelerate creation of strategic nuclear forces, including a "nuclear sword" or other strike weapons. As we see it, these events have strengthened both states in their resolve not only to increase their strategic nuclear arsenal, but also to make it suitable for operative use. So, we may conclude that the possession of nuclear weapons by India and Pakistan has not led the adversaries to maximal restraint in political and military questions.

We can only hope that as they build and perfect their strategic nuclear forces, both countries will demonstrate self-control, readiness to reach a compromise, and will ultimately create only minimal nuclear forces, which would restrain the leadership of both countries from illconsidered actions fraught with grave consequences for the region and the whole of mankind.

Discussion

Lehman : One of the more important themes throughout this paper is the evolution of thinking and I think it is almost inevitable that both in India and Pakistan, there will be changes in their policies as they think through the issues. But it won't happen quickly, and I think one of the reasons why it won't happen quickly is that nuclear policies are so politically charged that even the slightest nuance or change gets exaggerated. This has been the case in the United States and other countries for many years. You move a comma, you change a word and it may have very subtle nuanced connotations and yet it becomes a great domestic political battle. But I think that there has been convergence, excuse the expression, in the nuclear doctrines of most countries over time. They often keep a declaratory policy architecture that is unique to their country but underneath, certain basic concepts tend to emerge - that deterrence is based on somehow communicating to other countries the uncertainty that their attack would be successful but the certainty that the price would be too high. You see that emerge eventually. But with that comes a whole set of assumptions as to what you have to do. I think that the author of the paper was very good at highlighting the fact that where you start is not necessarily where you end up and my only amendment is that much of the language in the declared policy may yet still be the same.

Jasjit Singh: This is a problem I keep facing - that a doctrine is not policy. A doctrine is a set of principles that are behind what should be policy. I think we should be very careful in how we use that language. Or for that matter, not even "strategy" as such.

I think when the author starts to discuss some of the clauses of the Indian draft doctrine, we need to look at the original document. I suspect that somewhere in the translations, something is altered, which is not the fault of the author probably, but perhaps it may be useful if we could get copies made of the draft doctrine. I don't remember this word "battle-ready".

One has heard this argument even from Indians that to be credible, the Indian nuclear deterrent must be at least equal to that of China in numbers. I think that defeats the very logic of deterrence. It is only in conventional forces that one needs to worry about quantity. You can go back to the Cuban missile crisis and see what finally was the decision made. I think there is a relationship to the political objectives which will result in, and lead to, a need for nuclear deterrence. My view is that something like two dozen is more than adequate in terms of deterring. When you look at it in the longer term, countries are becoming more and more vulnerable. In fact all countries will need less and less if you look at it in terms of decades. The Academician said we are not going to get rid of nuclear weapons by the end of this century and I expect no country will need more than 10 nuclear weapons, because society will be so vulnerable. Here is a society so vulnerable to a hijacked unarmed civilian airliner. We are talking about nuclear weapons, for heaven's sake! So the numbers are going to decrease tremendously and at least the Indian position, by historical fact, is such that there is no need to rise to those levels and then learn the lesson, and then come down. I think the numbers will have to be way, way below what the Chinese have.

When this sort of conclusions are put together, this scenario - I am talking about the reference in the paper to the temptation for China to eliminate the possibility of India's retaliatory strike by making a pre-emptive strike – we are saying that we don't believe in China's no-first-use and you don't believe in India's no-first-use and we are back to square one. What doctrine are we discussing here, if we say no-first-use is meaningless? I understand the difficulty in understanding this, because there has been very little debate over these decades, in fact virtually none, on the whole concept of no-first-use, more recessed deterrence. I've been arguing this for a long time. It's the same deterrence. But it is a different level of deterrence. As you said, Roddam, this is far more stabilising within an overall nuclear destabilising process.

Di Capua: What is the meaning of nuclear weapons and nuclear deterrence, in the presence of recycled precision-guided munitions? In my mind, the advent of precision-guided munitions has totally changed the meaning of what nuclear weapons are all about. I will never forget reading a comment by a retired General who said, "I will never forget that my entire mission in Europe was to have a nuclear weapon aimed at a particular bridge in Russia". Obviously, you could not take off the bridge

with conventional munitions because you could not deliver them. So basically, you had to deal with a large circle of probable error and that is the way you approach it. So how do you approach the relationships between states in the presence of precision-guided munitions?

The other issue I think is important enough to be discussed in this context is what we have witnessed with 9/11 and may witness again - the fact that you have human "terminally" guided munitions. When you have a human being guiding a munition to its final target, it really changes to some degree the equations on how you have to deal with these matters.

Sun Xiangli: I have a comment about the Chinese nuclear strategy. In this paper it is mentioned that the Chinese strategy is developing from "minimal deterrence" to "limited deterrence" and to "maximal deterrence". I would say maybe these things are confused phrases. It's true that in the 1980s there were some articles and papers discussing nuclear deterrence in China. And I remember most of those articles came from the Chinese Military College. These articles expressed personal views and not the government, or official, position. Chinese strategic analysis circles never take these articles seriously. Recently we had several seminars on arms control. We talked about nuclear strategy. And most people in the seminars talk a lot about the survivability of the Chinese nuclear force, not about limited deterrence. Because in the 1980s, when some people spoke about limited deterrence, they wanted to have more capability, to expand the nuclear weapons' functions ... to use nuclear weapons in some lowlevel conflicts. I think this is nonsense, because you couldn't use nuclear weapons in general conflicts. It's very dangerous, suicidal, to use nuclear weapons casually. The only function of nuclear weapons is to deter nuclear attacks. It can also play a role in wars, to prevent major conventional wars among the bigger powers. This is the only function of nuclear weapons. You can't use them in general or low-level conflicts. So limited deterrence means some kind of deterrence of war-fighting and combat. It's nonsense. It's not possible. We never take this kind of view seriously in China.

The second point I wanted to make is that the Chinese nuclear force is being upgraded, it's true. But it's not true that it is being developed to some war-fighting capability. The major task is to make sure it has basic

Role of Nuclear Doctrines and the State of the Armed Forces in South Asia

survivability, especially against BMD, considering the US decision to deploy BMD. Of course, how much you increase, what concrete steps to take, I don't know personally. I believe the Chinese government has not made a final decision on how to do this.

Some months ago, the US and the Chinese government tried to coordinate this issue because China is worried that its minimal level of nuclear deterrence will be compromised by the BMD.

It is certain that China will persist with no-first-use and persist in keeping its nuclear arsenal at the minimal level, because history has shown us that in the Cold War, both the former Soviet Union and the US had developed so many nuclear weapons. But it was largely a waste of money. Now those countries are disarming their nuclear weapons. Since the first nuclear test, Chinese leaders realised that having too many nuclear warheads is useless. A minimal level is enough. This is the current Chinese position.

Lehman : This might be an appropriate moment to weave together a number of issues that have come up. Minister Mikhailov alluded to the question of US nuclear weapons on the territory of non-nuclear weapon states. This is not a violation of any treaty. In fact, these weapons are there because of treaties such as the North Atlantic Treaty. The treaty doesn't require that they be there, but rather there is a collective decision-making process. Indeed while there are often questions raised about how many there are, and sometimes pressures to reduce them, whenever the US proposes to reduce them, our European allies get nervous and insist that we keep them, at least some number. The number is actually very small, small in comparison with what was once there. But it raises a most interesting question, which is the notion of extended deterrence.

Mikhailov: The USSR disintegrated 12 years ago and now we are living in another independent state, Russia. We'd like to point out that several US Administrations have changed since that time. The NPT forbids both direct and indirect proliferation of any nuclear weapons and technology. According to US data, there are about 400 nuclear units deployed outside. We are not speaking only about Germany. Today we are speaking about

1700 units overall, and 400 of them are outside the US. About six years ago, President Yeltsin said at the Moscow Summit that this is proliferation of nuclear weapons. Mr. Clinton kept silent. And remember, the USSR disintegrated 12 years ago.

Lehman : I simply cannot let it stand that it is a violation of the NPT. For several reasons. One is that these deployments were publicly known before the conclusion of the NPT. The question of the obligations to our allies was addressed in the negotiations of the NPT and as far as I know, there is no disagreement. I understand the provisions of the NPT to which you refer. They make it clear that we as Parties have obligations not to provide nuclear weapons to non-nuclear weapon states. We understand what our obligations are under the treaty. Again, there are a few airdelivered weapons; they are not on alert, they are slow-flying systems, they are short-ranged. These are not like the days of the SS-20s and the Pershing missiles. In fact, I think Russia and the US are the only ones at the table here today, who actually disarmed that whole category of nuclear weapons. It's India, Pakistan, and China who deploy them today, not the US and Russia.

I would remind everyone around this table that the joint verification experiment (between the USSR and the USA) was one of the major transforming efforts of modern history. Remember what happened. The two great adversaries got together and they brought their real experts together. And they actually solved a problem together. Indeed, I would commend everyone around this table to follow that example.



Nuclear Weapons, Deterrence and Stability in the International System: South Asian Dynamics

Sridhar K. Chari¹

S tability in the international system continues to be vaguely conceptualised, given the essentially 'anarchic' nature of the international system, with a multiplicity of variables precluding the delineation of all but the simplest of concepts. Intuitively, one thinks of stability as the absence of actual war or conflict, or the absence of crisis situations that might either lead to conflict, or impede "normal" relations. In broader terms, stability can be thought of as "order" where the international system proceeds along certain institutionalised mechanisms and procedures, which makes economic, political, and people-to-people interactions possible, and de-legitimises aggressive action.

The international system today is founded on the continued relevance of the 'State' and attendant nationalism, theories about the increasing marginalisation or softening of the 'States' system notwithstanding. Much before this debate came to the fore with the rise of multi-national companies and the economic globalisation and information revolution of the 90s, Hedley Bull had argued, in 1977, that

^{1.} The author would like to thank Prof S. Rajagopal, Homi Bhabha Visiting Professor, NIAS, for his many helpful comments and suggestions in the preparation of this paper. Parts of this paper were also delivered at the 8th ISODARCO-Beijing Seminar on Arms Control in Beijing, China, in October 2002.

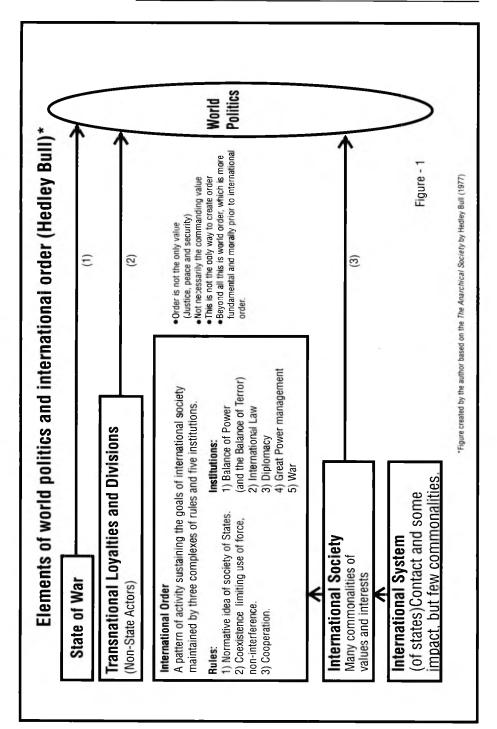
"to conclude that the states system is dysfunctional is to overlook the true role it can play on the achievement of order in a human community that is deeply divided."² (See figure 1.) He also highlighted how "order" and "stability" can sometimes conflict with values of justice, progress, and development.

Be that as it may, State power and behaviour is a key factor in a stable international polity. Traditionally, international relations have been best explained in terms of power and national interest. Competing models and explanations, going under various umbrella terms like "liberal internationalism" and "liberal institutionalism", have offered many valuable insights and and valid arguments, but we always seem to end up with power and national strength as the key variable. And by all accounts, the imperatives of "realpolitik" continue to operate. Power took on a dramatic new meaning with the advent of the nuclear weapon, and five decades on, the influence of its presence in a handful of states and on the system itself, has sometimes been incorrectly estimated. The concept of deterrence, which has always existed in some form, took on a special meaning, given the enormous destructive power of the "ultimate weapon."

The rise of international terrorism, of powerful, networked, and collaborative rather than hierarchical, non-State groups, albeit with covert State support, is another key factor in international stability. Introduce nuclear weapons into this group, and obviously traditional models of deterrence, predicated on State behaviour and rationality, will no longer work. The effort then, has been to prevent these groups from gaining access to these weapons. Not enough is being done however, to discourage states that continue to directly or indirectly support terrorist activities.

'This paper will employ some theoretical constructs and models to look at strategic stability and the international system today, with a focus on deterrence and nuclear weapons. It will do so first at a systemic level, and end with a look at the situation in South Asia. It will set out to argue that while nuclear weapons can indeed contribute to successful deterrence, the international system will have to look more closely at

^{2.}Bull, Hedley, The Anarchical Society: A Study of Order in World Politics, New York, Columbia University Press, 1977.



aspects where deterrence in broad terms can be stated to "fail" and thus highlight the need to institutionalise mechanisms that do not fuel conditions where challenger states feel that the benefits exceed the costs of risking conflict. This presumably has always been an important factor where questions of territory and national integrity are concerned. Successful deterrence though can only be one aspect of stability. An international war against terror, for example, cannot operate with double standards, and the principles held hostage to *machtpolitik*.

The key elements of deterrence are well known, and do not merit too much elaboration here. Some points can be made, however. Deterrence as a strategy applies not only to nuclear weapons but is a characteristic of national and indeed, societal, behaviour, at various levels. It must also be seen in the context of technological change, and the technology-society relationship.

The school of deterrence optimists that believes that nuclear weapons contribute to stability, does so simply because state units, essentially undifferentiated in their functions and behaviour, will factor in the high costs of a nuclear attack, either on first or second strike, and thus be deterred from actions leading to such an eventuality. Nuclear weapons in the hands of two contentious states, goes the reasoning, contribute to a balance of power, that will in turn contribute to stability – depending on how you define it. For some analysts, nuclear deterrence has succeeded if it deters nuclear attack. For others, it has failed, if it has not deterred aggressive and destabilising actions, carried out under the safety of a nuclear umbrella, so to speak. This classical model of deterrence is consistent with traditional superpower behaviour in the nuclear realm, but it is not consistent when considered under a general balance of power model, where conflicts have frequently arisen between so-called balanced states.

A refinement of balance of power theories is a balance of threat model, where states balance not power, but threats. Under a balance of threat model, states do not balance power, but seek to balance threats, given, of course, their set of resources, technological capabilities, and available alliances. American analysts like Micheal Mastanduno,³ and G. John Ikenberry,⁴ have argued that the United States, in an effort to preserve its predominance in the international system, follows a "grand strategy" where the incentives to balance against it are reduced, by adopting behaviours that do not encourage or necessitate traditional balance of power behaviour from other emerging powers in the system.

Under this model, associated more with the Clinton Administration than the present Bush one, though many of the elements are institutionalised to a large extent, and exist through changes in administrations, the US seeks to "engage and integrate"⁵ countries which can be described as status quo countries as far as the international order is concerned, and confront those which wish to destabilise the system. Promoting democracy, mutually beneficial economic links and globalisation, and "interpenetration" as far as access to and voice in US economic and political decision-making, education, and cultural life are concerned, and a certain multilateralism on the world stage, would be consistent with such a model of US behaviour. Such an "interpenetrated hegemony" is indeed a reality in many ways, and US development and its current technological and economic lead has in fact been made possible only by such interpenetration. Alternatively, the adoption of Ballistic Missile Defences, a possible unilateral strike against Iraq in the current scenario, double standards in the war against terrorism, persistence with skewed economic structures even while articulating the benefits of global free trade, a general unilateralism articulated in terms of their own exclusive national interest, would obviously create the incentives to balance or at least mitigate US predominance. Intuitively, the behaviour of powerful states in the system would impact the nature of individual and systemic responses. And this plays out in the same way in regional scenarios too, with regionally dominant players.

^{3.} Mastanduno, Michael, "A realist view: three images of the coming international order" in *International Order and the Future of World Politics*, T.V. Paul and J.A. Hall, Eds, Cambridge University Press, 1999.

Mastanduno, Michael, "Preserving the Unipolar Moment".

^{4.} Ikenberry, G. John, "Liberal Hegemony and the Future of American Post War Order" in Paul and Hall, 1999; and Ikenberry, G. John, "Why Export Democracy? The Hidden Grand Strategy of American Foreign Policy", *The Wilson Quarterly* (Vol 23, No 2, Spring 1999).

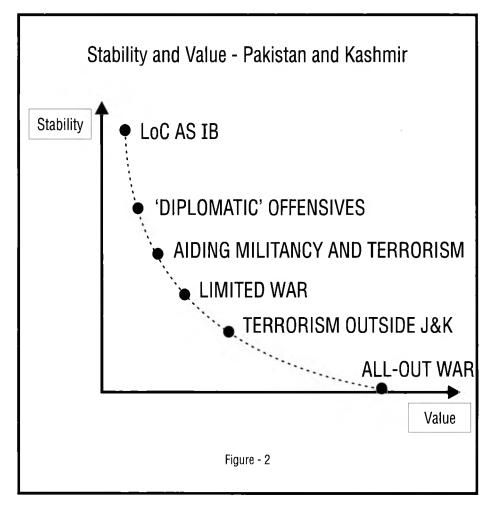
^{5.} Mastanduno, Michael in Paul and Hall (1999).

Deterrence arguably works best, when states' stance is credible and rational. Now, rationality is of course another of those problematic concepts – we tend to use it as a sequence of reasoning which sets off costs and benefits. Credibility is linked to both capability and rationality. Credibility is linked to capability in that without the capacity to inflict unacceptable levels of damage, the deterrent effect is nullified. And the threat to inflict such damage can be credible only if it is rational to carry it out. One frequently finds it difficult to predicate much on rationality, when confronted with military rulers of failing states, with a spectrum of pressures and compulsions ranging from the domestic to transnational religious/civilisational concerns, operating in volatile environments, and vulnerable to coups and hijacks of all kinds. There are also competing pressures from the international community, which do result in inducing rational action.

In the Indo-Pak scenario, the destabilising element is the oft referred to belief held by Pakistan that it can carry out a covert war with India, by sponsoring and aiding terrorism, under a nuclear umbrella, which precludes the employment of decisive and superior conventional force by India. It can also be argued conversely, that since Pakistan's oft repeated threat to use nuclear weapons is rhetorical, and does not follow a rational escalation scale, and therefore is not credible, it will be very much possible for India to take punitive, retaliatory action, under the very same nuclear umbrella. India can consider calibrated action, targeting not the Pakistani State, but the infrastructure – political, financial, personnel, and military - that facilitates terrorism on Indian soil.

The behaviour of a challenger state is thus critical. If Pakistan begins to place a higher and higher value on Kashmir, and thus employs or facilitates more and more aggressive actions, it will reach a state where it believes that the value of the perceived gain, i.e. Kashmir, is more than the costs of an Indian retaliation. In that case we would have reached a situation where only high degrees of instability will prevail.

It is useful sometimes to graph certain relationships, again, not with the idea of claiming mathematical certainty, but as a tool to understanding these relationships better. (See Figure 2). In the figure, I have put Stability as the dependent variable on the Y-axis, and Value as the independent variable on the X-axis. Working with a relative measure, one can assign a value to certain actions on a particular issue, say, Kashmir. As the value of the potential gain, here Kashmir, increases there will be a corresponding drop on the stability scale, producing a downward sloping curve. There is an Indian parliamentary resolution which lays claim to the whole of Kashmir, including what is currently occupied by Pakistan, and the area known as Aksai Chin, which is territory handed over to China by Pakistan. If hypothetically, Pakistan accepts that resolution, the value assigned to Kashmir by Pakistan would be zero, and on this issue of Kashmir, stability would be at the maximum. At the other end, if Pakistan values it so highly that it is prepared to risk all-out war, instability would be at its highest. To put it in another way, there is a clear asymmetry in how the two countries value stability itself.



