

CHAPTER 14

SPECULATIONS ON THE FUTURE OF
NUCLEAR SOUTH ASIA

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The future of nuclear South Asia is inextricably linked to power and politics in Pakistan and India and to the global nuclear order. The conflict between India and Pakistan may be the most serious and imminent danger to the South Asian region and humanity over the next fifty years. Over this period, India and China will continue their rise as great powers and rivals, even if they do not become peers of the United States. This will ensure that Pakistan remains at the heart of regional and global politics for decades to come.

The dynamics of the still evolving India–Pakistan nuclear relationship will be critical. This relationship is, of course, increasingly a part of a larger set of strategic relationships involving the United States and China. At the same time, Islamist politics in Pakistan, which may gather strength in coming decades, seeks to more directly confront India and the West. We look in particular at the risk of nuclear war and of nuclear terrorism. We consider also how India and Pakistan might respond to the renewed global effort to eliminate nuclear weapons.

NUCLEAR DYNAMICS

The nuclear arms race between Pakistan and India is an expression of a deeper conflict that has shaped the national narratives of the two countries. The wars of 1948 and 1965 over the status of Kashmir and the 1971 war over East Pakistan—which saw India intervene and inflict a decisive defeat on Pakistan—entrenched the idea, especially in Pakistan, of the hostile ‘other’ across the border. India’s first test of a nuclear weapon came soon afterwards, in 1974, and

drove Pakistan to press ahead with its own nuclear capability. Six decades of almost unremitting hostility has both limited their economic, political and cultural ties as well as prevented any substantial process of South Asian regional integration from gaining hold.

Nuclear weapon policies seem to have hardened in recent years and the South Asian confrontation seems set to endure, with limited prospects for any kind of long-term restraint or *détente*. Today these two South Asian countries are locked in an open-ended hostile competition to continuously upgrade and expand their nuclear arsenals.

India clearly seeks to become a major nuclear power. In July 2009, it launched its first nuclear-powered submarine and plans eventually to deploy possibly five of these submarines. In May 2012, the Indian Defense Minister announced that, 'The strategic indigenous submarine . . . would be inducted by the middle of next year.'¹ India is also developing an array of long range missiles that will allow it to project power. In April 2012 India test-launched *Agni-V*, a new 5000-km range missile able to strike the Chinese cities of Beijing and Shanghai.² Design work has started for an *Agni-VI* inter-continental ballistic missile with a range of 8000 km to 10,000 km that could carry up to 10 warheads each, to be ready for testing by mid-2014.³

With far fewer resources, both technical and economic, Pakistan has been seeking to increase the size of its nuclear arsenal and to maintain some kind of parity with India. It is building new plutonium production reactors and expanding associated fuel and processing facilities. The lifetime of all these facilities may well be of the order of forty years or so.

The nuclear arsenals held by Pakistan and India are widely believed to be around hundred weapons each. It has taken four decades for them to reach this size. It is possible that these arsenals will increase in the next two or three decades to several hundred weapons each, comparable in size to the current arsenals of Britain, China and France.

For both India and Pakistan, as for other countries, making nuclear weapons and their delivery systems is becoming easier with time, and cheaper. Modern technology is highly modular and detailed knowledge of scientific principles is no longer vital. Scientists are only marginally necessary; engineers suffice to make working nuclear weapons.

Computer-controlled precision lathes and other machines have made reverse engineering of mechanical parts easy. No longer is 'rocket science' a correct expression for indicating scientific complexity. This, along with help from China, is why Pakistan has succeeded in building up its nuclear arsenal.

Nuclear weapons have not displaced conventional arms. India is planning to spend as much as \$55 billion on weapons over the next five years.⁴ As India's economy continues to grow at very high rates, its military spending will continue to increase. India already has the eighth largest military budget in the world.

For Pakistan, defense spending for 2010–2011 was almost \$8 billion, a 30 per cent increase over 2009, and amounting to 21 per cent of the total budget.⁵ It has signed arms sales agreements worth over \$6 billion since 2001, including for new U.S.-built F-16 jet fighters. China, an old ally, is also supplying the country with jet fighters and other weapons.

In both India and Pakistan, which are still very poor countries, the very large commitment of funds to nuclear and conventional arms suggests that the nuclear-military-industrial complex is likely to grow stronger. This will make it more difficult to restrain military competition and associated spending in coming decades in either country.

