NUCLEAR POWER AND HUMAN SECURITY

Itty Abraham

Where are we now? At the present moment, there are a number of very real dangers that lie ahead for the people of India and Pakistan. Some have been the stuff of expert commentary both in the sub-continent and in the west—the possibility of war over Kashmir leading to the use of nuclear weapons, the absence of secure command, control, communication and intelligence facilities increasing the danger of weapons being used in error or miscalculation, the small number of weapons on both sides producing a logic of 'use them or lose them,' the chance of accidents and mishaps leading to nuclear detonation, the possibility of pre-emptive strikes, and so on. While not discounting any of these and other prognostications, the greater danger in my view is that we get trapped in a conceptual box bearing the stamp, 'Made in the Cold War.'

As the outlines of an explicitly nuclear South Asia take shape, the only thinking that seems possible comes from the experience of the Cold War. We see this in a number of ways: recounting the similarities and differences between the India-Pakistan relationship and the USA-USSR as a way of explaining why nuclear conflict is more or less likely in South Asia, borrowing strategies and ideas that are supposed to have reduced tensions between the superpowers, or more insidious, the USA offering incentives to India and Pakistan not to go further down the nuclear road which replicates the unequal international structure of that period. But why is mimicking the Cold War experience the correct path to take?

Cold War Realists

Do we really want to end up where the USA and Russia are now—with thousands of missiles still pointed at each other, with merely a small number of warheads removed from missiles still in their silos, with nuclear weapon armed submarines still cruising underwater, with arsenals still stacked with nuclear tipped artillery shells, with new sub-critical and hydrodynamic testing facilities coming into being, with testing ranges still open and ready for use, with thousands of nuclear scientists still employed by weapons labs: how can an end like that seem like a solution? To which problem is it a solution?

The seduction of the Cold War (and its 'end') is what unites the glee of Indian right-wingers who have now found their masculinity and the cold-blooded approval of the votaries of 'political realism,' both here and abroad. The conclusions they draw from an uncritical acceptance of a particular understanding of the political history of the last half century can be reduced to these: for the realists, nuclear weapons provide the ultimate security of the state, and, a stable condition can be achieved between nuclear rivals through the import of the logic of deterrence. For the formerly emasculated, every country desires nuclear weapons because countries with nuclear weapons are the ones that count. India's destiny lies in possessing nuclear weapons because it is a great civilization. Are these statements as self-evident as they are made out to be?

It is easy to dismiss the presumptions of the raw nationalists of the right. First, it is a logical fallacy to assume that because all the present permanent members of the Security Council have nuclear weapons, possession of nuclear weapons will entitle any country to a permanent seat on the Council. The world now measures international influence in other ways. Second, not every country desires nuclear weapons. Two countries in a somewhat similar position to India and Pakistan, Brazil and Argentina, have recently given up their fairly well developed nuclear programs. It is not a coincidence that this was done at the moment when the military regimes that had dominated both countries for much of the post-war period finally returned to their barracks. South Africa's former apartheid regime did the same—renounce nuclear weapons—in its historic transfer of power to the black majority. But, it could be said, perhaps these are special conditions. What about Australia and Sweden, both of which had active nuclear programs, but gave up the search for weapons in the 1950s? What about Japan and Germany, both of which have large scientific communities and who sit on large stocks of fissile material: neither show signs of developing weapons programs. What about the other 40 countries around the world that could do it but have not? There is no truth to the assertion that those that can do it, will, or that international acclaim and respect follows those who are acknowledged nuclear powers.

Remember that during the 1995 Non-Proliferation treaty negotiations, the nuclear powers were forced by non-nuclear countries to accept the importance of Article VI, the demand that nuclear powers work toward general disarmament, as a condition of the treaty's indefinite extension. Recall also the international fury that ensued when France blithely set sail toward the South Pacific to run a series of nuclear tests before signing the Comprehensive Test Ban Treaty: the reaction so shocked the French establishment that they hurriedly cancelled their last few tests claiming they had all the data they needed.

Nuclear Deterrence?

What about the 'realists' who want to copy the actions and rhetoric of the nuclear powers? The condition that is supposed to have prevented war between the USA and the USSR during the Cold War is based on the horror of the destructive potential of these weapons. Whether for those who believe what happened in Hiroshima and Nagasaki in 1945 was so terrible that it should never happen again, or for the nuclear strategists, who believe that no government would be so irrational as to risk massive destruction of its own people in order to pursue belligerent aims

against another country, the present system is built on the premise that nuclear weapons cannot be used. That simple hope is the basis of 'successful' nuclear deterrence between the USA and the USSR/ Russia.

But remember, 'successful' nuclear deterrence does not make conventional warfare less likely. If anything, the historical record shows that the nuclear powers, successfully deterred from dropping missiles on each other, continued to fight each other through a variety of surrogates, in Africa, Latin America and Asia, for nearly half a century. The price for the Cold War was paid with the lives of black, brown and yellow people—not a sign of success if you lived anywhere other than the USA or USSR. For India and Pakistan, there's nowhere else to go, or, nuclear weapons on both sides says nothing about the likelihood of peace breaking out. Rather, the presence of nuclear weapons may make policy makers more sanguine about resorting to conventional and unconventional forms of warfare.