On this question of valuing Kashmir, I can recall a story related, I think, by a former foreign secretary. A Pakistani counterpart was visiting him, at an office in New Delhi, and the Pakistani gentleman, pointing to Kashmir on a map on the wall, said: "All our problems with India will be solved if you can just give us that crown you are wearing." And the Indian replied: "That is not a crown, that is our head." You can relate that to what Kashmir means to India, in terms of the secular foundations of this country, and Pakistan's claim to it based on it being a majority Muslim state and so on. Of course, there are also strategic considerations why Pakistan has always wanted the Indian-held Valley – Pakistani troops could then be sitting on Indian borders, without the high mountain terrain as a barrier.

Rhetorical postures adopted by Pakistan, including repeated nuclear sabre-rattling, as it has been termed, obviously do not contribute to stability. One of the earliest of Western thinkers on the problems of deterrence structures, Michael McGwire, had warned about the destabilising effects of the "manipulation of risk for political ends."⁶ In the recent stand-off between the two countries, in the first half of 2002 following the terrorist attack on the Indian Parliament on December 13, 2001, Pakistan was the country that repeatedly mentioned the "nuclear option."

In all traditional models of deterrence predicated on a structural, neo-realist analysis, like those articulated by Kenneth Waltz,⁷ the presence of disputed territory weakens the deterrent effect to the extent that it may not prevent conflict. But deterrence will still prevail, as the incentives to keep the conflict limited in scope and intensity will continue. This will again bring in the question of conventional strengths of the defender and challenger states – the defender state can only be expected to pull out all stops and augment its technological capability to successfully ward off such attacks, while preparing the diplomatic and political ground to ensure that such actions are indeed stopped. But the higher the bar is raised, or the longer such destabilising actions continue, the stronger and more focused will have to be the defender state's

^{6.} McGwire, Michael, "Deterrence: the problem – not the solution" *International Affairs* (1985-1986).

^{7.} Sagan, Scott and Waltz, Kenneth, The Spread of Nuclear Weapons - A Debate (1995).

response.

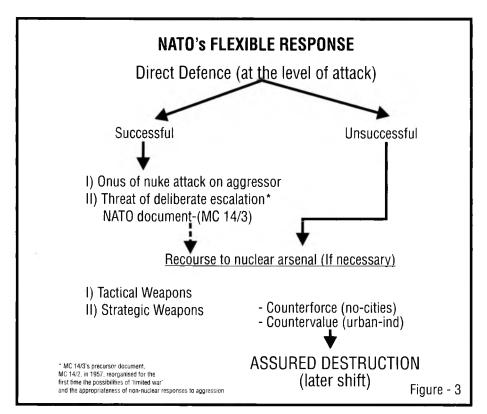
Kargil is often cited in this context. So was it deterrence that worked in Kargil, or (even more controversially in the recent stand-off) was it American pressure and influence, as some have posited?

Since Pakistan continues to take aggressive (though limited) action on the Kashmir issue, has India's deterrence failed? Since all-out war has been prevented, has it succeeded? Would Pakistan be able to argue that India has been "deterred" from taking retaliatory action against Pakistan consequent to India's charge that the Pakistani State is responsible for terrorist actions on Indian soil?

It could be argued, as many are doing these days, that India's deterrence has weakened post-1998, because it has failed to deter Pakistan from aggressive actions on Kashmir, including active infiltration and the sponsoring of terrorism. R. Narasimha has argued that it may only be tactical instability that has increased, while strategic stability has been maintained. In the context of the debate whether nuclear weapons should have a broader role than deterring only nuclear weapon use by the enemy state, it can also be argued that it is India's nofirst-use doctrine which has "failed", and not deterrence as a whole. In hindsight, it might perhaps have been better if India had not declared a no-first-use policy after the 1998 tests. On the other hand, given the international reaction to the tests, to Indian articulations of a Chinese threat, and the like, perhaps India felt the need to articulate such a policy vis-à-vis China, which also has a no-first-use policy, and the rest of the world, which was crying itself hoarse not only about the possibility of a nuclear escalation, but about a "great country" bucking a movement towards nuclear reduction. To a certain extent the policy can be considered to be a positive factor - the relationship with China has got better, and the "international community" has shown more understanding and willingness to accommodate India's position. As far as Pakistan is concerned of course, that has not been the case - they see the Indian policy as merely a cover to assert Indian conventional superiority, and that this superiority can be offset only with a Pakistani first-use policy, with a minimal or even non-existent escalation ladder. So it is unlikely that any reversal or attempt to reverse this policy will contribute to stability now. What is more, the question of a first-use policy must also be seen in the light of the credibility of the threat. It will

be difficult to argue that adopting a first-use policy will necessarily deter Pakistan from pursuing its covert war. As NATO discovered long ago, and the US during the Gulf War, there are problems of credibility in threatening nuclear retaliation against limited border forays, or actions like burning oil wells.

In Kargil, one could argue that what happened was that India adopted a level-of-attack defence, as a first tier response in an overall defence doctrine. If we recall NATO's flexible response strategy, that strategy evolved from the earlier simplistic Trip-Wire/Massive Retaliation strategy, which had the notion that the US would retaliate massively if the Soviet Union made so much as a small incursion across the borders. Europe was not comfortable with this, as the question was asked whether the USA would risk New York to save a German town near the border or even Paris or Berlin. A level-of-attack defence, where just enough force is used to repulse the aggression, puts the onus of escalation on the attacker. (See figure 3.) India of course used airpower, but that was again



limited to the theatre of conflict, and disengagement is always easier with airstrikes, as Jasjit Singh has pointed out. If the conflict escalates, so do the risks for the initiating party.

This brings us to the larger question of systemic state responses. If the international states system is predicated on and values stability, the discouragement of destabilising actions should be more institutionalised and uniform in its application than it is now.

If we incorporate these concepts in the South Asian situation, including China's role in the region, some interesting questions come up. Would weaker states in the region be interested in balancing threats rather than balancing capabilities? India, for example, cannot be described to be in a balance of power race with China, though it would definitely be thinking in terms of balancing any threats that may exist, including the factor of the Chinese relationship with Pakistan. And could Pakistan be induced to balance any threat it perceives from India, rather than indulging in pure balance of power behaviour, which, it could be argued, is a destabilising factor of far more importance than what a neo-realist model would allow?

If threats, rather than capabilities are balanced, that could contribute to increasing stability in the region. Pakistan has sometimes articulated the notion that even if the Kashmir problem were solved, there would be other things to take up with India. Gen Musharraf is reported to have stated just that. In this view, India is a big, powerful, hegemonic neighbour whose very strength threatens Pakistan. This would be an unfortunate, and destabilising position to take.

So, in conclusion, two points can be made. The prospects for stability in South Asia lie first in the nations in the region seeing the need only to balance threats rather than balance capabilities, the latter being articulated in terms of abstract notions of power and strength on the world stage. Second, and more specifically, they lie in how much value Pakistan puts on the Kashmir question. As shown in the earlier graph, any aggressive action which puts a high value on Kashmir (this of course is an internal, domestic equation as much as an external one) would be destabilising. China will also have to re-evaluate its military aid to Pakistan, and the world will have to take into account not only Pakistan's links with China, but with North Korea too. The movements of missile and nuclear knowledge and technology between these three countries are established facts.

At the international level, double standards cannot be allowed to prevail. This can be argued for even if a hard, realist approach is adopted. Can double standards be allowed to exist in the war against terrorism? Even if the actions are not indicative of clear double standards, can the international system tolerate actions based on narrow realpolitik decision-making (institutionalised in the foreign policy behaviour of most states)? If territorial questions continue to contribute to lack of stability in the South Asian region, shouldn't we be moving towards the freezing of borders as they exist now, for example? If stability is what we are looking for, that is a clear first step.

The Indo-China relationship of late must be considered a stable one. Encouraging work on resolving outstanding border issues, and exploration of technological and economic cooperation are steps in the right direction.

Though Chinese military assistance to Pakistan worries India, it must be recognised, that India, in its behaviour on the international stage, has always demonstrated commitment to a stable international order. It is universally agreed now that India is in essence a status quo state.⁸ Pakistan's worries about India's intentions against its integrity and statehood are misplaced. Repeated articulations from Pakistan of such an Indian threat can consequently only be considered the workings of the imperatives of internal and external realpolitik and strategic ambition.

India values its territorial integrity, like any other country, and strongly believes in a federal polity and a strong state, providing a vehicle for its national development. Its aims are, demonstrably, not hegemonic, and it is interested in the achievement of a higher quality of life for its people. It is not, again demonstrably, into balance of power games. Countries in the periphery and semi-periphery of the international system, especially the more powerful ones like China, Russia, and India (considered as the system's emerging great powers – to wit the US Hart-Rudman Commission Report on National Security), are engaged in the pursuit of a more equitable system that allows a level playing field for development. Elsewhere it has been argued that even in the nuclear

^{8.} This was stressed by the author in his M.A. thesis at Leicester University (2000). Recent books, like the one by Stephen Cohen (India, Emerging Power) have endorsed the view of India as a status quo state in many respects.

realm, India's policies followed a consistent curve, and, as R. Narasimha has argued,⁹ it is strategic autonomy that India has been looking for — in a world where realpolitik still rules, and there is much that disadvantages countries not in the core of the system. None of these goals are inconsistent with the establishment of a stable international order that simultaneously allows change towards greater development of a greater number of people. Indian leaders have to exercise more imagination, vision, and skill in diplomatic and political dealings with the country's neighbours and the world, and in internal economic and defence policy. This would include increasing the efficacy of defence procurement measures, and in overall defence preparedness.

To put it in another way: the problem of countering Pakistani covert tactics is not primarily a problem of whether deterrence is holding, or whether no-first-use is working. It is a problem of augmenting India's level-of-attack defence, by paying attention to all its components. Conventional defence preparedness should be at a much higher level than it is now. The same with intelligence and counter-intelligence, the information and propaganda war, the diplomatic and political war, the judicious harnessing of technological aids, and indeed, India's overall economic strength. That is the only way to steadily raise the costs of Pakistan's strategy of covert war and support to terrorism.

A point about arms control – a recent analysis of deterrence by Frank Zagare and D. Marc Kilgour¹⁰ while validating some concepts of deterrence that we have talked about, finds, interestingly, that deterrence based on a minimum necessary capability, rather than on dominating capability, contributes more to stability. India has always recognised this, as evident in its draft nuclear doctrine. We have a clear case for disarmament and arms control there. Both India and China have articulated a concept of minimum deterrence.

I would like to end by saying something about nationalism, which is so linked to the establishment of healthy states in the international system. Nobody can refute the fact that nationalism has a dark side. But as Anthony D. Smith has pointed out, "What has to be explained is the

^{9.} Narasimha, R., "Evolution of India's Nuclear Policy" in XII International Amaldi Conference on Problems of Global Security, Proceedings, Accademia Nazionale Dei Lincei, Rome, 2001.

^{10.} Zagare, Frank C. and Kilgour, D. Marc, *Perfect Deterrence*, Cambridge University Press, 2000.

ubiquitous power of nations and nationalism in a global world...both remain indispensable elements of an interdependent world and a mass-communications culture".¹¹ This is relevant for core and non-core countries, especially in the latter's attempt to assert themselves in a system that is still skewed unfavourably for them.

Countries recognise the value of economic liberalisation, while retaining a certain strategic leverage. What is true within societies is true between nations and States as well. We all need not only the rewards that individual achievement can bring, but a well-being that is predicated not only on individual achievement, but on the right to "effortlessly belong"¹² which comes from identification with ethnic groups, religions, civilisations, and a nation-State – whether based on a creed, or arguably "imagined" or otherwise. The future is definitely moving towards open, pluralistic societies, still grounded in the States system, but with less of ethnocentric and discriminatory security and economic structures, hopefully leading to greater strategic stability, first in the short run, and, with evolution, in the longer run.

^{11.} Smith, Anthony, D., Nations and Nationalism in a Global Era, Polity Press, 1996.

^{12.} The phrase is from Margalit A., and Raz, J., "National Self-Determination" in Kymlicka, Will (Ed) *The Rights of Minority Cultures* (Oxford, Oxford University Press, 1995) p. 86.

Discussion

S. Gopal: Thanks for a very interesting analysis, Sridhar.

Something has always bothered me in this whole question of deterrence and we need to discuss it. Deterrence is essentially a state of mind, I presume. Now, with all the various concepts of balance of power, balance of terror, which we discuss, do we ever take into account the state of mind of a ruler or the ruling group of a country? Some of them might be willing to risk a nuclear confrontation, some might bow down at the very mention of the word "nuclear". I believe India has always been a loser in the matter of deterrence with Pakistan. Pakistan has constantly stated it would not hesitate to use nuclear weapons if its "security and sovereignty" is at stake. This is a very specious argument because throughout this period, India had never talked or taken action to indicate that it is any serious threat to the security and sovereignty of Pakistan. On the other hand, are we unwilling to cross the Rubicon in our problems on terrorism because there might be a possibility, even remotely, of nuclear weapons being used on us?

Sridhar: First, on the question of an unstable or irresponsible ruler willing to risk a nuclear confrontation, I think that danger definitely exists. And it will be difficult for us to argue here in India, that Pakistan does not pose any kind of a nuclear threat, because deterrence works well. That probably runs counter to some of what we talked about in terms of deterrence. But the argument for stability would probably be, and maybe some of Pakistan's behaviour does bear this out, that there are structural and systemic influences which prevent it from becoming so insensitive to costs, that it is willing to escalate to a nuclear level. During the recent stand-off, I think it was the Pakistan Information Minister who said that if the very existence of Pakistan is threatened by India then what is this "damned nuclear option for? We will use it". Even there, it was articulated not in terms of Kashmir, but the existence of Pakistan itself. In other words, they could only justify issuing a nuclear threat not in terms of Kashmir, but the very existence of Pakistan.

The second point you mentioned, yes, it was always destabilising to manipulate risk with any kind of political goals and ends. This is a very destabilising factor in any nuclear equation, the manipulation of risk, instead of leaving it at a natural level.

On the question of terrorism, when we are talking about non-state actors of any kind, you are no longer talking of state units, where you can even predicate them on certain models of rationality, models of systemic and structural influences on the state system. When you are talking of nonstate actors, you are taking the discussion to a different plane. Then you are no longer talking of deterrence. If you are talking of suicide attacks by non-state groups, they are not going to be deterred by anything.

Gopal: No, I am not talking about non-state actors, but non-state actors aided by a state. They are really not non-state actors. They are supported actors, supported by Pakistan. The whole point is, how much do we have to be patient or be cowed down in dealing effectively and once for and all with terrorism, on the specious argument that there is a possibility of nuclear confrontation?

Sridhar: Yes, I agree. See for example, how Dr. Novikov's paper says India's deterrence has sufficiently failed, i.e. it has failed to deter Pakistan because of Pakistan's actions. This is where we will have to probably articulate our level-of-attack defence against terrorism in terms of certain actions, so that it is on a certain course, where the deterrence is strengthened, rather than weakened. The words "flexibility" and "responsiveness" in the doctrine become very important. They have to be part of an overall defence doctrine, part of an overall political and diplomatic strategy, which predicates a course of conflict with very serious consequences at the end for the aggressor – at the very least, no rewards for such behavior.

Mikhailov: Are you sure that order and stability are the main principles for development of society? In my opinion, these are the principles of a dead society. What I mean is, war is also an extreme principle of society's development. It brings harm to any society, but maybe it is disorder that moves science and human intellect forward. Maybe there is an inbetween position between stability and war that makes our society develop.

Sridhar: You would have noticed in my chart about Hedley Bull, that he puts down "state of war" as in fact one of the "institutions" in world politics. Order cannot be considered the commanding value in the international system, most assuredly. Because, privileging the concept of order, you can institutionalise a certain system, an international order of some kind, which is highly disadvantageous to many other nations. You can argue for an NPT, an exclusive and discriminating nuclear system in the international stage, on the grounds that it promotes order, peace, and stability. Definitely, there are many states for whom this will be a highly disadvantageous position. So order need not necessarily serve justice. That's for sure.

Mikhailov: I understand this is not a simple question. You may consider writing a serious scientific work about it. We can write it together, maybe. Because the problem of order is one of the main questions in philosophy. It can't be explained in two words. We understand that.

One more question. Jammu and Kashmir is a weak point in the external policy of India and Pakistan. You compared it with the head or crown, or whatever. But everyone is thinking about a military solution of this international problem. But Europe showed another solution. European integration. Every state preserves its independence while they have monetary union and collaboration within the integration. Do you not think it is possible for Pakistan, Afghanistan and India to create something like this?

Sridhar: I don't think it is possible. I think it will be very difficult to transpose the European model of what happened in the decades following World War II, and apply it to South Asia. It won't work for many reasons. Disparate religions and cultures, disparate strategic cultures, in fact. But even if you could think of a model where India forms a security community quite the way Europe has formed, there are so many variables and factors, it would not be possible in the near future at all.

Prospects for Stability in a Nuclear Subcontinent

Mikhailov: In the 21st century, when every country has access to the Internet and new means of communication and so on, we are talking of technological breakthroughs. You are mistaken about the difference in cultures, because every country observes the principles and features of other countries. I believe that this collaboration I mentioned is one of the most possible ways in the future.

Raja Ramanna: I did want to say something else, but after listening to Mr Mikhailov's rather simplified statement that the problems of Europe are similar to the problems of India, I think he has forgotten that the very existence of India is itself a miracle. It is a large country with a billion people and if you go to any town, you find five languages being spoken simultaneously. The culture is the same. You are Hindu, Muslim or Christian. Of course, the Christians are small in number. It's not the culture, it's the size of the country. The richness in some areas, the poverty in others. All this has to be faced, which Europe did not, except they did it by killing each other in two world wars, which is a shock treatment. It is in the nature of a shock treatment they have come together. If Prof Mikhailov believes they have come together, I shall be very happy.

I have a question regarding the problem of threats. I would like to ask, has the time come when we can say that armaments, nuclear or otherwise, will not be passed on to other countries secretly, which adds to the threats in South Asia? I mentioned this earlier, but the fact remains - right from the time when the enrichment plants from Holland were transferred to Pakistan and uranium hexachloride was given by Germany, and there was a film called the "Islamic Bomb", which tells of all the companies that supplied equipment to various people who could not produce it themselves. Now you have all sorts of treaties, agreements, material transfer committees. Have you really reached a stage where you can say you have complete control over the secret movement of nuclear or allied materials from one country to another? Then the threat feeling will certainly decrease. But in the subcontinent, that is an important threat.

Mikhailov: I will respond to the first part of what you said. I am convinced that there are solutions for the problems, and war is not among them. The countries of Europe have gone through hunger, the Second

World War and other disasters. For example, the Americans destroyed several cities like Dresden. It was like a nuclear bomb explosion. I am speaking about a reasonable solution to the problem we are discussing. And Europe is just an example, nothing more. I don't say India should wear European dress.

Ramanna: That's what you are saying really. Otherwise it is no example. Actually, I would say the Soviet Union failed and you didn't keep your own country together.

Mikhailov: The demise and disintegration of the Soviet Union was the result of our ideology of Marxism-Leninism, Socialism, Communism.

Ramanna: This is an example of ideology. The ideologies appear here as religious separations. So there are problems everywhere of a different sort.

Narasimha: This is a question, of course, which we can discuss at great length and perhaps we should do it in a more informal way, because there will be many views, explanations, theories about all of this. But Sridhar Chari might want to answer Dr Ramanna's question.