A continuing India–Pakistan arms race, episodic crises and the nuclear shadow will ensure that South Asia as a whole will remain unstable. For twenty-five years the India–Pakistan conflict has frustrated the hopes underlying the creation of the South Asian Association for Regional Cooperation (SAARC). The SAARC charter declares that, 'the objectives of peace, freedom, social justice and economic prosperity are best achieved in the South Asian region by

fostering mutual understanding, good neighbourly relations and meaningful cooperation among the Member States.' Without ending the India–Pakistan conflict, it may prove impossible to build the kind of effective South Asian community required to address the growing political, economic, social and ecological crises expected in the region in the coming decades. Looking forward, one small basis for optimism may be Pakistan's decision in 2012 to finally reciprocate 'Most Favoured Nation' (MFN) status with India.

REGIONAL NUCLEAR POLITICS: CHINA AND INDIA

India's relationship with China is different in some key regards from that between Pakistan and India. It is, on the one hand, less overtly hostile and free from the kind of tension and belligerence that makes a Pakistan–India confrontation an ever present possibility, and at the same time the two Asian giants are bound together by increasing trade and commerce.

India and China have disputes, and although no Kashmir-like dispute exists, regional ambitions create tensions which are exploited by ultra-nationalists. The two countries have had competing territorial claims in Arunachal Pradesh and Aksai Chin, especially since the 1962 India–China border war. This dispute has fuelled intense nationalism in both countries. They are seeking to address these problems. In July 2009 China and India concluded their thirteenth round of border talks with a wide range of agreements including the installation of a hot line between the Chinese and Indian capitals. In March 2012, they agreed on a detailed protocol to deal with border clashes.⁶

India and China also are serious competitors for global markets and global prestige. But this is compensated for by their rapidly growing bilateral trade. In 2011, India–China trade was over \$70 billion, a growth of almost 25 per cent since 2010. In comparison, India and Pakistan mutual trade—discounting smuggling and third party trading—was about one to two billion dollars annually in 2011.

Military leaders in India are seeking to make China the centre of their long term strategies, plans and procurements. General Deepak

Kapoor, India's army chief and Chairman of its Chiefs of Staff, created a minor storm in 2010 after declaring that he wanted to be able to fight a two-front war against Pakistan and China.⁷ This has involved purchases of over half-a-billion dollars worth of weapons that could be deployed to the mountainous Indian border with China.⁸

The Indian navy for its part wants to be able to project power far beyond the Indian Ocean. In a June 2012 speech, Admiral Nirmal Kumar Verma, Chief of Naval Staff and Chairman of India's Chiefs of Staff, pointed out that the Indian navy is expanding regarding how it deploys ships, observing that with, 'some of our ships are on their way back from a deployment to the South and East China Seas while some others are on their way to the Mediterranean.'⁹ Admiral Verma also highlighted India's globe-spanning joint naval exercises, including MALABAR with the United States Navy; VARUNA with the French navy; KONKAN with the British Royal Navy; INDRA with the Russian navy; SIMBEX with the Singapore navy; and IBSAMAR with the South African and Brazilian navies. China is notable by its absence. The launch of the Arihant nuclear submarine was another step in the direction of power projection. Once the Arihant is inducted, India will become the sixth operator of nuclear submarines in the world, after the United States, Russia, France, Britain and China.¹⁰

China has also been cited by Indian policy makers as a driver for India's nuclear weapons program. In May 1998, Prime Minister Atal Behari Vajpayee wrote a private letter to President Clinton justifying India's nuclear tests that were conducted month, claiming that China was the reason since it was 'an overt nuclear weapon state on our borders, a state which committed armed aggression against India in 1962.'¹¹ Eleven years later, a controversy erupted when a senior Indian government technical expert, K. Santhanam, claimed that in the May 1998 test the thermonuclear weapon (hydrogen bomb) did not work as designed and that India needed additional nuclear weapons tests to ensure it had a reliable H-bomb, specifically

to counter China.¹² Additional nuclear tests could speed India's quest for thermonuclear weapons arsenal comparable to China's.

India's quest for nuclear parity with China also may have played a role in Indian interest in a special strategic relationship with the United States, codified in the January 2004 Statement on the Next Steps in Strategic Partnership, under which the U.S. and India agreed to cooperate on civilian nuclear activities, civilian space programs, high-technology trade and missile defense. The controversial U.S. India nuclear deal, signed into U.S. law in 2008, may serve to boost India's bomb-making capacity, by allowing India to freely import natural uranium and hence can divert its scarce domestic uranium resources to its military reactors.¹³

REGIONAL AND GLOBAL DYNAMICS

The future of nuclear South Asia is increasingly wrapped up in great power politics. For six decades, the United States has sought to have India become part of its strategic and economic plans for Asia especially as a counter to China. In the early years, the U.S. hoped that India could serve as a pro-western capitalist democracy able to compete with communist China, which had its revolution in 1949; two years after India won independence.