Sridhar: Definitely, in any question of threat perception, the relationship, assistance that a country is providing covertly or overtly to another country is an important factor. If Pakistan or any country within India's threat ambit is being assisted with certain capabilities and those capabilities are directed against India, then it will be a factor in the threat perception.

Jasjit Singh: A brief comment. When we are talking of deterrence, we should be very clear, what it is we expect to deter. It cannot be that Pakistan will get deterred automatically on every count. That is a mistake Pakistan has been making – that just because there are nuclear weapons, India is deterred across the board from terrorism to nuclear weapons.

To Mr Mikhailov's point about integration: I think when you look at history, you find two or three things very clearly. Number one – this

Prospects for Stability in a Nuclear Subcontinent

integration is exactly what Pakistan tried, first by sending mujahideen into Afghanistan and then Taliban into Afghanistan, because of the idea of strategic depth and controlling Afghanistan. Well, that is a different method, of course, which is not to say that NATO or WTO did not have similar plans or thinking, at least, on those lines. But more important is the question that there is no evidence for the past fifty years to show that India has not attempted to find a peaceful solution. In fact, many people in India, especially the younger people, believe today that today's problems of both terrorism and Kashmir would not have been there if we had exercised our rights at the right time.

Lehman : In all these issues of order, stability, deterrence, there are dynamics involved. And it is not always unintended consequences; sometimes it is the diverse nature of interactions. Let me give you some examples. Order and the status quo are not necessarily the same. Rules of order may well accelerate change. Think of automobiles on the road. If there are no agreements on which side of the road you drive on, who stops and who has the right of way, there isn't much change. But you bring order into it and suddenly there is movement. In Europe, if you go to Brussels, you sometimes get the impression that the capital of an integrating Europe is the capital of a disintegrating Belgium. There are in all our countries the centralising and the decentralising forces. And they are rather natural. In some cases we deal with sectarian violence by expanding the realm of interactions such that the sectarian issues are less central. But if the expansion is too large, then people fall back upon their local communities in some ways and these rise again. So it is not unusual that in an age of increased globalisation, you are also seeing an increased localisation. There are interactions that are complex. The issue for us in many ways is: how do we manage those to promote our prosperity, freedom, and security? And those are complex calculations. But I think it is these dynamics that are the things we have the most difficulty understanding.

Sridhar: Sure, I agree. Any order that is predicated on a kind of stability that does not allow change is going to be essentially unstable in that sense. An international order that allows change is something we can all work towards.

Narasimha: I wanted to make a couple of comments on Minister Mikhailov's intervention, if I may. About this question of Europe and why don't you settle your issues peacefully and all that. Listening to all these comments, I feel that there is still a very considerable misunderstanding of the situation in India and in South Asia. To start with, India as it is today, is the Union of 25 states, 15 different languages, different cuisines, and different styles of music and to some extent different cultures. And many different religions. Let me remind you once again that India has more Muslims than Pakistan. And on the soil of India, at least four major religions have grown. So I want to tell you that India today is what Europe wants to be. India today is already at the stage where Europe is trying to be. It has one currency, a central government, a constitution and relations between the Centre and states which are all laid down. Therefore, the model of Europe is the model of India, as far as we are concerned. The real question is not whether Europeans want to follow the Indian model or not. The real question is whether South Asia can work on a model which is either like that of India or like that of Europe today. Here the problem is not with India at all. If India makes a suggestion for a European-type confederation, for example, or an even looser arrangement, the usual reaction from India's neighbours is that India is too powerful for such a group to be stable. There is a SAARC, which has not been effective at all, we must admit. The Indian analysis of why SAARC has not worked is that it is due to problems with Pakistan. The view that is now beginning to prevail in India is that we should go ahead and make arrangements with other neighbouring countries with whom it is possible to make arrangements. For example, Nepal, Sri Lanka, Bangladesh. In each of these cases there are problems between India and those countries. But these problems do not seem insurmountable. I believe, personally, that in those cases, India should be more imaginative than it has been. And I think India should go out a little more and make sure that relations are established here, which would lead towards the kind of Europe that you are talking about. But the problem with Pakistan is different. It cannot be understood without understanding the history of South Asia. Our friend here talked about the 300-year war. I won't talk about the 300-year war, but unless you understand what happened in India over the last 1000 years, it will not be possible to appreciate the present position with Pakistan. There has been this

Prospects for Stability in a Nuclear Subcontinent

argument from many people that Pakistan is afraid of India, but if that were true, I think the problem can be easily solved. The reason is, I do believe India is a status quo power and has no ambitions on Pakistan. I am quite sure that this can be assured, but the problem of Kashmir will have to be tackled. Pakistan's view of India, while it may have fear on one side, has ambition on the other, and therefore, we will not make any progress on solving the problem.

Mikhailov: I am convinced that two nuclear powers have no right to start a nuclear war. You will have to find other solutions to the problem. Secondly, during the Cold War, we had very tense relations with the US. Think of 1988. President Gorbachev of the USSR and I, a professor in nuclear research, found ourselves in Nevada on a joint verification experiment. Even a year earlier I could not have imagined I would go there – it would have been like a horrible dream. So as I listen to you now, I am convinced that in a year from now we might have a totally different situation and what you consider only a dreammay come true, may become reality.

Narasimha: It may. And I hope it will.

Assessing China's Asian Role and Security Poilcies

Sun Xiangli¹

1. Introduction

Since the Indian and Pakistani nuclear tests in May 1998, the tensions in South Asia have attracted more and more attention from the world. People worried that the continuing conflict over Kashmir could lead to a nuclear exchange. Considering the uncertain factors existing in this area, the security of nuclear weapons and nuclear materials also becomes a serious concern. Because of the fact that South Asia is a region with dense population, any kind of nuclear war or accidental use of nuclear weapons would be a disaster, and the theft of nuclear weapons and nuclear materials would be a serious threat to the would. As a neighbour of both India and Pakistan, China has paid much attention to South Asia in recent years. A stable sub-continent is in the interests of China and the whole world. More efforts should be made, both by local states and others in the world, to realise long-term stability in this area. This paper examines China's security policies, and analyses its role in maintaining Asian stability, and specifically the stability of South Asia.

^{1.} The views expressed here are those of the author alone.

2. China's Security Policies in Asia

Asia is a region that features diverse political systems, cultural traditions, religious beliefs and levels of economic development. History has left behind some thorny disputes for Asian countries. During the Cold War era, most Asian states relied on one of the two military blocs to ensure their own security. With the end of the bi-polar system in the world, some new uncertainties emerge. How to resolve the old disputes and new security problems has become a very urgent task facing Asian states.

In today's world, there is a worrying trend of solving disputes through military strikes, violent activities or terrorist attacks. But experience and history have shown clearly that military strikes and violence cannot win a favorable international environment for long- term development and prosperity. On the contrary, war and violence always provoke new hatreds and intensify conflicts.

China's Asian policy, which focuses on economic development. economic cooperation and security dialogue, represents another approach to conflict-solving and has distinctive characteristics. It takes economic development as the centre, and subordinates national defence to the nation's overall economic development.² It rests on the belief that economic development is the physical basis of domestic political stability and national security. With fast economic development and economic cooperation, China has not only maintained a stable domestic situation, but has also become one of the most important forces in leading and promoting Asian economic progress. In order to achieve a favourable environment for economic development, China pursues a national defence policy that is defensive in nature, and attaches great importance to developing good-neighbourly relations in Asia. Economic cooperation and security dialogue have become the most effective means of enhancing relations with surrounding countries. China's successful security cooperation reflected in the Shanghai Cooperation Organization (SCO) regime has become a meaningful model for Asian countries in addressing security concerns.

^{2.} *China's National Defense in 2000*, Information Office of State Council of the People's Republic of China, October 2000, Beijing, pp. 11-13.

2.1 Focus on economic development, pursuit of a defensive national security policy

China is a developing country with the biggest population in the world. In a country with 1.3 billion people, the continuous improvement of peoples' living standards is viewed as the key condition for domestic stability. Since the late 1970s and early 1980s, China started to carry out a reform and open-door policy, focusing on economic development. In order to concentrate the limited resources on the economy, the percentage of defence spending in the gross domestic product (GDP) has declined from 4.63% in 1978 to 1.09% in 1997. From 1998, the percentage began to increase somewhat, mainly due to increase in spending on military personnel and retired officers. Although Chinese economic power has increased significantly in recent years, per capita income is still low compared with many western countries. There is no doubt China will persist with a defensive security policy.

China's pursuit of a defensive security policy has a very strong historical and geopolitical background. China has a 20,000 kilometre land border and an 18,000 kilometre coastline and borders with two dozen countries by land and water. In the last one-and-a-half centuries, China suffered several invasions by western countries. Although China has enjoyed independence since 1949, as a country located on the Asian line of confrontation between the western and eastern military blocs in the Cold War era, it has been facing an unfavourable security environment for decades. As a result of these special historical and geopolitical factors, national security has always been a serious concern for China. So, ever since the foundation of a new China in 1949, the country has been pursuing a military strategy focusing on resisting aggression and defending the state's independence, sovereignty and territorial integrity. Although military force is important, Chinese leaders also realised the dangers of entering into an arms race and implementing an aggressive policy which would incur hostility and waste limited resources. Therefore, having a defensive security policy has to be a long-term national strategy.

China's nuclear strategy also reflects the defensive nature of its overall defence policy. In the 1950s, the United States considered using

^{3.} John Wilson Lewis and Xue Litai, *China Builds the Bomb*, Stanford University Press, 1988, pp. 17, 22, 29, 38.

nuclear weapons against China several times.³ Faced repeatedly with direct nuclear threats from the United States, Chinese leaders made a decision in January 1955 to develop nuclear weapons. From the day of its first nuclear test, China declared a policy of no-first-use of nuclear weapons, under which China builds nuclear weapons only as a retaliation force to prevent others from initiating a nuclear attack against it. In order to avoid wasting resources, China exercises much restraint in developing its nuclear arsenal. Its nuclear force has been maintained at a very limited level. When the Cold War was over, China began to participate actively in international arms control. It joined the NPT regime in 1992, and signed the CTBT in 1996. BMD is viewed as destabilising, as it will complicate the relations among nuclear states, and compel the lowest level of effective nuclear retaliation to be enhanced.

2.2 Improve political relations through economic cooperation and resolve security concerns through political dialogue

One highlight of China's Asian policies in the last decade is the maintenance of a stable environment by developing good-neighbourly relations. Two steps have been taken to this end. The first is actively promoting economic cooperation to strengthen mutual trust. Economic cooperation is regarded as an effective approach to promoting mutual understanding and confidence with neighbouring countries. In 2001, China's foreign trade volume had reached \$509 billion, over half of which came from trade in the Asian area. Close economic interaction has become a strong motivation for further improvement of political and security relations.

The second is participating in and creating bilateral and multilateral regional dialogue regimes to promote regional security. Due to historical and other reasons, there are some security concerns such as border disputes between China and its neighbouring countries. In order to avoid military conflicts and wars that would undermine its economic development, China advocates nonmilitary means to settle disputes. By peaceful negotiations, most land border problems between China and its neighbours have been settled in the last decade. On the thorny issue concerning the sovereignty dispute in the South China Sea, China advocates the principle of "shelving disputes and conducting joint development", "easy issues first, difficult issues later". This also reflects

its persistent policy of solving disputes through economic cooperation and dialogue. After several rounds of talks, China and the ASEAN countries have drawn up a code of conduct in the South China Sea, which becomes a regime to reduce possible military conflicts in this region.

Apart from bilateral dialogue, China pays more and more attention to multilateral regional security cooperation. China has participated in the ASEAN Regional Forum (ARF), Conference on Interaction and Confidence-Building Measures in Asia (CICA), Council on Security Cooperation in Asia and Pacific Region (CSCAP), Northeast Asia Cooperation Dialogue (NEACD), and so on. The security cooperation regime between China and Russia as well as some Central Asian states is one of the outstanding regimes that have contributed a lot to maintaining and promoting regional peace and stability. In April 1996, the leaders of China, Russia, Kazakhstan, Kyrgyzstan and Tajikistan met in Shanghai for the first time and signed the Agreement on confidence-building in the military field along the border areas. In April 1997, the heads of the five countries met again in Moscow and signed the Agreement on Mutual Reduction of Military Forces in the Border Areas. With annual meetings and active cooperation, this creative "Shanghai Five" dialogue mechanism has become a cooperative political bridge between these countries. With Uzbekistan joining in 2001, the "Shanghai Five" evolved into the Shanghai Cooperation Organization, which has expanded its scope for cooperation from the single purpose of resolving border problems to a wider range of regional and international issues. Now this organization has started substantial efforts in fields such as combating international terrorism, national separatism and religious extremism, supporting nuclear-free zones in Central Asia, and promoting regional dialogue in other Asian areas.

Recently, China has shown much interest in preventive diplomacy. Its efforts in exploring preventive diplomacy with ARF countries are a new trend that can perfect the present dialogue-based security regime.

In a word, China's defensive and cooperative security policies are in its own interests and conducive to a prosperous and stable Asia. I believe that if this kind of security policies continue, any security issues will be resolved well, including historical problems and new disputes that may arise in the process of transformation of the international and regional structure.

3. China and South Asia's Stability

The relations between China and its neighbours in South Asia have experienced several stages. The new China was founded at a time when Asia had emerged from long-term colonial rule. Both China and India were facing a similar task of nation-building. The two countries had close exchanges and contacts in the early 1950s, and they initiated jointly the famous five principles of peaceful coexistence, which greatly promoted international relations in Asia and the world. Due to boundary questions, the Sino-Indian friendship was undermined in the late 1950s. The border war in 1962 led to a cooling off period in bilateral relations. In the late 1970s, the two sides resumed political exchanges. In 1993, China and India signed an Agreement on Maintenance of Peace and Tranquillity along the Line of Actual Control in the Sino-Indian Border Areas. In 1996, they signed the Agreement on Confidence-Building Measures in the Military Field along the Line of Actual Control in the Sino-Indian Border Areas. When India conducted nuclear tests in 1998, some Indian officials declared a nuclear threat from China. This resulted in a serious setback in bilateral relations. Fortunately, the two sides reached a consensus in February 1999, when officials from the Ministries of Foreign Affairs of the two countries affirmed that China and India would not constitute threats to each other. With the exchange of visits of state leaders in recent years, the Sino-Indian relationship has entered a new stage.

China has traditional friendly relations with Pakistan for the last several decades. The tensions between India and Pakistan have complicated bilateral relations between China and the two states. China does not want to interfere in their internal affairs and wants to have good relations with both of them. A stable and friendly South Asia is in the interests of China. China hopes the two neighbours peacefully resolve their disputes through negotiations and dialogues. China's neutral position in this regard, expressed well during Chinese Premier Zhu Rongji's visit to India early this year, has been accepted and appreciated by the Indian side. As some Chinese scholars said, both China and India are developing countries, and this common identity determines that they share many common concerns. Both nations need to focus on developing their economies. There is room for cooperation on many issues, such as developing economic cooperation against a background of globalisation, deepening understanding of human rights, promoting military and political stability in South Asia. Cooperation is more likely between the two nations than confrontation.⁴

In conclusion, China's Asian security policies, which stress enhancing security through economic development, economic cooperation and political dialogue, will not only promote stability in this region, but will also be a model for South Asian countries.

Discussion

Mikhailov: You mentioned that in 1992 China signed the NPT. I know that there is a French nuclear power plant in Xinjiang. It is under IAEA safeguards. You have several uranium enrichment plants. Do you have other plans for peaceful use of the atom under IAEA safeguards? Or do you have only projects built by other countries?

Sun Xiangli: As I know, there are already several nuclear power stations in China. We also have several plans to build more nuclear power stations, especially in North-East China, where there is a shortage of power. Cooperation with IAEA is possible. In the NPT regime nuclear states and non-nuclear states have different safeguards and obligations. As a nuclear weapons state, China has placed its nuclear power stations under IAEA safeguards.

Gopal: China has indeed adopted a policy of neutrality on the Kashmir dispute. But has your Institute made any study on this dispute and have you come to any conclusions? Have you also made any comparisons of Kashmir separatism vis-à-vis Xinjiang separatism? The principles involved, the national separatism, as you call it. Have you made any study and come to any conclusion on this?

Sun Xiangli: I have not made a comparison, but I know that India and Pakistan have very different views on the Kashmir issue. You think it is a

^{4. &}quot;Smile to India, Rather than Wave Fists", Liberation Daily Network.

problem of separatism. But Pakistan does not think so. Some people in Kashmir have their own opinion. So it is very complex for China. The new Chinese security policy, as I understand it, is "Try to avoid interfering", because for China it is very hard to see whom to support, which of the three parties in this dispute. So it is best for China to try to keep neutral and try to persuade the two sides to sit down and talk to each other.

Raja Ramanna: India-China relations are very good at the moment. But you have written here and mentioned that you have taken a neutral attitude with respect to Kashmir, with Pakistan and India. But, if I remember my history correctly there are parts of Kashmir which China also has occupied, and it is not known whether it belongs to China or India anyway, like Aksai Chin. Would you consider that a border problem or is it a settled problem?

Sun Xiangli: Not settled yet. We have some border disputes with neighbouring countries. We have settled most of them. Only two or three are left. One of them is the dispute between India and China. We have a working group on it.

Raja Ramanna: No, this is not so much between India and China, because this part had gone to Pakistan-Occupied Kashmir – it is called Aksai Chin. Now China has taken that part. It is shown as in China now.

Sun Xiangli: This border dispute is very complex. The border, you know, has three parts – the eastern part, the middle part, and the western part. Maybe it is your side's opinion that China occupied part of your territory, but you know, in China, we have an opinion, that you have also occupied a part of China's territory. It is a historical dispute. Before the British colonial rule was over, there was no clear border between India and China. That is why we need to settle it. But, unfortunately, both sides didn't settle it by peaceful means in the 1960s. You have reasons to complain and China does, too. We should not stop at that point. We should step forward, especially in the new century. We have had some good examples in border disputes, such as settling the border disputes with Russia completely, in the last year, and with some Central Asian

countries. Also, we have settled border disputes with Vietnam - only the land border, not the water border. So, I think we can use this kind of approach to settle it. Of course, the dispute between China and India may be a little serious, because we had a war before. So, maybe we need more patience. We can't settle it overnight. Maybe not in this decade, but in the next. Patience is needed. The best way is through dialogue.

Mikhailov: In your report you talked about the fact that in China, economic development and cooperation are providing political stability. Could you please specify the methods and mechanisms of your economic doctrine that promote political stability in the region?

Sun Xiangli: We have two concepts of security in China. One is domestic security. This is very very important for China because it has a huge population. The practice of the past two decades has proved for many Chinese that economic improvement can improve domestic security and with poor economic development and cooperation, you cannot have good-neighbourly relations with your neighbouring countries. There must be a very good guarantee to have a good international security environment.

Jasjit Singh: I am a great admirer of Deng Xiaoping. He said you must seek truth from facts. It is important that while we are discussing this, some important facts be remembered. China's position in Tibet is not exactly the same as what China would like to believe it is. There is an agreement between China and India on Tibet and certain rights have to be maintained. But that is not the issue now. I want to talk about what you said, Dr Sun, about Jammu and Kashmir being a disputed area. I am afraid Beijing does not treat the whole area as disputed because in Occupied Kashmir, on the Indian side, your government built a highway. And (Beijing) acknowledges that that territory is used as totally under Pakistan control. If you look back at the agreement of 1962, formalised in March 1963, between Pakistan and China, at that time China insisted this would be a temporary agreement. Because, the sovereignty of the area south of that valley was not decided. And the only other country that can have sovereignty over it is India.

So, your own treaties with Pakistan point to the fact that that territory is disputed, but disputed in the context of the fact that India would have the right to do so. If you look at China's draft when it was the Chairperson of the UN Security Council in 1948, in fact, it required Pakistan to withdraw from that State. I am talking of the historical facts that have now created this difficulty. And, incidentally, that was also George Marshall's position, till he was bamboozled by a young cabinet minister in the British Government, Noel Baker. The US changed it and all our thinking is basically that it was the Cold War that altered it. Secondly, we all talk about the 1962 war. I think it is important to put it in perspective. Mr Chou En-lai, in December 1962, actually stated, not to us, but in very authentic records, that the war was fought not because of an India-China problem, but because of the fear in Beijing that India might give Kashmir away to the Americans. The time has come to talk about these things, 40 years later, with a degree of detachment, and say we need to find solutions. We have agreements with China – 1987, 1993, 1996 and in a way, the India-China relationship in terms of the theme of this conference is far more stable in spite of both being nuclear, both having major disputes between themselves, than the India-Pakistan relationship. We need to see what the difference is between the two, we all need to look at it and not simply say this is old rivalry. There is clearly the same set of problems - large tracts of territory, historically disputed, inherited problems, on which the Panchsheel, the agreements of the 1980s and 1990s, are there. We have similar agreements with Pakistan - 1972. Academician Mikhailov was talking about the European model. The Simla agreement came through three years before the Helsinki process. Please look at that – it has the same three baskets that the Helsinki process brought about. Everyone claims that Helsinki was the opening to the end of the Cold War. Here, unfortunately, the cold war has not ended.

Sun Xiangli: One point I agree with is that joint agreements alone are not enough. You must have some preventive diplomacy regime, or a regime on implementation, to ensure that agreements, confidence-building measures or agreements can be implemented.

Sridhar: We have been alluding here to China's support for Pakistan's nuclear weapons programme. What are your views on that? And

secondly, I was wondering if China has actually articulated its view of the Indian Ocean region and what kind of security policies to adopt there.

Sun Xiangli: The first question: I have also heard of the speculation of China's support to Pakistan. I personally do not know if it is there still. You know China joined the NPT in 1992 and it has signed concrete agreements with the IAEA. Any nuclear export deal comes under IAEA safeguards. These kinds of speculations mainly come from the Western media and there is always some complex political background.

The second question: In the last decades, China has focused its security policy on the Asia-Pacific region. So it has paid less attention to the Indian Ocean and other regions. Because it is beyond its concerns. But now academic circles in China have started to study India's security policy, especially after 1998, and some scholars feel, it seems, that India wants to become a big player in the Indian Ocean. This is a personal opinion. There is no official position on this, or extensive study.

Narasimha: You mentioned that China has settled its border disputes with many countries, particularly with Vietnam and Russia. Our Russian friends are here as well. Could you tell us what principles the Chinese have followed in settling these border disputes with Russia and with Vietnam?

Sun Xiangli: I personally was not involved with these official working groups. I have studied some of the agreements between China and this country. I find the first principle is: "Keep the status quo as it is, i.e. keep the actual control line. And then talk of concrete steps that will settle it. The second principle is: "Take up case by case, taking from the easy to the complex and trying to resolve it." There are some other principles too. I just read an article introducing details about the talks on some Central Asian border issues. China and those states have a very good atmosphere when they talk about disputes. Both sides in many cases have arrived at a consensus.

Mikhailov: I remember the border conflicts between Russia and China. I heard about them only from the media, like any other ordinary citizen. I

have been working with Minatom, the Ministry for Atomic Energy, and this Ministry has never dealt with such issues. I only know that local conflicts can always arise, for example, in a family between husband and wife, but one always tries to find a peaceful way to solve them. As soon as I became Minister for Atomic Energy in 1992, I extended my hand to the Republic of China for cooperation in many spheres, especially in the sphere of atomic energy. And I got Chinese students to study in one of the leading technical universities of Russia, the Moscow Institute of Engineering Physics, at the undergraduate and higher levels. Besides, we recently held a seminar with the Chinese Academy for Engineering Physics at which Madam Sun Xiangli spoke very well indeed. I extended the hand of friendship to India also, to Mr Chidambaram when he was Chairman of the Atomic Energy Commission. The issue is not just Kudankulam but many other areas of cooperation. All these areas of cooperation (in India) are developing successfully, but not as successfully as the cooperation with China. And that's not our fault. The reason is perhaps the historical or philosophical roots you were speaking about, maybe you are poorer or maybe you are wiser. In any case, I'm amazed that there is not a single Indian student in the Moscow Institute of Engineering Physics, which produces engineers and physicists of the highest calibre. As for Pakistan, we have no cooperation at all with them in the nuclear sphere. And I am extending the hand of cooperation to India today.

Narasimha: On behalf of India, though I am not authorised to say that, we will accept that hand most gratefully.

Sridhar: Two or three years ago, when Mr Primakov, the Russian Premier was in Delhi, he was reported to have suggested the possibility of an alliance between India, China, and Russia. It seemed later that he was misquoted on that. The Russian Foreign Minister even said later that we should no longer be looking at blocs and rival alliances in the new world order. But it was interesting that this idea crept into Chinese academic discourse and I saw some Chinese papers where Chinese academics spoke enthusiastically about such an alliance; some, even if not talking about a three-way alliance, were talking about increased friendship between China and India in terms of two great civilisational powers. Is all this still dominant in Chinese strategic discourse?

Sun Xiangli: Yes, academic circles in China are more and more interested in promoting friendship with India and also between India, Russia, and China. The Chinese government's position is to try to avoid setting up a military kind of alliance. Because this is a Cold War era experience and there is the fear that it might get China involved in some military bloc conflicts. So China has no intention of joining such blocs right now. In recent years, more and more studies focus on closer, friendly relationships, not military relations. An article I read just before I came here said maybe it would be wrong for China to refuse such a relationship, that we should set up such alliances. There is definitely more interest now in China in developing friendship with India.

Kargil War to Current Threat of War: Prospects for Stability

Jasjit Singh

S tability in a nuclearised subcontinent would need to be examined in three related paradigms: India-China, Pakistan-India, and US-China (which inevitably would impact on the nuclear situation in the region). To understand the prospects of stability it is relevant to recall that strategic stability between the United States and the Soviet Union had been achieved by a degree of symmetry in the nuclear doctrines and strategies where both sides were willing to use nuclear weapons first, including launching them under time-sensitive scenarios like launch-on -warning or launch-under-attack.

Similarly, strategic stability between China and India remains at a high level in spite of extensive disputes between them, largely because of symmetry in the nuclear doctrines of the two countries which rely on "nofirst-use" of nuclear weapons. They have also maintained a high level of commitment to bilateral agreements which promote peace and tranquillity (like the 1993 and 1996 Agreements). Conscious efforts are made by both countries to seek settlement of existing disputes through peaceful means, and avoid incidents which could destabilise the situation.

Unfortunately, the situation between Pakistan and India is quite different. It is therefore necessary to examine some of the core factors impinging on stability before moving on to discuss the specifics of the situations during the Kargil War and the current military confrontation.

Strategic Aims and Doctrine

Before we look at the Kargil War, it is essential to look at Pakistan's strategic aims. These were outlined by the former Director-General, Institute for Strategic Studies, Islamabad as follows:

- To strengthen national power.
- To prevent open aggression.
- To induce India to modify its goals, strategies, tactics and operations.
- To attain a position of security or if possible, dominance which would enhance the role of other (non-military) means of conflict.
- To promote and capitalise on advances in technology in order to reach parity or superiority in military power.
- To deter war.

India's strategic aims are somewhat different. The primary objective is the socio-economic development of its people as laid down in its Constitution. It is well recognised that enduring peace and security is a prerequisite to sustainable development. There has been willingness, therefore, to enter into cooperative arrangements while deferring a final solution to existing disputes.

Pakistan has not articulated its nuclear doctrine in any meaningful way. This must be seen in the context of the basic rationale for Pakistan's nuclear weapon acquisition, which was to neutralise India's conventional superiority and hence deter war and deny India the potential for a punitive strategy because of the nuclear weapons. The best indication we have is the four scenarios for nuclear weapons use as spelled out last November by senior persons involved in the National Command Authority of Pakistan. These are listed below:

- India attacks Pakistan and conquers a large part of its territory (space threshold).
- India destroys a large part of Pakistan's land or air forces (military threshold).
- India undertakes economic strangulation of Pakistan (economic strangling).
- India pushes Pakistan into political destabilisation or creates large-scale internal subversion in Pakistan (domestic destabilisation).

Kargil War

There were a number features of the Kargil War in 1999 which are summed up as follows:

- Pakistan formally adopted a doctrine of "offensive defence" in 1989 and declared that the next war would be fought on Indian soil.
- Pakistan clandestinely launched its military forces across the mutually agreed Line of Control in Jammu and Kashmir state of India, setting up a bridgehead on a frontage of about 140 km and about 7-9 km deep during the winter of 1998-99. The area is at an altitude of around 11,000 to 18,000 ft and overlooks the main road link from Srinagar (the capital) to Kargil and on to Leh in Ladakh. This road link is open only during the summer months to supply the civil and military establishments in the northern part of the state including the Sino-Indian border in Ladakh area, the military posts along the remaining Line of Control as well as the Siachen glacier region. Dominance of the road and its shelling by the Pakistani army seriously interdicted the stocking up of supplies.
- According to knowledgeable Pakistanis this operation was undertaken according to an old plan that had been shelved in 1987, and was almost implemented in 1994.
- Pakistan had launched a covert war through terror in Jammu and Kashmir from July 31, 1988 onward (while its war through terror in contiguous Punjab state was conducted across the international border from 1984 to 1993 in the areas which contained all lines of communication to the state from the rest of the country). This was consistent with its old strategy of using covert and overt wars in conjunction with each other, in 1947-48, and 1965, and in Siachen Glacier region from 1978 onward.
- The covert war through terrorism in Jammu and Kashmir was losing momentum after 1996. At the same time, the dynamics of the domestic power structure inside Pakistan were changing, which threatened the loss of the special status that the army had enjoyed for decades.

Basis of Strategy

The main elements of the rationale for Pakistan's strategy for the war through cross-border terrorism and its escalation to the Kargil War may be summed up as follows:

- Acquisition of nuclear weapons would:
 - Neutralise Indian conventional superiority, which according to former Foreign Minister, Agha Shahi, hung as a permanent "Sword of Damocles" over Pakistan,
 - Deter India from any punitive use of conventional military power (as had happened in the 1965 war), and
 - Deter India's nuclear weapons which then would not come into play, leaving Pakistan to pursue its own strategy.
- Nuclear weapons would provide the umbrella under which Pakistan could pursue a "low-cost" option of applying armed violence (through terrorism in the name of jehad) to take Kashmir while at the very minimum it would "bleed India through a thousand cuts."
- Because of heightened concerns about South Asia being the nuclear flash point, the international community would intervene at an early date to try and impose a ceasefire which would alter the Line of Control (established after the 1971 war based on the ceasefire line of 1948) in Pakistan's favour.
- Pakistan held out a nuclear threat on May 31, 1999 to achieve the above goal. However, India as well as the international community ignored this.
- The Indian army would not be able to fight back up the steep slopes of the Himalayas without forest cover, and win in that terrain where the Pakistani forces were holding all the high points, within the summer months when the passes and roads are open (June to September). In reality, the army and the air force re-took all the high points and the territory.

Lessons of the Kargil War

Pakistan achieved total strategic and tactical surprise with its aggression across the mutually accepted frontier in Jammu and Kashmir. There are a number of lessons relevant to the line of our present inquiry. These are briefly noted below:

- Contrary to conventional wisdom, local border war between two nuclear-armed neighbours had taken place earlier between China and the Soviet Union in 1969. In fact over 275 wars during the Cold War were fought by the two nuclear-armed superpowers through proxies within a framework which would not lead to a potential nuclear exchange between them. Vietnam and Afghanistan stand out as major wars in this regard.
- Major gains of territory or destruction of major components of the adversary's military power would not be possible without an increased risk of escalation to nuclear weapon use.
- Escalation to levels close to nuclear weapon use was not in the interests of either country and both implicitly recognised this. Thus an implicit escalation control process was operating. For example, when India used its Air Force, it ensured that aircraft would remain on its own side of the Line of Control in spite of very restricted space for manoeuvre. And while Pakistan Air Force was airborne across the Line of Control, it did not interfere with the air and air-ground operations in support of its army across the Line of Control. Similarly, while India deployed its naval forces in the North Arabian Sea abreast of Pakistan, Pakistan Navy did not challenge it at any time. Both armies were deployed on the land borders throughout the 72-day war. Yet there was no incident on either side in spite of Kargil.
- India exercised restraint and accepted higher casualties by restricting war to the area of aggression while pursuing diplomatic initiatives to explain the facts to the international community. As a consequence, the United States played a crucial role and supported India, forcing Pakistan to accept withdrawal across the Line of Control.

 In January 2000, the Indian defence minister, George Fernandes, said: "We had understood the dynamics of limited war especially after India declared its nuclear weapons status nearly two years ago. Nuclear weapons did not make war obsolete: they simply imposed another dimension on the way warfare could be conducted. The Kargil War, therefore, was handled within this perspective with obvious results. Pakistan, on the other hand, had convinced itself for decades that under the nuclear umbrella it would be able to take Kashmir without India being able to punish it in return. The covert war against India was started in mid-1980s based on the same premise."

Indian Strategic Posture

India over the decades has pursued the doctrine of "defensive defence" since its strategic priority remains the socio-economic development of its people which also requires an assured environment of peace and security. The nuclear doctrine representing the collective views of the National Security Advisory Board of the NSC was made public in August 1999 and it is not the intention to go into details here. Suffice it to say that the main characteristics of that doctrine are:

- 1. No first use of nuclear weapons by India.
- 2. Assured retaliation to an attack. The retaliatory attack by India would lead to an "unacceptable level of punishment".
- 3. Survivability of the nuclear arsenal to ensure that assured retaliation at an appropriate level would remain available.

Limited War

Indians had recognised at least since 1987 (when Pakistan acquired a nuclear capability) that the nature of war had changed fundamentally. It was recognised in official as well as unofficial circles that Pakistan's launching of cross – border terrorism as a new form of war had been predicated on the availability of a nuclear umbrella. Serious discussions had gone on to work out a suitable strategy under these circumstances to deal with the new sub-conventional war that Pakistan launched on July 31, 1988 in Jammu and Kashmir.

But it was the Kargil War that provided a major incentive to seriously evolve a new strategy. Pakistan had launched a "limited war" and India had responded with its own "limited war". It was recognised that limited war would have many variables. In fact at a National Seminar organised by India's premier security/strategic studies think tank, the Institute for Defence Studies, the Defence Minister while inaugurating the seminar stated that:

"...the key to that lies with exercising our judgment about the type of war we have to fight in future and preparing for it. This would also require assessing the type, nature, and scope of limitations that would affect such wars, and how to succeed within their framework. The critical element in this process is the challenge how to prevent, and hence how to deter, a limited war where the nature and type of limitation may not be clear. The political necessity to ensure that war and armed conflict do not disturb our goal and efforts in the field of human development continues, but perhaps with greater importance. But while war in our context was kept limited in the past by choice, our interests would require that it should be kept limited in future as a matter of necessity. The most important reason for this is the nuclearisation of our security environment since the early 1960s on one side, and the late 1980s on the other. We could deal with conventional threats through conventional means to defend ourselves. We need, therefore, to ensure that conventional war, if imposed on us in future, is kept below the nuclear threshold. This will require close examination of our doctrine, defence strategy, and force structure".

December 13 and After

In its core elements, the suicide attack on the Indian parliament of December 13 was as momentous as the attacks of September 11 in the United States. A mere 7-8 seconds separated the top political leadership and the heavily armed suicide attackers in a building essentially protected by unarmed guards. India responded with military mobilisation and the threat of war. India made it clear that it would be willing to use military force to raise the costs to Pakistan of its existing policy of cross-border terrorism. The economic costs to Pakistan have already been raised by the deployments, since Islamabad is forced to increase by close to 30 percent its defence spending compared to an increase of around 3 percent in the Indian defence budget for the same period. Overall it did produce the desired results to a large extent by forcing Islamabad to make promises, if not any substantive change, in its traditional policy of waging war through terrorism.

The significant points that need to be noted are that Pakistan started to hold out nuclear threats by May 2002. But it conceded that crossborder infiltration had now stopped. India is prepared to exploit the space between nuclear weapons and sub-conventional war through terrorism. There are risks of escalation and miscalculation, but India has the capacity and the strategy to ensure that escalation dominance is maintained.

Prospects for Stability

The prospects for stability would need to be objectively examined. But a comparison of the Kargil War and the current confrontation and India's willingness to go to war, albeit a "limited war", might help provide some answers:

	Kargil War	Current Threat of War
	Launched unprovoked by Pakistan	Threat initiative by India
Risk of nuclear exchange	Nil??	High??
Conventional war Aims and objectives	72 days, hard fought	Threat, but no war so far in nine months, Will be a calibrated limited war if it becomes necessary. -Aim to raise the costs to Pakistan of its policy of covert war through terrorism
- Pakistan	-Change the status quo by military force	-Maintain status quo
- India	-Restore and maintain status quo	-Change the status quo which ensures continuing terrorist violence

Mikhailov: I don't think it is possible to link the events of September 11 with the Kargil crisis and the events in New Delhi of December 13. You are seeking a common enemy with the US. In this connection, I have a question. We know that the Government of India supported the punitive military operation of the US in Afghanistan against Taliban. It was actually against the Pushtun people who live in Pakistan as well. There are about 20 million Pushtuns in Pakistan. Does this not lead to aggravation of hate between India and Pakistan and to further tension between your countries?

Jasjit Singh: I didn't make any connection with September 11. I didn't even mention it. If I did, it is only to make one point. That while September 11 was so critical for the US and perhaps for most of the world, December 13 was very critical for us. I don't think people understand this. It was not just a terrorist attack. Look at the ground reality. We are facing hundreds of attacks per day. December 13 was different. That is the point I was making. In fact, the government was within the next week, ready to go to war, regardless of the consequences, because we were so close to a catastrophic event.

Mikhailov: My question was different. You supported US punitive operation against young Pushtuns. And there are about 20 million Pushtuns living in Pakistan. And although the Government of Pakistan supported the action, does this not this aggravate tension between Pakistan and India?

Jasjit Singh: India and the US have been working together since 1998 on a Joint Working Group on International Terrorism. Secondly, in December 1999, an Indian aircraft was hijacked by terrorists to get more terrorists released. That aircraft went to Kandahar and the Taliban were a major factor in that process and so were other people in Kandahar, Pushtuns or not. Thirdly, our fight is against terrorists, in fact jihadi terrorists, Islamist jihadi terrorists. Whether they are Pushtuns or Sikhs or Christians, it does not matter to us, because it is terrorists we are against. They are killing

women, children, old people, innocents. Fourthly, in the US war in Afghanistan against Taliban, the Taliban was a rebel government, not recognised by the UN or by the Russian Federation either. The government that was recognised was the Rabbani government. Three countries had recognised the Taliban – Pakistan, Saudi Arabia and the UAE. It is incorrect to make the war against Taliban a war against Pushtuns. Fifth. We are talking about India and Pakistan. I don't know why we are talking about Pushtuns. But since a question has been asked, let me talk. The issue here is still the same. To the best of my knowledge President Putin and his government are cooperating with the same US government in the same war against terrorism. Unless you have different information.

Narasimha: May I add one more point? Historically and currently, I don't think the Indians have anything against the Pushtuns, nothing whatever.

Mikhailov: So your stance is that the situation between India and Pakistan is aggravated by Pakistan only and India has nothing to do with it.

Jasjit Singh: That is right.

Mikhailov: There has never been a state called Taliban. There has always been a Republic of Afghanistan and it was recognised by the UN.