In recent years, as China's economy has boomed, it has emerged as a potential great power competitor to the United States. Thus the U.S. has pressed again to recruit India. Indian leaders, for their part, have seen an opportunity to use a new relationship with the U.S. as a way to drive India's rise as a major power. The changed U.S.–India relationship was formalized in the 'Next Steps in Strategic Partnership' agreement of January 2004. A U.S. senior official announced that, 'Its goal is to help India become a major world power in the 21st century. . . . We understand fully the implications, including military implications, of that statement.'¹⁴

As India builds up its military capacity, with U.S. help, Pakistan will rely even more on China for military assistance. This four-cornered arms race can probably be sustained at a very high level in the decades ahead. The Goldman-Sachs BRICS projections of the

future growth of the economies of Brazil, Russia, India and China, suggest that by 2050, India will have a GDP comparable to that expected for the United States (over \$37 trillion dollars), and half that expected for China. Pakistan is projected to have a GDP in 2050 that is fourteen-fold greater than in 2010.

An additional regional factor in the nuclear dynamic is the possibility that Iran may decide to turn its search for a nuclear weapon capability into a fully-fledged nuclear weapon program. It is worth recalling that both India and Pakistan acquired the capability many years before they made the decision to build an actual nuclear arsenal.

NUCLEAR RISKS AND CONSEQUENCES

The crises and wars that marked the first fifty years of India and Pakistan have not faded with the coming of nuclear weapons. Major crises and a war followed the 1998 nuclear tests, and crises will continue to recur, and with them will come the risk of war and the possibility of escalation into nuclear war. The new danger is that of nuclear terrorism.

Pakistan's leaders have made it clear they are prepared to use nuclear weapons first in any conflict; they hope this threat will prevent war, because they fear being overwhelmed by India's conventional military might if war should happen. While India has offered an agreement for no-first use of nuclear weapons, its armed forces seem prepared to try to destroy Pakistan's nuclear capability before it is used, and seek their own capability to launch a nuclear attack if they believe that enemy nuclear missiles are armed and ready for launch. Pakistan, in turn, may seek to pre-empt such a situation by using its nuclear weapons even earlier in a conflict rather than risk losing them in a massive, rapid Indian conventional assault that India has war-gamed as part of a strategy it dubs 'Cold Start'.

The experience of Hiroshima and Nagasaki showed that a single nuclear weapon can devastate a modern city. About a hundred thousand people died in each city, but people living a few miles away

from these cities were not affected directly and so were able to shelter refugees and provide some assistance to the injured. It is unlikely that nuclear war between India and Pakistan would involve only the use of a single nuclear weapon. Even if each side used only five weapons each, and targeted cities, they would kill on the order of three million people and injure at least as many (see chapter: 'What Nuclear War could do to South Asia'). Relief and recovery from such destruction would be beyond the capacities of either country. The other countries in the region have few resources they could divert. The broader international community would be stretched thin to manage the recovery effort.

A larger India–Pakistan nuclear war would devastate South Asia and much of the world. Recent studies looking at an India–Pakistan nuclear conflict in which they used fifty weapons each found that the smoke produced by burning cities would spread to cover the South Asian region within five days; in nine days it would begin to encircle the world and cover the earth in less than two months. The smoke would darken the sun for as long as a decade, cooling the Earth's surface and causing drought that would devastate global agriculture.¹⁵ This possibility should give new urgency to South Asian regional efforts and broader international efforts to have India and Pakistan restrain their arms race and war plans, and move towards a more cooperative and peaceful relationship.

The other grave nuclear danger facing Pakistan and India is nuclear terrorism. Today, with 90 to 110 nuclear weapons spread across Pakistan and fissile materials produced or processed at numerous locations, the threat from religious extremists—both from outside as well as inside the nuclear establishment—is also very real, albeit unquantifiable. It is known that the Al Qaeda leadership met with sympathetic former senior scientists in Pakistan's nuclear weapons program. By engineering a nuclear catastrophe in some Western city, Osama bin Laden and his disciples dream of provoking a nuclear response from the U.S. that would rally new supporters to their cause and unleash a final showdown between the West and the Muslim world.

It is not just the United States but also India—and Pakistan—that need to fear nuclear terrorism. London or New York may be the preferred targets for Al Qaeda militants but Islamabad and Delhi may be much easier. If a retaliatory nuclear response from India on Pakistan's cities is triggered, this would be the fulfillment of a dream to ignite the ultimate conflict that would destroy both *kafirs* (unbelievers) and *munafiqs* (Muslim hypocrites). Along with India and the West, the radical Sunni interpretation of Islam that drives the Islamist militancy in Pakistan treats Shi'a Muslims as an enemy. A radical Islamist takeover in nuclear Pakistan could push Iran to take the decision finally to build a nuclear weapon and create a deadly new nuclear confrontation.