Jasjit Singh: We are playing with words. Let us get it clear. Fifteen thousand madrassas in Pakistan train jihadis for murder and terrorism. I don't know if Minister Mikhailov knows about them. We can give you the numbers. Eighty-seven training camps in Pakistan, which send these people across. General Pervez Musharraf, President of Pakistan, is on record more than once, saying, "Yes, we are now stopping it. There will be no more infiltration". So it is not that I don't find anything wrong with my country. I think what we are discussing here is nuclear stability, and a confrontation. What is the cause of that confrontation? I think we need to understand that clearly. I have no problem if somebody wants to argue for Pakistan, that they are doing everything wonderful. I hope they are. Because our people are getting killed. And I think we have the right to ask

the question why? What is the logic of killing innocents in India? What is the logic of stopping elections in India, through the Kalashnikov? Why are drugs being spread? I can go on endlessly, but I don't wish to do that, but since you asked a question, tensions with Pakistan have not increased. They have always been there, because of this constant terrorism across the border which is going on since 1988–14 years now. Don't expect that India will go on ignoring it. No other country would have waited that long. Your country didn't wait, other countries didn't wait that long.

Mikhailov: I have a brief remark about dividing the whole world into terrorists and non-terrorists. It may be very convenient. We understand every nation may struggle for its independence or its culture. It is very interesting that President Bush said, "Either you are with us or you are a terrorist". We understand that you consider your country to be the best in the world and it is very interesting that you blame Pakistan for everything that is happening between your countries,

Jasjit Singh: I am afraid you are getting it totally wrong. We need to understand two or three things. One, India has the second largest Muslim population in the world. I don't know whether you know this. Secondly, the President of the US pursues his own policies. Don't blame me for US policies.

Mikhailov: I understand terrorists are to blame. But you must also review your own policy. You must find some roots, some reasons in your own country.

Jasjit Singh: It is not a question of blaming anybody. There are no medals in this. Facts are facts. If you are unhappy with my facts, go and get them from the Pakistanis, from anybody. From the Americans, from the Russians. But, please, please, deal with facts.

Gopal: I just want to address one statement made by the Minister about India supporting the US in its actions against "Pushtuns". First of all, it was not against Pushtuns. It was specifically against the Taliban government and the Taliban group and not even against Afghanistan. History shows India is the country that has voted the maximum number of times in the UN against US policies. The US has been extremely unhappy with us for a very long time. But in this particular case, India promptly supported the US because we knew what evil terrorism is, what evil supporting terrorism is and we were fully with the US only for that purpose. Pakistanis themselves dropped the Taliban and are actively supporting the US today. The bases have been provided there, not in India. General Pervez Musharraf provides the bases there.

Mikhailov: I would like to say two words about the camps in Pakistan. Every country has special military bases, special forces, secret forces, perhaps. Every country trains special troops. Despite your peaceful external policy you have to have special military units. To my mind, you, the Indian people, are closely connected with the Pushtuns living in Pakistan. And you should have had a very wise policy in this context. We would support the Pushtun people, but we don't have any in Russia, maybe one or two refugees. Since there is no Pakistani delegation here, you can tell me you are the best country in South Asia. A whole nation cannot be terrorist. There are groups of terrorists in India, in the US as well.

Gopal: I shall be speaking about terrorism tomorrow and I can address some of these concerns in detail.

Narasimha: One extraordinary conclusion I draw from the discussion we have had in the last half an hour and also briefly during lunch is the gulf that there is still. In spite of many discussions at the official level, at the non-official level, Track One, Track two, Track One-and-a-half, and so on, to me it is extraordinary that there are still such wide differences of perception. That must, in fact, indicate something deeper and it has to be driven down to the earth.

Lehman : Immediately after Kargil became public and intense, I was at a conference and someone stood up and said that I had predicted this. Actually, they misunderstood what I had said and I actually had it wrong. But after returning from a visit to India and Pakistan just before Kargil, I said that my reading of the situation is that both India and Pakistan believe now that with the overt nuclear deterrent, they now have a much freer hand

on the ground for conventional and unconventional activity. I thought, in particular, that meant that India would be less tolerant of certain types of activity. So in that part I got it right. It was actually Steve Cohen who quoted a Pakistani officer from many years ago saying that when they got the nuclear weapon, they could then be more aggressive with respect to Jammu and Kashmir. But what I have never understood, and this is my question to you, Jasjit, is I can understand why someone in Pakistan might think that having nuclear weapons meant they could be a bit bolder. But what kind of decision process lets them believe that they could take regular army forces across the border in large numbers and expect to stay there, given that India has the larger conventional capability and clearly seemed to be reacting from its own nuclear forces from the point of view that it would no longer be as tolerant? The point I got right was that India would drive the Pakistanis out. The question, and this goes to your question about why wasn't there more concern about nuclear war at that time, was that for India in Kargil, to get victory did not require incursion deep into Pakistan. Rather, it was the defeat of the Pakistan army in Kargil, which in fact you did. My question is, what were the Pakistanis thinking? Did they think they were actually going to stay there? And what would have happened if you had not been able to drive them out?

Jasjit Singh: Ron, this question, "What would the Pakistanis be thinking of?" is not easy in some respects. The important point was that they were sitting on this slope and all the way up. The Batalik sector and on all the way for a 140 km further up. It is a very peculiar situation that existed, which was not seen to be possible by anybody, that in fact troops could be moved up during winter. Because even the notional patrolling that the Indian army was doing gets withdrawn after September from these heights because they are totally snow-bound. Apparently, in 1987, there was some effort by the Pakistani army to occupy some of these places which General Zia-ul-Huq subsequently said 'No' to. I am quoting Pakistani, not Indian sources. I think the grand plan was that once you have this basic mindset that India will be constrained to use its full military potential elsewhere, Kargil would force India to fight in Kargil. And fighting in Kargil would have been extremely difficult for the Indian army. In fact, it is a near miracle, believe me, if you have ever seen that terrain and the reality. Eighty percent of the casualties of the Indian army

are from the chest upwards, because they were getting shot from the top. Dead or alive, this is where the injuries were. I believe, and none of my own countrymen believes this, I think, we came very close to losing Kashmir that year. I have said this, I don't know if you recall, at the National Security Conference.

Narasimha: I recall. I agree with you.

Jasjit Singh: The challenge for India was that if you don't push them out to the Line of Control before September, what do you do? In fact, practically before mid-August. The only option available to India was either to let winter come or open a front elsewhere. Pakistan was waiting for the opening of a front elsewhere - exactly what the situation is today. Would India go across at some point? I don't think they felt it necessary. It would be solved. You see what former army Chiefs of Pakistan were writing in newspapers. "Just hang on there for two months. As the winter comes, there is no way. Next year, India will lose Siachen." It was a very bold decision, very sound strategy. It did not work I wrote a book that year and I said there was an X-factor, as in all wars. The X-factor was the weather. That road opened up almost a month before the normal time. So we could move more troops. We already had forces up in both Leh and Srinagar. So acclimatisation, which was a major problem in 1962, was not so serious. Secondly, we used the Air Force. That made a very big difference. Because Pakistan had not moved in reinforcements into the northern areas because reinforcements might have given away the surprise. It is not an unthinking work that the Pakistanis did. It was a fairly well thought out strategy, well executed, brilliantly fought. Your question was, what was the decision-making that went on? I think Nawaz Sharif was party to the decision. General Musharraf was party to the decision. There was a lot of speculation in the Pakistani Press that General Karamat was not so enthusiastic about it. And this was one of the reasons why he was forced to retire on October 8 and promptly Musharraf, who was arguing for a more adventurous position, moved in. This was doable. That is why the blame has been put on Nawaz Sharif. We could have hung on even on the LoC. After all, once we had pushed the Pakistani army to the LoC, we could have continued fighting on the LoC for the next two years. It would not have appeared as a defeat and I think that they had calculated that.

The problem was that we were then threatening, saying we would have to do something, and I think the White House, in particular, was very conscious of that and there was very hectic diplomacy between June 14 and June 30. And pressure was put then on Nawaz Sharif who wanted the US to issue a statement that they would not intervene, but would take an active interest in Kashmir. Clinton refused and made it clear that he would have to unconditionally withdraw his forces and only then come to Washington. This was the unforeseen thing from the diplomatic side. I don't think they really thought nuclear weapons could come into play. I don't think we thought nuclear weapons would come into play. The question was fighting it out – a very difficult battle in a very difficult situation, where Pakistan held all the cards. The difference is, I think we hold all the cards now. The initiative rests with India since December last year. We may or may not go to war. And I think the logical reason is, by applying these pressures, even this nuclear hype, even assuming all this, New Delhi included, it served the purpose. Because Musharraf would not have made the serious statement on May 27 which he finally did. Because from the January 12 position to May 27, in my opinion, the difference was that the US became a guarantor of Pakistan's policy. Which it was not on January 12. No. Whether Pakistan delivers on this or not, the Indian government is asking the Secretary of State, "What is the latest? What is he doing?"

So in a way, the US is involved, I think for greater stability, for more positive reaction. But at the root of it is still the basic question we were discussing – how does stability get ensured in future? I think it is important that we take that view or at least look at it closely and see what are the factors of instability and what are the factors of stability, so that one can be discouraged and the other can be encouraged. The decision-making, I think, was that Zia-ul-Haq was on the cabinet when the final green light was put up in 1987. Only General Yakub Khan objected, on two counts. One, as a military man he said there were too many risks in this operation – the same Kargil operation. Secondly, as Foreign Minister of Pakistan, how would he deal with the rest of the world? Therefore, Zia-ul-Haq said, "Stop it". I could cite at least three Pakistan media sources on the bodies of those who died, which were then pulled out and buried in that winter of 1987-88. The whole grand plan was that they would be

projected as mujahideen and India would be slow to react even when it found out, and the world would not be so worried, compared to what it would have been if it were the army. If it was seen as the Pakistani army against the Indian army, I think the concerns would have been greater. As long as it was seen as mujahideen versus the Indian army, as the Minister implied all the time, then it is our problem. We should have dealt with them in some way or the other. But I think that was a very critical factor and there is a consistency in Pakistan. There have been three broad axes in which Jammu and Kashmir has been attacked in all military operations, sub-conventional or conventional - the southern axis, the western axis, and the northern axis. Do you know that in 1948 when they used the army and almost got to Leh, they went through Kargil in the winter? A very tough, very professional army. They are very good, almost as good as ours. (Laughter).



Discussion

Following a presentation by Marco Di Capua

Jasjit Singh: Would India and Pakistan be better off without nuclear weapons?

About India first. This does not come up very often. I am glad you asked this question. It should really be, "Would we be better off without a nuclearised environment?" As long as there are nuclear weapons around you, the choices are limited. If the environment is not nuclearised, in fact, India's security is better India is much better off with a non-nuclearised environment, even from a hawkish point of view. India will remain conventionally superior to Pakistan for all time to come. Sheer size and capability, and so on, will ensure this and that is the reason why Pakistan went nuclear. My estimate is that the decision to go nuclear was taken in Pakistan in less than ten days of the end of the 1971 war.

What about India-China? Even assuming there could be an armed conflict between India and China in the Himalayas, most Indians tend to make the mistake of thinking that the 1962 war was an aberration, that it can not happen again. But in fact, there were serious clashes between Indian and Chinese troops in 1967 for four or five days without either side budging and then it stopped and from then onwards that frontier has been peaceful, which has to do with the deployable force China can have,

China's political interest in fighting a war with India, and a range of other things. In substance, my view is that a non-nuclear environment will be better. This is why I have always believed that for India there is a dilemma created by the existence of nuclear weapons - the dilemma that nuclear disarmament actually is a better solution, not necessarily only a better moral answer. Is this now achievable? That is different. My reading of history is that as disarmament became less likely, as nonproliferation pressures started to mount, India started adopting a harsher position on disarmament, and the time-bound demand for disarmament. This was not there earlier. In fact to be very specific, it started to emerge around 1987, the time when Pakistan went nuclear. In a way, India's support for the NPT starts from when China went nuclear. So there is a linkage here in the thinking process, whether it is clearly articulated or not.

Will Pakistan be better off without nuclear weapons? I don't think they believe so. Because their whole logic is that it now ensures their security. The problem is still Occupied Kashmir. Will converting the LoC into the International Border solve the problem? I don't think so, because if you look closely at Pakistani concerns on Kashmir, they were never originally because it was Muslim. This is a mistake we all tend to make. Their desire to possess Kashmir was due to geopolitical, economic reasons. Essentially two. One, all the river waters of Punjab come through Jammu and Kashmir. And since the Pakistani economy is largely agriculturebased, canal-fed from rivers that flow from Jammu and Kashmir, India can control the totality of Pakistan's economy. They even now talk about the possibility of strangulation by India. This idea in a way got sold with the Indus Water Treaty of 1959. The second concern was, the ruling elites of Pakistan throughout these 55 years are essentially Punjabi. Therefore, if nuclear weapons provide Pakistan with a sense of security, it may not be such a bad thing. The question is, from a sense of security, many of them looked at it as an opportunity under their umbrella, to do something more. That is where the problem starts.

The question of the economic cost of a strategic force and the economic framework of India. I have done some calculations on this. It is not easy to calculate what it should cost, because it is linked to what should be the size of the arsenal, which is linked to what should be your doctrine and I

Prospects for Stability in a Nuclear Subcontinent

am moving from the simple case of a no-first-use to recessed deterrence, to arrive at the numbers we require. And my figure has always been less than two-three dozen that will survive. What will survive a Pakistani strike against India will be different from what will survive what could be hypothetically a Chinese strike against India or a US strike against India. Purely hypothetical. In its extreme form if we are thinking of the US we are totally out of our depth, there is no question of surviving, it is not even a hypothetical question. The essence is, we are talking about perhaps not more than 100 deliverable warheads. That is my figure. It is actually more than what would be needed.

The cost, therefore, is 4% of the defence budget, considering that a large amount of the cost is already absorbed in a variety of ways – you need strike aircraft, a command and control system, because once you have a no-first-use de-alerted recessed deterrence, then your command and control system is much smaller, less costly, more robust. Four percent of the defence budget – that is my figure. The defence budget should not exceed 3% at any time, 2.5-2.6% is the level for the last eight years.

Narasimha: Let me add one figure, which is out in the open, which can compare with Jasjit's numbers. We know exactly what the Science and Technology budget of India is. Published figures -0.71% of the GNP, last year, which is actually pretty low, compared to what many other countries are spending. That includes Space, Atomic Energy, all the other S&T that you talked about. Take a look at how much the nuclear part of the S&T budget has been. It will come to a figure of 0.15% of GNP, at the most. Now that 0.15% of GNP does not include the investment in nuclear power stations, but it includes all the R&D in nuclear weapons.

One comment on Pakistan's fear that India intends to dismember Pakistan as the Pakistanis think it did in 1971, with Bangladesh. This is one point about Pakistani logic that I would like to understand. If the Pakistanis were truly afraid that India was going to do that and wanted to do that and would be able to do that, do the nuclear weapons they have give them an assurance that that is not going to happen or not? They have nuclear weapons. One would think that possession of nuclear weapons gives them that assurance that they cannot be broken, even if India wanted to. What is your assessment?

Di Capua: It is this. At least the view I have heard about is that nuclear weapons in this regard for Pakistan are really the ultimate suicidal deterrent, inasmuch as the last act that once the dismemberment of Pakistan is about to happen, is the launch of nuclear weapons from Pakistan, which will be Pakistan's ultimate revenge. The reality will not guarantee that the Pakistani state will not be dismembered, but will actually guarantee that India will be punished to the hilt for trying. It is a suicidal gain in my view, and this is what is so dangerous, because this is the ultimate act of a state that is about to disappear and this is what to me is so worrying about the issues of nuclear weapons in this area.

But, again, I am not a specialist. These are the kinds of issues I hear about.

Narasimha: I have not heard any Pakistanis say that. I wonder if Jasjit knows of any Pakistani who has said that.

Jasjit Singh: No. But if you follow the logic of Pakistani nuclear thinking, you actually reach that point. I have used a different word for it, nuclear 'fidayeen'.

Di Capua: Yes, exactly.

Jasjit Singh: It is like the Israeli Samson option. It is not really an option at all. It may be an option for a state like Israel which otherwise will not get destroyed in any case. But in the case of Pakistan it is different.

Narasimha: The conclusion, therefore, that I draw is that this is not the motivation.

Jasjit Singh: What has happened is that particularly post-1987, Pakistan seems to have moved to a more aggressive position rather than a defensive position. So, the sentiment in Pakistan is a sense of revenge over Bangladesh, related to Occupied Kashmir, not to the rest of the country.

Narasimha: I feel that the motivation for the nuclear weapon is not a real fear of disintegration. Because if there were that fear, it should actually give them some confidence, which it has not. I don't think India would have any objection to their keeping the nuclear weapon. I believe the motivation for the nuclear weapon is different. It has to do with Bangladesh, revenge, yes, and ambition, not just fear.

In fact, if the dominating sentiment is fear, we should discuss it openly. I will try and see what set of measures can eliminate that fear. That may be one very useful thing that the US can do. Mainly to try to define, in dialogues with Pakistan first, and then in let us say, three- or four-party meetings, how that fear can be eliminated -- if that is the driving motivation, which I doubt.

Di Capua: The fear of dismemberment of Pakistan?

Narasimha: Yes. If that is the motivation for everything that is happening, we could work out a guarantee here, I think. If those are serious issues, I think we should hold a little meeting so that such guarantees can be formulated.

Lehman : This discussion leads right into the question I was going to address, which is, "Is the stability of the Indo-Pakistan relationship a generational issue?" Which is a sub-set of the classic international relations question, "Are you more likely to go to war with people you know, or people you don't know?" Is it better to understand each other or better not to understand each other? Because, unfortunately, the history of warfare is filled with examples of people going to war with people they know best! Indeed it is not for nothing that wars are usually fought by neighbours. Many experts from outside of South Asia will come here and talk about fear of war by accident. I am not one who believes that many wars are fought by accident. But I do believe that a lot of wars are fought by miscalculation. And misunderstanding. Somebody started a war thinking they were going to come out better off. And sometimes they do and sometimes they don't. But when we have raised these issues of miscalculation in Delhi or Islamabad, from both the Indians and the Pakistanis, we get the same answer: "We know each other well. We

understand. There will be no miscalculations. We have known each other for years." Well, I have two problems with that. The first is, as Jasjit was saying, "What are the facts?" Well, the facts are that however well you know each other, you sure have a lot of wars! And the second thought is: "Do you know each other well, now? What about generational change? Are Indians and Pakistanis more connected now in terms of interaction and knowledge, or less connected? Is that good or bad?" That is my question.

I want to pick up on this discussion of how Pakistan thinks about this. And I want to say that I have fundamental disagreements with things that have been said here today. I think that not even the Pakistanis have a clear understanding of where they are. But to the degree that they are thinking about this question, they are more likely than Indians to think about functional use of weapons. They are not thinking about this simply as an abstract deterrent. They do believe they may be attacked. They do believe the integrity of the state may be challenged. So they actually have a concept of tactical use that I think is alien to Indian thinking. And I think that that escalatory process is one that could get people into trouble very quickly.

But there is one aspect of some thinking in what I am going to call "the Islamic world", that I think is bold, big and frightening. That is that throughout the Muslim world you have many, many states with many, many grievances that are very small. They all aspire to have a higher standing in the world. And again and again in their modern history, they have been looking for someone or some way to multiply their leverage. And usually it has been some form of Pan-Islamic movement. And a lot of what we are seeing today is a reflection of that. So, if you cannot reunite Pakistan militarily, can you do it through Islamic politics? Fundamentalist, militant politics. If you cannot defeat India militarily, can you bring India's Muslim community into being an ally and asset of the Islamic world? Now you even hear some of these frightening people who speak about support for Osama bin Laden re-visiting the Islamic bomb question. In one sense it all seems so simple-minded, so crazy. On the other hand, this is a different kind of logic, driven by very powerful emotions. So we have in this question of nuclear weapons in this region, this variety of views in Pakistan as to how they would be used, if they were to be used. There is a view that they are a political weapon that gives you leverage, a tactical weapon that saves the integrity of the country, and there is a view that they are a retaliatory weapon for some kind of a retribution for centuries or decades of grievances. What will actually occur will depend on how the game is played. But what is frightening is that some of the outcomes are very, very bad.

Narasimha: I feel I must say one word about what you have said. I am certainly speaking for myself, but I think I am speaking for many Indians. There is no surprise in what you are saying. It is a thought that Indians have lived with for a long time. I think the US is thinking these thoughts after 9/11 but these are thoughts which may not have been explicitly stated in India, but have been there in the back of the mind of Indian thinkers for a very long time.

Mikhailov: I would like to say a few words about the use of nuclear weapons in this situation of tension between India and Pakistan. I shall start with World War II. About 5 million tons of TNT equivalent were used. Fifty million people were killed. So, to eliminate one person, a hundred kg of TNT equivalent was used. The effectiveness of nuclear weapons is approximately the same. So we can calculate how many nuclear warheads are needed. But it does not matter how many nuclear warheads one needs. What matters is the destructive power of a nuclear weapon. I am not for the process of increasing the nuclear potential of India and Pakistan. It will never equal the potential of the US or Russia. I believe that the nuclear arsenals of India and Pakistan are a matter of prestige, of strength, a way of telling each other, "Don't touch us". History gives an example of a country that destroyed its own nuclear potential equal to that of India and Pakistan - the Republic of South Africa. It destroyed about ten nuclear units. This is an example to the world community. The warheads were primitive, but nuclear warheads. I understand the joy and pride of the Indian people after the nuclear test of 1998. But I am convinced that the Indian people will also feel joy and pride when the nuclear potential is destroyed. I am sure that this may happen in this century, after a change in the external policy or after a different party comes to power. The question may arise between China

and India. But it can be solved. It can be solved between the two superpowers. Neither country should strengthen the arms race. The map of India Mr. Singh showed depicted India before Independence. I am convinced that the best way for India and its neighbours is integration. That is my dream. All the countries are moving towards this dream. I am a hawk by nature, but I am the most peaceful man in the world. We built up the nuclear potential of the USSR after Hiroshima and Nagasaki, but I am sure this will never happen again. Of course, political factors, leaders play a very important role in the process, for they are influenced by the world financial oligarchy and do things they are made to do. If this is so, we scientists should combine our efforts to stand against this negative tendency. Stop this madness! One should not do this. It is the wrong way.

Narasimha: A comment and a question. The comment is this. If you go back to the map of undivided India that Jasjit Singh showed, that was in fact the dream in India till 1946. If Indians today talk about that map and about integration, it will be strategically destabilising. Because the Pakistanis will say, "Aha, you see, that's what you've always wanted!" They will interpret integration as a desire to make a bigger India. So, I think anybody who wants peace with Pakistan, like I do, for example, however much I might dream about that undivided India of which all of these countries were part, I would hesitate to suggest that to a Pakistani. But I would have no objection to Minister Mikhailov promoting that idea. That was the comment. The question is this. If the South African attitude to nuclear weapons was such a wonderful idea, why does not Russia immediately destroy its nuclear weapons?

Mikhailov: I understand your question and I can say that both Russia and the US are moving towards this goal. Of course, there are a lot of problems. It is a thorny and winding road. In 1996, our former President, Mr Yeltsin, spoke about the reduction in our nuclear potential. For instance, in accordance with the START II treaty, we can have about 6,500 strategic units. Now we are talking about only 1,700. It is not so simple to reduce to zero. It is expensive. We cannot drop them into the ocean.

Jasjit Singh: You can hand them over to the UN and we shall guard them, don't worry. The ideal UN peace-keeping force to guard all nuclear forces so that nationally they become zero.

Gopal: I think that is the plan the US came up with. Why can't we revive the Baruch plan?

Jasjit Singh: I want to get back to the generation issue that Ambassador Lehman raised. Obviously, it is a very difficult question to answer, because the way the new generations have grown up on both sides is quite different. I don't have a final view on whether it is going to be better or worse. In some respects, the problem is that the passing of the older generation, the understanding of facts For example, when I talk to people in Pakistan who are in their forties or thirties, they actually believe something totally different! They look at Kashmir, and their understanding of facts is totally different. It is a different set of things you are dealing with. When you are talking to Indians in their thirties or forties, and a lot of them were in my Institute, they have not seen the India of the 1930s and 40s, and therefore they look at life differently. I think what we need to focus on is that on such issues we need serious examination, because the new generation on either side is much more sensitive to, shall we say, logic, than possibly we were at an earlier stage. If you are ever going to get stability of the type that is needed badly, it is going to come about not merely because of the other changes we were talking about, but through a very substantive dialogue, studies, discussions, exchange. Stability in the US - USSR relationship came about after thousands of books were written and many discussions were held. We don't have to re-invent everything. But the problem area is that contact is progressively becoming less and less in the last twenty years.

International Terrorism and its Impact on South Asian Stability

S. Gopal

errorism as asymmetric warfare essentially came into existence in the 60s of the last century, adopted by the Palestinians who realised the bitter truth that the Arab world is unable to take on Israel militarily. Failure of a number of guerilla movements in various regions of the world from South America to South-East Asia was the motivating factor in this. The Palestinians resorted to urban warfare, instead of the classic rural warfare. Modern communication technology and better and faster global transport helped them to go international. Hijacking and bombings were adopted and the killing of the Israeli athletes at Munich in the 1972 Olympic games underscored the nature of the new threat. They were able to set up transnational networks aided in those days by some states. The Arab defeat in the 1967 war gave a fillip to the growth of fundamentalist Islamic movements like the Muslim Brotherhood. The rise of revolutionary Islam of the Shia variety in Iran in 1979, throwing out an American-backed "modernist" Islamic regime, and the Soviet invasion of Afghanistan fuelled the growth of terrorist groups. The coming together of people from various countries to confront the Soviets in Afghanistan also helped in the expansion of terrorist groups. Osama Bin Laden's strength and successes are to be seen in this light.

Prospects for Stability in a Nuclear Subcontinent

The exit of the Soviets from Afghanistan and the end of the Cold War left a large number of well-trained and battle-tested "Islamic warriors" who used, and still use, their experience to support local terrorism in North Africa, Kashmir, Chechnya, China, Bosnia and the Philippines. The West was mostly concerned with Middle East terrorism, where the Syrian-supported Hezbollah used, for the first time, in 1983, suicide bombers causing the death of 241 US Marines in Beirut.

After the withdrawal of the Soviets from Afghanistan, that country went through a long period of instability with the US, which funneled funds and arms for the jehadi groups against the Soviets turning away from that country without realising the disastrous consequences which were to follow. The instability provided an opportunity for recruitment of volunteers by the fundamentalist groups. The 90s of the 20th century saw these groups getting more and more inhuman in their ideology and attacks. They made full use of modern tools of communication like the internet to build up an impressive international network. It is reported that this included even steganography in their e-mail where messages were hidden in graphics. Al-Qaeda is the case in point. Started around 1990, it planned to establish a transnational mujahideen network with the avowed ideal of "re-establishing" Muslim states throughout the world and overthrowing corrupt regimes in the Islamic world. Drug trafficking and smuggling were used to raise the necessary finances.

Many states supported such groups to pursue their own international agenda. Pakistan is a good example in this regard. Motivated by an obsessive hostility towards India and unable to concentrate on political and economic reform and good governance, it provided assistance to the terrorist groups both in Afghanistan and Kashmir. The Taliban, which provided training grounds for the various terrorist groups in Afghanistan, was essentially a creation of Pakistan. By the middle of the 90s, Pakistanbacked terrorist groups in Kashmir found a safe haven for training in Afghanistan. Abject poverty among the underprivileged in Pakistan led a number of youth to turn to the so-called Madrassa education (with free boarding and lodging) which deteriorated from pure Islamic teachings to jehadi struggle. Many a Pakistani young man found his way from Madrassas to the Afghan jehadi training schools and from there to Kashmir, Chechnya, etc. Successive Pakistan governments found it increasingly difficult to control these movements, if at all they had a mind to do so. Contemporary terrorism was thus globalised with attacks in many parts of the world. The 1993 bombing of the WTC and its destruction in September 2001, are telling examples of this phenomenon. Nearer home in South Asia, we had the attack on the Indian Parliament in December 2001 and the earlier attack on the Srinagar State Assembly. One of the fiats of Osama Bin Laden, issued in 1998 under the banner of "The World Islamic Front for Jihad against the Jews and Crusaders", was that it is the duty of all Muslims to kill US citizens, civilian or military, and their allies. Peshawar in Pakistan provided the staging ground and supply depot of AK-47s for the jehadi going to the camps organized by the Al-Qaeda in Afghanistan. They took their skills to try out at home in Yemen, Algeria, Saudi Arabia, Egypt, the Philippines, Kenya, and the United States.

One major reason for Al-Qaeda's success and popularity is the American policy on the Middle East, the oil-related support to unpopular and autocratic and feudal regimes like Saudi Arabia and support to Israel. The rise of Islamic terrorism in the Middle East and support for it in the Muslim world can be directly attributed to this. Laden's demand for the exit of American troops from Saudi Arabia finds, therefore, widespread support among the common Muslim masses in the Middle East, if not in the entire Islamic world.

Sometimes Islamic radicalism gets injected into conflicts which have other reasons or roots. Chechnya is a case in point. Dudayev was by no means an Islamist, but had visions of an independent, secular Chechnya. But when it failed, the Islamic fundamentalist group found an opportunity to ride on it and spread their tentacles there. The recent hostage-taking in a Moscow theatre and the subsequent tragic consequences show that the Chechens are already hand in glove with Al-Qaeda or at least strongly influenced by them in tactics.

The Central Asian Republics are another fertile hunting ground for these fundamentalists. Not because people are religiously motivated but because of the protest potential due to repressive regimes with a track record of poor governance ignoring the poor socio-economic conditions among the masses.

Al-Qaeda had bolstered a destabilising brand of Islamic fundamentalism in a long list of Middle East and Central Asian regimes. It has provided assistance to groups working against governments in Algeria, Syria, Chechnya, Turkey, Jordan, Tajikistan and Philippines.

Prospects for Stability in a Nuclear Subcontinent

South Asia has seen a lot of terrorist violence in the last couple of decades. The most important are the Afghan and Pakistan-based terrorist group activities and the LTTE in Sri Lanka. The latter is essentially confined to terrorist activities within Sri Lanka though the organisation itself is well spread globally, among the Sri Lankan expatriates who fund it. It is an ethnic group with a limited aim of gaining independence for the Sri Lankan Tamils. Recent developments seem to augur well for ending this terrorist violence and peace returning to that country.

A study of the statistics of terrorist incidents indicates that while the number of attacks in Asia is only half of that in the Middle East region, the casualties are much more in Asia. Attacks are bloodier in Asia. While the overall number of terrorist attacks from year to year continued to decline around the world in general, the number of attacks in Asia began to rise.

The religiously motivated terrorist is much more dangerous than the politically motivated one. This is borne out by the fact that international terrorist incidents declined in the 1990s but the casualties in these incidents went up.

The terrorist groups claiming to speak on behalf of the Muslim world, are only a very small number. Some are pure criminals like Dawood Ibrahim, the drug smuggler who organised the bombings in Bombay in 1993. He now finds support and succour in Pakistan. Today's terrorists are a conglomerate of loose transnational groups with religious affinity. They rely on criminal activities like kidnapping, narcotics, and smuggling to finance their organisation. There are also legitimate business and non-governmental organisations as well as wealthy individuals supporting them financially.

Though guns and conventional explosives have so far remained the weapons of choice for most terrorists, some terrorist groups have shown interest in acquiring the capability to use chemical, biological, radiological, or nuclear (CBRN) materials. It is difficult to predict the likelihood of a CBRN terrorist attack, but most experts agree that today's terrorists are seeking the ability to use such agents in order to cause mass casualties.

India has been bearing the brunt of violent terrorism since the last decade of the last century. A number of Pakistani-based organisations have been carrying on depredations in Kashmir. A disturbing feature has been the spreading of the tentacles of the so-called jehadi terrorist groups into South India such as Coimbatore in Tamil Nadu. This gives the lie to the so-called jehadi propaganda that they want to liberate "Muslim Kashmir" from the Hindu India yoke. The attacks in the south are aimed at disturbing communal harmony even in the south and destabilising and finally balkanising India. These groups, as it is now well known, enjoyed financial and logistic support from the Inter-Services Intellligence of Pakistan. The latest terrorist outfit formed to start jehadi operations in Jammu and Kashmir is an outfit called Shoora-e-Furqan (Assembly of Believers), comprising of thousands of Pakistani Taliban fighters airlifted by Islamabad in the wake of the siege of the Northern Afghan town of Kunduz, by the US-led forces. It will be based in the Pakistanadministered part of Kashmir.

Little realising the adverse consequences that they themselves will face, Pakistan through its intelligence agency ISI had encouraged, financed, and provided logistic support to many of these organisation to carry out acts of terrorism in India. The ISI had an indirect but longstanding relationship with Al-Qaeda, turning a blind eye for years to the growing ties between Osama bin Laden and the Taliban. It used the Al-Qaeda camps in Afghanistan to train covert operatives for terrorist violence in India. Some of these groups have started sectarian killings in Pakistan itself, creating an enormous security problem for that country. The decision of the military government of Pakistan to crack down on these groups under US pressure, after 9/11, has led to serious confrontation between these groups and the government. President Musharraf himself is now a target of these terrorist groups. Despite Pakistan government's avowed readiness to end its support of the Taliban, its intelligence agency was, according to some reports, providing safe passage for weapons and ammunition to arm them. In a way this is borne out by the continuing terrorist violence in Jammu and Kashmir carried out by cross-border terrorists. After all it is not possible for terrorists based in Pakistan to cross into India and carry out terrorist activities without the knowledge, if not approval, of the government of Pakistan and its armed forces.

In its anxiety to use terror to cut India to size, Pakistan itself has become a victim of terror and an ungovernable state. Some statistics given below will bear this out :

The count began with the murder of Wiqar Ahmed, an activist of the

outlawed extremist Sunni-Deobandi group, Sipah-e-Sahaba Pakistan. Ahmed was shot dead by two unidentified assailants riding a motor-bike. The same evening a Shia doctor, Tariq Rizvi, was shot and injured while he was attending his clinic in Khokrapar. Syed Zafar Mehdi, Principal of the Jamia Millia Polytechnic Institute, was then killed along with his driver, Mir Zaman, and his peon, Mukhtar Ahmed. Witnesses told the police that the killers shouted slogans of "Allah-o-Akbar, Kafir, Kafir Shia Kafir (God is great; Shia are apostates) while fleeing the crime scene.

In March 2002, an attack on a church in Islamabad killed five people including the daughter and wife of an American diplomat. The March attack coincided with the trial of the accused, including Sheikh Omar Saeed, in the Daniel Pearl murder case. In May 2002, a prominent Sunni scholar, Ghulam Mustafa Malik, was killed in Lahore. He was one of the most popular figures among all sects, and his televised sermons were broadcast on several Pakistani and overseas channels. This was followed by the horrific killing of fourteen people, including 11 French nationals, outside the Sheraton Hotel in Karachi in a terrorist bomb attack. The French were there to help Pakistan build submarines! It is also interesting to note that the wife of the murdered Wall Street Journal reporter, Daniel Pearl, was French. According to an anti-terrorist specialist in Paris, France was being targeted because it is a partner of the Americans in the destruction of bin Laden's network. France was the only participant in the anti-Taliban coalition actually involved in aerial combat in Afghanistan. French Mirage and Super-Etendard planes were bombing positions in eastern Afghanistan. As an ally of the US, France was categorised as an enemy of Islam by hardcore Islamists.

Coming back to Kashmir, the terrorist campaign there was, till 1993, being waged largely by indigenous Kashmiri groups, trained and armed by the ISI and Pakistan's religious parties. Practically all these groups except the Hizbul Mujahideen (HM) of the Jamaat-e-Islami have realised the futility of violence and confined their activities since 1993 to a political and propaganda campaign against the government of India. After 1993, Pakistan-based organisations have virtually taken over the campaign. The training and logistics infrastructure were either in Pakistan or in Afghanistan. While the US air strikes destroyed their setup in Afghanistan, the setup in Pakistan is intact. The main Pakistani organisations are the Harkat-ul-Mujahideen (HUM), the Lashkar-e-Toiba (LeT), the Jaish-e-Mohammad (JeM) and the Al Badr. Suicide terrorism was introduced in Kashmir in 1999. There have been 46 incidents of suicide terrorism, of which only two were by Kashmiri organisations. The remaining were by Pakistani organisations – the majority by the LeT and a smaller number by the JeM.

What needs to be understood is that Pakistan has backed not Kashmiri terrorists alone but has in the past, aided and abetted other insurgent groups in India, specially in the north-eastern tribal areas. Pakistan's support to Mizo insurgency has been confirmed by no less a person than Lal Denga, the beneficiary of the Pakistani munificence and leader of the Mizo insurgents. He later made peace with India, and told the Indian authorities about the activities of the Pakistan government in supporting the Mizo Insurgency. Pakistan's aid to Sikh terrorists is too well known to be repeated here.

Pakistan has now become a major cerntre for Al-Qaeda activities. According to the Commander of the Coalition Forces in Afghanistan, Lieutenant-General Dan McNeill, there may now be more Al-Qaeda terrorists operating in Pakistan than in the original theatre of war. He conceded that his task was now more complicated as the coalition does not have the right to conduct combat missions in Pakistan. While pointing out that sympathy for Al-Qaeda remained strong in Pakistani tribal areas, he added that fewer than 1,000 of its cadres were now in Afghanistan.

Conclusion

South Asia's, or rather the subcontinental, stability is hostage to the mindless terrorist violence in the past few decades. December 13, 2001, the day on which Pakistan-based terrorists attacked the Indian Parliament was indeed a defining moment for India in its patient struggle against terrorist violence. The patience of India (both the government's and the people's) almost ran out and the government, with the support of the people, was willing to risk a major war to put an end to this proxy war. The argument that any conflict would inevitably lead to a nuclear conflict is a prescription to suffer terrorist depredations in silence. Pakistan keeps complaining to the world that its security is under threat from India. All the wars between the two countries were initiated by Pakistan. The

Prospects for Stability in a Nuclear Subcontinent

separation of Bangladesh was not because of India's actions but due to alienation of the Bengalis by the insensitive attitude of the rulers of what was then West Pakistan. Today, the only issue which could be considered a security threat for Pakistan is a belligerent India losing its patience and deciding to cross the border to end the cross-border terrorism. There is a strong need for Pakistan to realise that India's patience has almost run out. Pakistan itself has now become a victim of terrorist activities and faces instability .The terrorist violence should be first put down firmly by both countries and negotiations to re-order the vitiated relationship between the two countries could follow. Stability in the subcontinent and in South Asia would then be automatic.

Discussion

Lehman : A question and a comment. The question, a sub-set of the bigger issue of what is the future of Pakistan, is what is the alternative to Musharraf and the army? Is there a democratic process that can address these issues at this time? How do we think that question through? The comment is on the Tamil Tigers. I think you are right that they have been very focused on Sri Lanka. On the other hand, in many ways, they have been a model for this internet-funded suicidal terrorist activity. Outside of this region, most of the rest of the world has not followed the Tamil Tiger situation very much. And I think if we had paid more attention earlier, we would have seen some of these tools that are being developed.