The origin and nature of the Islamist militancy in Pakistan ensures that it will be an inter-generational process and will shape Pakistan and the region's future for at least the next fifty years. In the 1980s, the military regime of General Zia, Pakistan's Islamist parties, Saudi Arabia and the United States created a generation of radical young Afghans and Pakistanis committed to jihad. The madrassas that trained these militants continue to operate and are the only schools for many hundreds of thousands of boys and girls still in their teens. The militant worldview they learn will guide their thinking for decades.

TOWARDS NUCLEAR DISARMAMENT—IMPLICATIONS FOR SOUTH ASIA

Pakistan is at the heart of nuclear fears for much of the international community. The 11 September 2001 attacks on the United States raised fears of nuclear terrorism by Al Qaeda. The beginnings of the 21st century also brought new concerns about the spread of nuclear weapons materials and knowledge on the black market. In 2003, A.Q. Khan was revealed to have trafficked key nuclear weapons technologies and weapon designs from Pakistan's program to Iran, Libya and North Korea, and possibly others. These developments have added new urgency to the long-standing goal of eliminating nuclear weapons.

These concerns are shared by all the great powers. In September 2009 a unanimous United Nations Security Council resolution declared: 'We are all committed to seeking a safer world for all and to creating the conditions for a world without nuclear weapons.'¹⁶ But the abolition of nuclear weapons may not come soon. In his 2009 Prague speech calling for abolishing nuclear weapons, President Obama stated that the goal of eliminating nuclear weapons 'will not be reached quickly—perhaps not in my lifetime.' Secretary of State Hillary Clinton has pushed the prospect of disarmament further back, arguing, 'We might not achieve the ambition of a world without nuclear weapons in our lifetime or successive lifetimes.'¹⁷ Even the most ambitious nuclear disarmament effort, led by the international campaign known as Global Zero, imagines the final elimination of nuclear weapons only by 2030.

A South Asian Nuclear-Weapons-Free Zone (SANWFZ) offers one way to pressure Pakistan and India to restrain their nuclear ambitions and build a stronger South Asian regional community. Initially such a treaty might include only Sri Lanka, Bangladesh, Nepal, Afghanistan, the Maldives and Bhutan. A treaty would permit these countries to exert official and popular pressure on Pakistan and India to disarm, strengthen nuclear-disarmament movements in these countries, and offer the two governments a path back from the nuclear abyss if political circumstances improve. There are Nuclear-Weapons-Free Zones in Latin America, the South Pacific and Southeast Asia, Africa and Central Asia, which commit countries in these regions to not acquire nuclear weapons.

READING A CRACKED CRYSTAL BALL

It is an exercise in grand speculation to imagine in any detail what South Asia may be like in 2060. Nonetheless, it seems likely that the struggle between India and Pakistan will continue. Elites in both countries, for different reasons, seem determined to build-up their nuclear arsenals and conventional forces and accept the high economic, political and social costs of their confrontation, and live with the risk of nuclear war.

The geopolitics will be complex and unstable. United States and India may together seek to balance and contain Chinese power and influence. China may increase its support to Pakistan to help offset India. The United States may be compelled to aid Pakistan to prevent it from being overwhelmed by Islamist forces. The arms race could be fierce, and given rapidly growing economies in China and India, involve massive expenditures, especially in high-tech conventional weapons. Less likely perhaps is that America and Russia move decisively towards abolishing nuclear weapons. Britain, France and China would join them, and India and Pakistan may have no choice but to go along.

The India–China economic rivalry may become the most important concern for India. Knowing that Pakistan, aided by China, will be a thorn in its side, India could make significant concessions to Pakistan on Kashmir and the increasingly charged issue of allocation of the water of the Indus river. If Pakistan is able to end the Islamist militancy, détente could change into the long-awaited rapprochement between Pakistan and India. This could open the door for a process of South Asian regional integration finally to take hold.

It is as likely, however, that the Pakistan army's narrow interests will keep it committed to the struggle against India, regardless of cost and consequence. In a replay of the U.S.–Soviet race, Pakistan could break its back trying to keep up with India. The South Asian region would fester as the two countries wrestle for advantage in every forum. Left unchecked, it would result in the economic, political and social collapse of Pakistan, which would unleash chaos. Under such circumstances, it is possible to imagine that the jihadis may capture a nuclear weapon. A fearful India and United States would intervene, raising concerns in China. The prospect of great power conflict would loom.

The nightmare scenario is that Pakistan's generals, faced with collapse, decide to threaten nuclear war. As the Cuban Missile Crisis showed fifty years ago, in the midst of crisis, there is fear, miscalculation, errors of judgment, flaws in command and control,

and simple bad luck, and any of them could trigger a nuclear war. The subcontinent's cities would become radioactive ruins. Tens of millions would die. The pall of smoke would darken the world and become a global calamity.

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