Gopal: Well, there has to be a democratic alternative (to Musharraf and the army). It may not be in view immediately. The most important group in Pakistan which would like the Kashmir problem to fester would be the army. Because the very existence, the very strength of the army depends on hostility towards India. Because Pakistan by its own words says it has no other enemies. So if India and Pakistan make up, there is hardly any

raison d'etre for a big, strong Pakistani army! So it is indeed essential to have a democratic regime if these problems are to be solved. And, in fact, I don't think most of us hope that we can have an amicable Indo-Pak solution as long as the Pakistan army rule continues.

Jasjit Singh: I would perhaps modify that. Firstly, Ambassador Lehman , the question is not Musharraf. Musharraf represents the Pakistan army. So if you ask the question, is there an alternative to Musharraf, you are actually asking if there is an alternative to the army. Yes, ideally speaking, there should be democracy, but given the history of the last 55 years, given many other things, it is going to take a long time, maybe 20-30 years. Democracy is substantively a matter of culture – willingness to work, willingness to adjust to each other, which as you move further northwest and all the way to Afghanistan, reduces.

My second point. The problems of instability which we are talking about started to aggravate post-1985. Of course, democracy is fragile, it is subject to tremendous domestic pulls and pressures, to very strong pressures from the large Islamist movements in Pakistan, and I would only suggest to Mr Gopal that it was not just 1967 that mattered, there was a growth that took place from the early 1970s and you can virtually date it to the role Saudi Arabia played in the October war, in the Yom Kippur war, and therefore raised the issue that Islamic countries can inflict damage and pain on everybody. But that is a larger set of questions and in fact, there are three people involved in it who were already for the previous 25 years intellectuals who were rationalising what would happen. One was Maudoodi, the other was Ayatollah Khomeini, the third was an Egyptian. All these things started to come together by about that time. Yes, this is the most desirable option, but in reality, I don't think the army in Pakistan is going to move away from the power structure of Pakistan. To some extent my own view is that what Musharraf is doing is to once again formalise the role of the army in the power structure of Pakistan. This provides perhaps the best interim solution. It is not one I would like for my own country. Nor for the US.

Not that there is any likelihood of it taking place. And these models have existed. Look at Indonesia, Myanmar and many other places. I don't think

Prospects for Stability in a Nuclear Subcontinent

the issue is that as long as the army is running the show there, we are not going to get stability in the region. No, I don't think so. Why does stability start to increase with the fear of the army that they will be pushed to become a normal army? I am talking about 1985-87 onwards. In the previous 2-3 years, it was much more visible when Nawaz Sharif started to remove the eighth amendment, altered the framework, dismissed an army chief, you don't do such things in a hurry. Certainly you don't do that in Pakistan. I think my bottom line answer to Ambassador Lehmann's question is that there is a reality, the army is going to keep ruling, it does not matter who the man at the top is, Musharraf is committed to a certain policy line, so it would be desirable if Musharraf stays on that. He is not my choice, but that is not the question here at all. I think as long as there is enough pressure worldwide and by India on Pakistan to alter its policies, this will have to reduce. This idea that there is a very strong hardline element in Pakistan is overstated substantively. It is not really as strong as people generally believe it to be. That is clear from what we have seen in the past 9-10 months.

Gopal: I would like to respond to this response. Right now, is there an alternative or not is a different question. There may not be any alternative. What we cannot forget are the two major wars which Pakistan had with India, both when an army general was in power -1965 and 1971. We won't talk about 1948. The third war, the Kargil war, was indeed when there was a Prime Minister, but he was virtually pushed into it by the present President of Pakistan. To that extent, I am somewhat sceptical about an Indo-Pakistan solution as long as the army is in power. I agree that the fragile democracy, the two democratically elected Prime Ministers, have been great disappointments. But then we have to find a solution eventually.

Mikhailov: I would like to say a few words about this very complicated issue. I would like to cite the example of Chechnya, a part of the Russian Federation. The official figures say 200,000 of our countrymen were killed here. It is more than the number killed in Afghanistan. The leaders of our country have now come to the conclusion that there is no military solution to this problem. The attempt to solve problems through military force, the model that has been created by the US, can only lead to guerilla

war against the US – nothing else. It is difficult to specify all the reasons for this complicated situation. But I would just like to mention that, for instance, in Arab countries, a child gets ten times less vitamins than a child in the US. The solution may be to share, and share generously and not give crumbs from the rich man's table. To increase prosperity all over the world.

To get down to the problem of democracy We should not forget about the financial oligarchy. That is a definite power that influences all processes. Why do we talk about Al-Qaeda alone? Kennedy was not assassinated by Al-Qaeda. The problem is one of contradictions between nations and cultures, and disparities in economic prosperity, educational divide, maybe. Those are the things we should think about.

About the term "terrorism". I don't like the saying that those who are against us are all terrorists. I would like to cite an example from czarist times. Czarist Russia took a long time to conquer Central Asia and the Caucasus. Who was the terrorist in those wars? It would be difficult to say for sure. Of course, the victor can always say the defeated are the terrorists. There is a saying in Russian that the weak are always guilty. I won't philosophise here. But perhaps there is another solution, a matter of political will. Maybe a new leadership will find a solution. But I am convinced that the ambitions of political leaders make the common people suffer. Because simple people do not understand what democracy is. The only thing we should think of is to increase the standards of education, support science, and increase prosperity of the common people. By the way, in the US, the Democratic party was defeated by the Republicans. So perhaps there is no democracy in the US?

I would like to emphasise again that there is no military solution to conflict between India and Pakistan. However, I cannot make recommendations. I have no ready-made solutions for you. But I am sure your two countries have enough talent and wisdom to solve the problem peacefully without the use of nuclear weapons.

Di Capua: As a physicist it is very important not to take what is happening at present to be the steady state. We don't know what the steady

state is going to be. But I think in order to predict what the steady state will be, it is important to consider what the previous history has been, if the system remains unchanged. For us in a sense, I think the issue with regard to Pakistan is that it is very important to realise what the role of Pakistan and the role of the Pakistan army has been over the last 50 years. I think it is very important to make sure one understands that perhaps now the Pakistan army finds itself without a role, given the end of the Cold War, the issues with Afghanistan. So we need to really think through and try to establish some predictions what the role may be. It may be very possible that the Pakistan army finds itself with other roles and is trying to define a role that may become a threat to India.

The second issue was brought up by Mr. Mikhailov and the speaker. It is the fact of how ineffective high pressure forces, i.e. military forces, are against low-density targets, which are terrorist targets. Again, I want to bring up the resolution of what amounts to the same kind of terrorism that India has suffered, which is the terrorism in Northern Ireland. And to what extent the role of the cut-off of financial support of the IRA by law in the US gets credit for the resolution of the conflict. And I think perhaps for too long the US has turned a blind eye to the flow of petro-dollars into support of terrorist groups in South Asia. So again, we really need to be a little patient to find out what the steady state is going to be, once the financial support for these groups has ceased. Unfortunately, it is a lot more difficult to stem the flow because of the informal channels by which this support flows, but there is hope to believe that this kind of support will stop. Hopefully this support will not be replaced by drug money, because a very serious challenge is that once the flow of petro-dollars stops, it may very well be replaced by money which is equally difficult to stem, which is the flow of drug money.

Jasjit Singh: I would suggest to Mr Gopal that we need to go beyond the same set argument. That just because there was an army man ruling in Pakistan and the war took place, that was not the reason why the war took place. I think we need to look at it very carefully. There was a certain level of domestic tensions within Pakistan for the same goals, there was an escalatory process that went on. Bhutto pushed Ayub Khan to start the 1965 war and Ayub paid the price, incidentally. Bhutto pushed Yahya

Khan to take that position and Yahya Khan paid the price. Let us leave that alone. The difference I think here is that the situation in Pakistan over the years has been that it is a feudalist society. And feudalism and democracy rarely can go together. The army in Pakistan – much less the Air Force and Navy – has become just one more element in the feudal structure of Pakistan. Now the present attempts that Musharraf is trying to make, to formalise the role of the army, because in the coming elections the major feudal leaders, Benazir, Nawaz Sharif, Leghari, and others, are not going to be the prominent ones, and yet what he did last year in terms of the reforms was to create feudalism at the lower level, a minifeudalism that exists in reality in village life. And at the district level. So, I think we have to look a lot more deeply at what is happening in Pakistan to be able to make a judgement of what the future holds. I hold the same view that the army in Pakistan is going to stay, that is what you have to deal with. The question is, will the leadership, that Board of Directors of 11 people, if they feel that this is a counter-productive strategy, will they change it? One factor is very clear. In Pakistan, if there is to be a change in the policy, it can only be brought about by the army. If there was a political leader in power at the time of September 11, I don't know what would have happened.

A View from Bangladesh

Waliur Rehman

"And Ye shall know the Truth And the Truth shall make you free".

I was born a British Indian (1942), became a Pakistani (1947) and then a citizen of Bangladesh in 1971. While it is wrong to ascribe to the Raj all the difficulties afflicting us in South Asia, it is not entirely wrong to state that the colonial power is to a great extent responsible for the legacies it left behind. I have always argued that colonization or alien rule in any shape or form is debilitating and demoralizing for the political structure and social fabric of every country, be it in Asia, Africa or Latin America. In the case of the Indian Sub-continent only the British exploitative mechanism can be called maximalist. It is thus rightly said that every brick of London is built with the blood and sweat of India, the crown jewel of the British Empire.

Predictably, when the British were forced to quit India, they left enough issues behind to the nations of the region to be preoccupied with. The prevailing tension in South Asia is a direct result of the policies that the colonizers followed in India. Standing today on the threshold of the new millennium, who would believe that it was a Muslim who translated the Upanishads and a Hindu who translated the Quran ! The Muslim rulers and the Mughals in many cases selected Hindus as Army Chiefs and some Hindu Maharajas had Muslims as their Military Chiefs. This was India, the continent which produced a civilization far superior to anything that the modern western states can think of.

If Lord Clive established a toehold in India through a conspiracy of the worst kind, he also formalized the practice of bribes under official patronage. Read what Sir John Strachey wrote, " truth plainly is that the existence side by side of these hostile creeds is one of the strong points in our political position in India."

The Bengalees fought for a sovereign, independent Bangladesh under their great leader Sheikh Mujibur Rahman, when he realized that cohabitation with Pakistan, as it was then, was not possible. Like the Czechoslovak founding-father Thomas Garrique Masaryk who was the voice of the 19th century having witnessed death and destruction on ethnic and religious grounds, Sheikh Mujibur Rahman preached tolerance, cooperation and togetherness in the sub-continent.

This brief backgrounder will help, I believe, to address the question of stability in South Asia. When Pakistan crossed the LOC the whole world was taken aback, because at that very moment Prime Ministers A. Vajpayee and Nawaz Sharif were signing the Lahore Declaration at the historic Minar-e-Pakistan. It is important to note the reactions of China, the United States, the European union and last but not the least, the ASEAN meeting in Singapore. There is a common thread running through the responses of all these countries: the 'affaire Kargil' was less than proper; please withdraw from across the LOC and come to a negotiated settlement on the basis of the 'Simla Agreement' and 'Lahore Declaration'! Former US secretary of state Madelene Albright repeatedly said, 'follow the Simla Agreement and stop the cross-border terrorism' and this will facilitate the path to dialogue.

I say this in the context of the remarks of Pakistan Army Chief General Pervez Musharraf, now President, that Pakistan troops did cross the LOC ! As the world leaders repeatedly underlined, crossing the LOC at Kargil was a serious violation of the Simla Agreement and it ran directly against the letter and spirit of the Lahore Declaration, and thus was not conducive to peace and stability in the South Asian region. Please note the emphasis: it is not a cease-fire line, it is the LOC. Could this emphasis help us read the tea leaves? Or will India and Pakistan continue sparring with each other until Kingdom come? A shift in perception or paradigm shift, as Ambassador Tanvir Ahmed Khan of Pakistan said in a column in the Dawn newspaper of Karachi, may not be the solution. We should go deeper into the minds of those who run the affairs of states: here again, we are afraid of speaking up and speaking out the truth. We want to balance what is a terrible convolution of the thought-process! We fought against the balance of power concept in the post-world War II Theater in Europe. And we won.

Democracy alone can show us the path to deliverance. That's why we harken back time and again to the relevance of civil society. Like Aristotle, Thomas Aquinas regarded civil society as a "natural part of life". They both conceived family as the basic political unit. From family to society, from society to the larger political framework where "man can develop his reason or moral sense". They both put stress on "reason rather than authority". It is worth noting that "civil society" by definition is antithetical to autocracy and dictatorship, military rule and extra-judicial politico-bureaucratic predominance.

We in Bangladesh rose against autocratic rule through the 1952 language movement, against military dictatorships in 1958, 1962, 1966 and finally in 1971, we liberated our motherland - but at what cost! Certain amount of cost though is necessary. As Lamartine said, "we make together the sublimest of poems" in such moments. We also suffered the scourge of military or quasi- military rule from 1975 to 1991 following the brutal murder of the Father of the Nation in 1975.

In Pakistan, unfortunately, the efflorescence of democracy and democratic process has suffered time and again, always to the detriment of its people's interest. Pakistan's failure to abide by the election result in 1971 is a glaring example, if you need one.

Gaetano Mosca drew certain conclusions based on empirical study. When politicians, bureaucrats, academics, artists, artisans, authors fail to guide the society, undemocratic forces try to fill the vacuum. In such situations, institutions don't develop. Remember what happened to Sparta? Over-militarisation prevents civil society from participating effectively in affairs of state.

Building up a frenzy over Kashmir may keep the Pakistani nation cemented for a short time but it is likely to fail in the long run. At the same time, Pakistan has to come to terms with its own ethnic problems. We must not forget that religion alone cannot hold a nation together. We have our own experience. Religion is personal. When it becomes the raisond'etre of a nation, the be all and end all of a nation, it only brings disaster. Failure of the Holy Roman Empire is an example. The rise of the Ottomans and their collapse is another. When the Ottomans had a multiethnic rule, they succeeded in maintaining what Montesquieu called – 'La Logique D'etat'. At some point, the Christian Janissaries were guarding the sultans; they were heading many national institutions; Christian Janissaries were Army Chiefs; the moment religion entered into the governance of the country the Ottomans started disintegrating. What is the lesson? Extremism is bad, moderation is good. And Democracy breeds moderation. Kant rightly said democracy tends to avert war, democratic institutions stand as a bulwark against Bonapartism and act as a restraint against militarisation of a society.

Very often I refer to a story, a part of history regarding Schleswig -Holstein. Denmark, Prussia, Austria and Germany all had claims on this southern part of the Jutland peninsula. Lord Palmerston immortalised himself with his remark on this question, "only three people understood the problem, one was dead, one went to a lunatic asylum and I'm the only survivor and I have forgotten all about it"!

Please don't get me wrong. I am not as pessimistic as Palmerston; I'm optimistic and hopeful. The question of Schleswig-Holstein was resolved as was the Franco-German problem of Alsace-Lorraine or the Flemish-Walloon question in Belgium through dialogue based on La Logique D'etat.

I again turn to our subject – Prospects for Stability in a Nuclear Subcontinent. India with all its difficulties, has succeeded in building institutions that are well rooted. This is the largest functioning democracy in the world albeit messy sometimes. And I am happy to note that status quo ante on the LOC has been established. The sanctity of the Simla Agreement has been restored. Bangladesh is a stakeholder together with India and Pakistan; Simla after all, is a direct sequel to our glorious War of Liberation in 1971.

But there is the 'rub'; two recent US Congressional Task Force Reports have some unpleasant facts recorded regarding the situation in Kashmir. It has given graphic details of how a particular organisation is busy in destabilising the situation in the Himalayas and beyond. At this point, as a citizen of South Asia I would like to pose a question: what do the South Asian nations really want: tension or stability, war or peace, marginalisation or socio-economic development? The answer is quite obvious. We know about the Middle Ages and the melancholy monuments with their triumphs of death, their `Danse macabre'; their 'memento mori'' with the grim and grinning image of putrefaction, that Professor Hugh Trevor-Roper so brilliantly described in the Rise of Christian Europe. With these references I am not getting into any value-judgement. They are meant to help us come face to face with a reality, the reality of the growth and development of Democratic Institutions in the region.

An a priori condition of democracy is that all agencies and organs of the State must be under total civilian control. Or else extra- constitutional forces will try to steal a march over the democratic government. Reforms – yes, but slow or half-baked reforms actually hasten to weaken democratic values rather than strengthen them. Don't we remember how the half-hearted efforts of Louis Phillipe and later Czar Nicholas Alexander II only hastened their disappearance and with them the reform measures? What we need is leadership. And leadership with Ideas. But as AJP Taylor said, 'a great idea seldom has a free run'. And if idea connotes the idea of progress, then in Bury's words, "the principle of duty to posterity is a direct corollary of the idea of progress".

An heir to a great civilisation, the South Asian Region is again destined to play a great role. And this is only possible through what I call with some temerity, the Aryan-Dravidian synthesis, just as the idea of Europe, in Paul Valery's words meant Greece, plus Rome, plus Christianity.

In 1998 both India and Pakistan went nuclear by exploding nuclear devices. Regardless of the dramatic events following 9/11 and subsequent allowances given by the US to Pakistan, India has not flinched from the Vision Agreement for the 21st century: India-US Relations, March 21, 2000 signed by President Clinton with Prime Minister Vajpayee. I quote, "We will seek to narrow our differences and increase mutual understanding on non-proliferation and security issues. This will help us to realize the full potential of Indo-US relations and contribute significantly to regional and global security". As a result of which the US-India defence and security relations have developed very significantly.

As I have always maintained, India is the potential great power in the region. In the next 20 years or so India is destined to become a power to reckon with. US Ambassador Blackwill aptly suggested that US considers India a great power in the region and Indo-US collaboration will not only secure stability in South Asia, it will impact on regions far beyond the sub-continent.

So what is my conclusion? It is America and America alone which can lean on Pakistan to heed to the US advisories about continuing infiltration of terrorists into neighbouring India, and secondly to stop nuclear proliferation. As we have seen very clearly in one of the research studies, Pakistan can ill afford to sustain nuclear capability for long without going bankrupt. Because of impending shortage of funds due to increased defence expenditure or "services expenditure", development of much needed basic socio-economic infrastructure including health care, literacy and poverty alleviating projects will suffer. Our preliminary estimates show that Pakistan's opportunity cost of nuclear detonation is about 24 times more than that of India, assuming that the income inequality will remain unchanged due to the Expenditure Switching Policy of Pakistan.

Stephen P. Cohen, a Senior Research Fellow on Foreign Policy Studies at the Brookings Institution, is a copious writer on South Asian Affairs, particularly on Indo-Pak relations. Once he dubbed Pakistan a 'failed state'; then he asked Washington in a May 2001 article to "make the case to Islamabad that continued support for non-Kashmir and terrorist groups will qualify it for inclusion on the list of states that support terrorism" (Brookings Policy Brief-May 2001, No. 81).

If Pakistan does not heed the US advice, Stephen Cohen will be revisiting Pakistan. And no one wants to see that. The common citizens of Pakistan want good relations with India, their needs are as good as ours. The ever-burgeoning civil society of Pakistan wants a quick end to the tension between the two nuclear neighbours. As I began, like the Schleswig-Holstein question, the question of the nuclear Sub-continent also will be resolved, but it will take time – some more time.

And for this India may have to take the initiative, at an appropriate moment, in the not too distant future.

Report on the Concluding Session

The concluding session of the International Roundtable Conference on Prospects for Stability in a Nuclear Sub-continent was held on September 4. Prof R. Narasimha chaired the concluding session. All the participants were present.

Prof Narasimha opened the session by noting that participants had differing views on the basic issues, on the current situation, and on the factors leading to the current situation. The discussions over the course of the conference did not indicate any significant change in the divergent views known to be held by the countries taking part in the conference. This, however, did not mean that forward movement was not possible, he said. One could look at various measures that could be taken to further stability in those areas where strong disagreements did not exist. There were precedents like the agreement between India and Pakistan not to attack each other's nuclear facilities, and the Indus River Waters Treaty. There was also the positive India-China experience in this regard, he added.

He made the following proposals:

1) Much has been said about the mutual fears in India and Pakistan about the threat to each other's national integrity. There are many who think that it is not just fear of India that operates in Pakistan. There may be an element of ambition as well. But assuming that this fear exists, is a system of guarantees feasible?

- 2) We are already agreed that economics is important. In fact, India has extended the Most Favoured Nation (MFN) status to Pakistan, but Pakistan has not reciprocated. So there is an asymmetry here about the perceived value of economic relations. In any case, one could explore the possibility of gas and oil pipelines to India, through Pakistan. India would like to gain access to Central Asian reserves, at more attractive costs, if possible, but there is a fear here that economic life in India could be disrupted if the lines are turned off. It has of course been pointed out that throughout the Cold War, the oil flow never stopped. So, would it be possible to think of clever schemes of insurance and guarantees, both political and financial, that are practical, and ensure that the pipelines are not vulnerable to fundamentalist attacks or policy changes in Pakistan?
- 3) Could all nations that have made a public commitment to eliminate terrorism agree on international measures to choke funding to terrorist organisations?

The house was thrown open for more such suggestions, and the following were made:

Dr Marco DiCapua:

4) Implementation of robust National Technical Means to monitor cross-border infiltration is necessary. The US may be willing to offer technological help for this purpose. (It was noted that an initiative along these lines was already a part of Indo-US dialogues.)

Ambassador Ronald Lehman:

- 5) An education initiative, to make modern education more widely available in Pakistan and the Islamic world. Western Europe and the US are not poised to do this, but may be India can take it up.
- 6) Generational Initiative: What are young Pakistanis' dreams, aspirations, and views?

Prospects for Stability in a Nuclear Subcontinent

7) Nuclear sabre-rattling may be useful to Pakistan, which sees its capability as necessary to counter India's conventional superiority. But similar rhetoric may not be in India's interest. In fact, if India has enough nuclear material for what it needs, it should go beyond a mere low profile and restraint, and see if some kind of a fissile material cap can be introduced, which will also be reassuring to the broader community.

Dr Victor Mikhailov:

- 8) Consolidation of efforts of the region's states, including India and Pakistan, to enhance nuclear weapon and fissile material non-proliferation regimes.
- 9) India and Pakistan should seek a well-considered policy of their interstate relations in order to avoid serious military conflicts that may leave an option of nuclear weapons employment for a weaker nation.
- 10) Promoting cooperation among sub-continent nations in the field of peaceful nuclear energy in compliance with Article 4 of the IAEA Charter and seeking possible halfway and compromise solutions of complex issues that hamper development of nuclear energy production and impede transfer of technologies and services to this region.

Air Cmde (retd) Jasjit Singh:

11) A deeper examination of the nuclear doctrines of the various countries involved is needed.. There is an inadequate understanding of the limits and uses of nuclear weapons, what they can and cannot do.

Dr Sun Xiangli:

12) There is a need to review the past, and look at those stable periods in Indo-Pak relations, where there was a relaxation of tensions. What factors contributed to this relaxation, and how can these be brought about again?

13) Exercise in preventive diplomacy. Experience has shown that dialogue stops after some kind of violent terrorist incident. A new model, where talks are not interrupted by violent acts, is needed. Terrorism cannot be stopped overnight. If you put a precondition that unless terrorism stops, there can be no talks, it seems to me to make things very hard. Patience and tolerance are needed.

Some responses to the above suggestions:

Dr Raja Ramanna questioned whether it was possible to educate people who were already indoctrinated in a different way. There is a new movement, which is well-financed and quite 'terroristic', and its programme is not clear. The Muslim madrassas teach that violence is a great thing, and that Islam is the only good thing. They are not receptive to physics and maths, which they identify with the "ungodly" West. Prof Narasimha noted that any education initiative by India in Pakistan would be viewed with deep suspicion. Ambassador Lehman said that perhaps the Indian Muslim community could do something in this regard, and not the government of India.

Air Cmde Jasjit Singh linked the possibility of an oil/gas pipeline to India through Pakistan, and the existing Indus Waters Treaty. A mutual interdependence could enhance stability, he said. Such a pipeline will have third party involvement in the form of financial institutions etc, which comes with its own incentives for stability.

Responding to Dr Sun's observation about preventive diplomacy, Air Cmde Jasjit Singh noted that India had never asked for zero terrorism before talks. During the Lahore and Agra summits, terrorism was very much on. What India is looking for is at least a willingness to stop it. That does not seem to be there. Today, there seems to be no negotiating space left between India and Pakistan.

Responding to the suggestion on a fissile material cap, Prof S. Rajagopal noted that parity was an element of stability. As long as there were wide gaps in the holdings of fissile material, and there is no movement towards disarmament, a fissile material cap would be difficult to achieve, he said. Ambassador Lehman responded to the effect that his proposal calls for a cap on unsafeguarded fissile material, not an end to production, as long as it is safeguarded.

Conclusion

S tability is generally agreed to be a desirable component of 'world order' and the international system. Stability has been generally understood to be an absence of war and crisis situations. One can think of stability and instability as opposite ends of a spectrum, where at one end, is war, and at the other, a high degree of inter-State cooperation, characterised by close economic links (even a single currency), an overarching security framework which forms a 'security community' and some consensual political decision-making, rather like the current European Union. In between, one would have points denoting crises to 'normal' relations to close cooperation.

The aim of this project has been to explore the prospects for stability in what we have called a "nuclear sub-continent." In many ways, that begs the question, how much of the sub-continent's problems are related to the nuclearisation, overt or otherwise, of the area? There is also the additional fact that India – going not only by the explicit remarks of the Indian top leadership but the general feeling in both officialdom and among its people – believes that it is already at some sort of a war with Pakistan, because of the continued incidents of terrorism in Kashmir and elsewhere. This is where we most missed a Pakistani perspective on these issues. But as the preceding pages show, considerable inputs were provided by the American, Chinese, and Russian participants. India's own nuclear weapons programme has been marked by intense soul-searching and periods when the weapons programme was subordinated to other concerns, including an emphasis on civilian nuclear energy which existed right from the inception of the programme. Early Leaders like Nehru had serious reservations about nuclear weapons. By many accounts, Nehru was a sincere advocate of nuclear disarmament, and even today, disarmament thinking is deeply embedded in India's defence and foreign policy. No government in the last 50 years, however, found any incentives in the security environment to decisively abandon the weapons programme; on the contrary, Pakistan's nuclear weapons acquisitions which came to light in 1986 have only provided additional impetus.

The deliberations in the conference seem to indicate that realpolitik still rules the world. The unfortunate legacy of partition, wars with Pakistan, the 1962 conflict between India and China, meant that India had to drastically rethink what was in the early decades of Independence a relatively naïve foreign policy. The security concerns did not stop there. As a large developing nation with a huge population, it felt that it also had to think about its place in an international system where military power plays such an important role.

Has overt nuclearisation increased instability in the region? The editors do not think so, though many of the participants would not be in agreement. Nuclear deterrence has held – there have been no all-out wars, notwithstanding Kargil, and in spite of a million strong mobilisation in the first half of 2002. And interestingly, while the West is unanimous in believing that South Asia is a nuclear flash-point, such fears do not appear to have been expressed by non-nuclear weapon states in the region.

On the other hand however, everyone is in agreement that there are serious threats to peace in the region. The problems that remain are problems that existed prior to 1998. India sees Pakistan following a doctrine of prosecuting a covert war under a nuclear umbrella, evident not only in the continued sponsoring of militant activity, but in its public statements and frequent threats of nuclear action against India on a nonexistent escalation scale; this cannot be considered to be contributing to stability. The Indian view is that terrorist attacks on Indian soil, and routine murders of men, women and children cannot be glossed over as the doings of independent groups fighting for the "freedom of Kashmir."

Prospects for Stability in a Nuclear Subcontinent

The Indian response to this situation will obviously have a bearing on stability. Some Indian leaders may want to accept the status quo on Kashmir, notwithstanding a Parliament resolution laying claim to the whole of Kashmir, including territory occupied by Pakistan to the North of the Line of Control, and the territory known as Aksai Chin, held by China, to the North of the Line of Actual Control. For Pakistan, as noted earlier, Kashmir is the "unfinished agenda of partition".

It is a 50 years plus story. The Kashmir problem has not come to the fore because of nuclearisation. It was first fought over in 1947-48, just a few months into Independence. There is no doubt that Pakistan's clearly established strategy of destabilising the region in the hope of gaining an advantageous outcome is the main factor for serious instability. One cannot have stability between two countries, when one country actually does not want it – that is the unfortunate truth, as India sees it.

As for the international community - how much do they value stability in South Asia? Is there an asymmetry between the region's idea of stability, and that of the major powers of the international system? Arguments have been expressed in this conference about India's "hostility" to the nonproliferation regime. It cannot be stressed enough that India has adhered to NPT norms better than some of the NPT and P-5 states, right down to the implementation of safeguards regimes wherever mandated. It will be difficult to sustain the argument about an active hostility from India to the nonproliferation idea, if not to the treaty itself. India's nuclear programme has to be considered in the light of its security concerns and its energy needs, and in a situation where moves towards disarmament have been notional at best. Many do believe that civilian nuclear energy is going to become increasingly important for developing countries in an energy-starved future, and that a thrust on civilian nuclear cooperation under safeguards will help to de-emphasise the weapons aspect.

As for production of fissile material, India may be expected to keep it on-going, with its deterrent requirements in mind. India might want to join the weapon reductions regime when the nuclear weapon powers also lower their holdings to a similar level – it has agreed to be a party to negotiations for a fissile-material cut-off. There is, of course, no consensus in the international community on such a cut-off. In an uncertain world, it is difficult to see how India can agree to stop

Conclusion

producing fissile material when the weapon states hold huge stockpiles, which, for that matter, are unsafeguarded. India also predicates the future of its nuclear energy programme on closing the fuel cycle, which would entail reprocessing even for civilian purposes, which anyhow is acceptable under the proposed Fissile Material Cut-Off Treaty.

India does worry about the nonproliferation regime and the direction in which it is moving. Arguably, the NPT and other treaties have been successful in contributing to stability in that they have ensured that the inevitable spread of nuclear technology is slow rather than rapid, access to these technologies by non-State and so called rogue states is difficult although not impossible, and it has provided a mechanism, however inadequate, for the transfer of nuclear energy programmes to needy countries. On the other hand, the discriminatory structure of the NPT and its indefinite extension, its utter failure to ensure a move towards the disarmament the signatories are committed to, its even more appalling failure to prevent the clandestine transfer of weapons technology and equipment from P-5 states to both NPT and non-NPT states, have not contributed to stability.

The United States, as the most powerful state in the international system, can play an important role in the region. As many American commentators are themselves pointing out regularly in the American media and the scholarly community there, a continued strategy of essentially turning a blind eye to Pakistan's activities will likely prove counter-productive in the long run. American assistance to Pakistan, in that sense, is seen by India as one of the factors for instability in South Asia – though perversely it does appear that the presence of US troops in Pakistan has contributed to some tactical stability. One also wonders how much the dynamics of world arms sales contributes to instability in the region.

China's public stance of neutrality towards the region can be considered a positive factor in inducing stability. The fact remains however, that missile and nuclear assistance to Pakistan is a seriously problematic factor. Chinese officials like to state that military assistance to Pakistan is for Pakistan's defence. Defence against whom, however, and defence following what, is the important question.

As was brought out in the concluding session of the conference, there are many factors that can be looked at in considering measures to promote stability. Fears of dangers to the national integrity of Pakistan, if such fears are genuine, are actually easier to address, and a bilateral or even multilateral framework could be considered. Countering elements of strategic ambition however need to be thought out more fully. Measures to increase economic cooperation, and indeed mutual interdependence (like a gas pipeline through Pakistan), can follow the creation of such frameworks. Pakistan has made a public commitment to choke funding to terrorists, and international measures to ensure that this is seen through to its logical end would also be necessary. India would also need to augment its technological means to monitor and control infiltration on the border. Many of the other suggestions made during that session can also help, once the larger issues are addressed.

An immediate and important step towards stability concerns the question of designating the Line of Control as the International Border. This was not extensively discussed in the course of the conference. India and Pakistan have held their respective sections of Kashmir for more than 50 years now. The general perception is that there are Indian leaders who might find a conversion acceptable though India has officially stated that there is no question of "redrawing borders." A large number of Indians do appear to want such a solution, in the hope that such a concession would result in peace. There are also many who believe that this will be a sell-out, and a reward for Pakistani actions.

Pakistan on its part is hostile to the proposal mainly because it thinks this is what India would actually like, and appears to wish to acquire the Valley, notwithstanding the official stance of only supporting the cause of what it calls Kashmiri freedom. If the international community, especially the United States and China, want stability in the region, pressure from them on Pakistan to agree to a conversion might bear positive results. The United States officially considers the Kashmir region to be "disputed" but many American officials, including former President Bill Clinton, have called for both sides to respect the Line of Control, in effect, considering it a de facto border.

It would also be useful to push for a non-aggression pact in the region, something along the lines of the recent Kabul declaration signed by Afghanistan, Iran, Tajikistan, Turkmenistan, Uzbekistan, Pakistan, and China (the countries which have a border with Afghanistan). India is currently wary of such measures, for, like in the nuclear situation, it should not become an umbrella for continued covert aggression. Such a pact would thus most usefully follow only if the terrorism question is settled.

On the question of economic cooperation, India has accorded MFN status to Pakistan although the gesture has not been reciprocated. India will find it easier to increase economic links with a democratically governed Pakistan, or at least in a situation where the Kashmir issue has been de-emphasised to the extent where support to militant activities dwindles.

In such considerations, analysts are agreed that Pakistan's internal situation is a major factor. By all accounts, its economic fundamentals are weak, its politics are fractious, and fundamentalism looms large. A lot of the external aid coming in, especially from the United States, appears to be going towards the military. We are looking at the prospect of a state failing economically, politically, and socially, but with a strong and belligerent military. That is a recipe for disaster, and something that the international community will have to look closely at. That is the reason why it would become important to ask if a solution to the Kashmir problem would automatically increase stability in the region. It is unlikely to do so, which is why the entire gamut of structural issues mentioned earlier needs to be addressed. We come out of this conference with a feeling that stability in the region is under question and there is no clarity in what measures would really help. Many of the measures needed to usher in stability may not be even possible in the near future – but neglecting the problems will not make them go away.

There are many positive factors however, not least of which is India's clearly indicated desire for a stable and prosperous Pakistan. Pakistan's security framework of a permanent threat from India strikes Indian observers as realpolitik strategising, based on ambition rather than defence. In the final reckoning, it is the worldview adopted by India and Pakistan that will determine the future trajectory of strategic relations in the sub-continent.



List of Participants

Dr. Stanislav E. Barkovskiy Representative in India Ministry of Russian Federation for Atomic Energy Embassy of the Russian Federation New Delhi, India Email : bark@giasdl01.vsnl.net.in

Mr. Sridhar K. Chari Research Associate International and Strategic Studies Unit National Institute of Advanced Studies Bangalore, India Email : skchari@nias.iisc.ernet.in sridhar kchari@yahoo.co.in

Dr. Marco Di Capua Science Counselor Embassy of United States New Delhi, India Email : DiCapuaMS@state.gov

Mr. S. Gopal Associate, NIAS and Former Special Secretary, GOI Bangalore, India Email : gopal@blr.vsnl.net.in

Mr. Li Kaibo Institute for Applied Physics and Computational Mathematics Beijing, China

Ambassador Ronald F. Lehman Director Centre for Global Security Research Lawrence Livermore National Laboratory Livermore, USA Email : lehman3@llnl.gov

Dr. Victor N. Mikhailov Director Institute of Strategic Stability Moscow, Russia Email : iss@niiit.ru Prof. R. Narasimha Director National Institute of Advanced Studies Bangalore, India Email : roddam@caos.iisc.ernet.in

Dr. Vladimir E. Novikov (in absentia) Leading Researcher Russian Institute for Strategic Studies Moscow, Russia Email : mail@riss.ru

Prof. S. Rajagopal Homi Bhabha Visiting Professor International and Strategic Studies Unit National Institute of Advanced Studies Bangalore, India Email : rajgopal@nias.iisc.ernet.in

Dr. Raja Ramanna Director Emeritus-NIAS and Member of Parliament National Institute of Advanced Studies Bangalore, India Email : rr@nias.iisc.ernet.in

Air Cdr. (retd.) Jasjit Singh Director Centre for Strategic and International Studies Gurgaon, India Email : jasjit singh@vsnl.net

Dr. Sun Xiangli Associate Professor Institute for Applied Physics and Computational Mathematics Beijing, China Email : sunxiangli@mail.iapcm.ac.cn

Mr. Mikhail V. Zheleznyak Ministry of Russian Federation for Atomic Energy Embassy of the Russian Federation New Delhi, India

Mr. Alexander Zhgutov Institute of Strategic Stability Moscow, Russia Email : iss@niiit.ru

Selected Acronyms

ABM	Anti-Ballistic Missile
AMPT	Agreement on Maintenance of Peace and Tranquility
APR	Asia Pacific Region
ASEAN	Association of South-East Asian Nations
BMD	Ballistic Missile Defence
C3I	Command, Control, Communication and Intelligence
CCS	Cabinet Committee on Security (India)
CTBT	Comprehensive Test Ban Treaty
CBMs	Confidence Building Measures
DPRK	Democratic People's Republic of Korea
FMCT	Fissile Material Cut-off Treaty
IRI	Islamic Republic of Iran
INFT	Intermediate Nuclear Forces Treaty
IAEA	International Atomic Energy Agency
LOC	Line of Control (in Kashmir)
MFN	Most Favoured Nation
MIRV	Multiple Independently Targetable Re-entry Vehicle
MTCR	Missile Technology Control Regime
NPT	Non-Proliferation Treaty (Nuclear)
NPR	Nuclear Posture Review (US)
NPP	Nuclear Power Plant
NSG	Nuclear Suppliers Group
OSCE	Organisation for Security and Cooperation in Europe
PRC	People's Republic of China
QDR	Quadrennial Defence Review (US)
START	Strategic Arms Reductions Treaty (US-USSR)
SORT	Strategic Offensive Reductions Treaty (US-Russia)
VVER	Pressurised Water Reactor (Russian)

Errata

- 1. Pg 2, para 2, line 3: read Kashmir as Jammu & Kashmir
- 2. Pg 2, para 3, line 4: read global as bilateral
- 3. Pg 70, line 6 from below: read regime. Also, as regime, although
- 4. Pg 71 line 6 from top: read resolve disputes or secure consensus as resolving disputes or security concerns
- 5. Pg 107: line 6 from top: read Union of 25 states, 15 different languages as Union of 28 states, 18 different languages
- 6. Pg 109: line 9 from top: read would as world
- 7. Pg 139: Para 2, line 13, read 1959 as 1960

This book, which sets out to explore the prospects for stability in a nuclear sub-continent, brings together papers by top strategic thinkers from India, Russia, the United States, China, and Bangladesh, on Indo-Pak relations. The papers are drawn from those presented at an international roundtable conference at the National Institute of Advanced Studies in Bangalore, India, in September 2002. Also included are the intense and productive discussions that followed these presentations, and a critical introduction and conclusion. This volume is offered as a contribution to policy- and decisionmaking, and to international relations scholarship in general.

S. Rajagopal, Homi Bhabha Visiting Professor, heads the International and Strategic Studies Unit at the National Institute of Advance Studies. Sridhar K Chari is a Research Associate in the same unit.

ISBN 81-87663-44-8