The moral sanction of not using nuclear weapons because of their destructive power is soon trumped by the peculiar form of 'rationality' that becomes the norm for strategic discourse once nuclear weapons are in place. As nuclear war fighting plans are drawn up, policy makers are 'rationally' led to make calculations on the basis of the threat potential of relative destruction. Does a destroyed Karachi equate to a destroyed Bombay, or should New Delhi be added in order to make the relative loss to each country the same, they ask each other. Are nine million Indian dead the same as one million Pakistani dead, given the population differentials of each country? That even asking questions like this betray a fundamentally immoral condition is soon forgotten once the rational game theorists and strategic thinkers start ruling the roost.

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What deterrence promises is a condition where an absurdly heightened state of fear is seen to be the only way to maintain the status quo: it normalizes pathology. For example, the lesson of the Cuban Missile Crisis is not how tough US president Kennedy was in making the Soviets back down, or how cleverly Krushchev saved Cuba from US invasion, rather it is how easily a situation like that emerged, and how difficult it was to back away from the crisis. When the measure of international stability becomes an exchange of threats and counter threats, we are always already in a state of crisis. As we get deeper into the nether world of deterrence thinking, policy makers will agonize over whether the signals of threat escalation are being read clearly by the other side: that uncertainty will lead to greater insecurity on both sides as time goes on. And, when the state of security is reduced to the intangible feeling of how willing someone is to push the nuclear button—the reliability of the threat—sooner or later, the button will be pushed.

Western-style deterrence thinking is a call for extremists on both sides of the border to come to center stage, because their threats are more credible to the other side. When we accept deterrence as the mechanism to keep war from breaking out, we leave ourselves permanently hostage to the whims and fears of men whose names we don't even know, whose mental state is never quite assured, and whose own sense of masculinity is always in doubt. We will not even be told when the two countries go to the brink of war, because national security concerns are at stake. Deterrence thinking helped perpetuate the Cold War; it legitimized the production of more weapons of ever-increasingly destructiveness. Deterrence knows no way of ending a hostile stand-off, only its management. Deterrence cannot help us move toward a safer and more secure existence and hence it must be rejected.

In sum, I believe that nuclear weapons and their associated ways of thinking have become internationally sanctioned means for political leaders to avoid dealing with ongoing conflicts, whether real and imagined. The immediate task is to prevent nuclear weaponization and deployment in South Asia. But we can only do that if we know where to look and how to understand what we see.

In this context, it is necessary to remember that for the most part western strategic thinking followed advances in weapons technology, not the other way around. Contra the sanitized versions of US Cold War history that make it appear that a grand strategic plan was set in motion after the second world war to contain and defeat the Soviets, in fact, a far more ad hoc system was the norm. Weapons developers and university scientists, driven by huge budgets and a culture of technological one-up-man-ship, were principally responsible for the shift from a deterrence strategy called "counter-value," with population centers as principal targets, to "counter-force" strategies, a far more dangerous option which could take away an opponent's second strike capability, and thus increase the chances of war. By their focus on increasing the power, accuracy and efficiency of first bombs, then missiles, and now lasers and other anti-missile devices, scientists forced the strategists to come up with new ways of rationalizing their technical accomplishments into a new equilibrium of terror. Once new generations of weapons were built, strategists worked hard to develop new iterations of old theories. It would not be inaccurate to say that the greater foes of arms control between the Soviets and the USA were not each other, but their own scientists and weapons developers. Is it any different in India?

Nuclear Complexes

The problem of nuclear weapons is larger than its purported role in international relations. We need to understand, first, that the nuclear crisis in South Asia is part of a larger global crisis, which is the existence of huge arsenals of nuclear weapons in

a number of countries; second, that only domestic pressure will be sufficient to close these nuclear complexes down, international treaties are necessary, but not enough; and third, that those who have the most to fear from these arsenals are the domestic populations of nuclear weapon states.

Let me focus on this last point. Nuclear complexes across the world constitute, apart from their destructive potential, a continuing source of danger to the populations they are meant to serve. We have seen, for the last fifty years and across the world, the cost of nuclear decision-making for popular security and well-being. We have documentary proof that US and Soviet nuclear scientists exposed human subjects and soldiers to nuclear radiation, that unprotected casual laborers were used to clean up radioactive leaks and spills in India, that serious environmental and human disasters were caused by accidents in nuclear power reactors all over the world, that aboriginal people in Australia and Native Americans were pushed off their homelands when uranium was discovered there. At the same time, we hardly know about the means by which highly contaminated nuclear wastes will be stored until safe to dispose of, the extent of genetic mutation and radiation sickness among populations in the neighborhood of reactors, mines, and testing grounds, or about the huge and scarcely accounted amounts of resources that have been expended on these complexes over the last five decades. It must be noted also that when most of these cases were exposed, the first response of those in charge were cover-ups, stonewalling, denials, and attempts to intimidate and coerce the victims.

The privileging of scientific expertise produces a sense of infallibility.

These problems are not the result of the actions of a few misguided individuals. The kind of behavior that the nuclear complexes of the world induce is built into the constitution of modern, large, capital intensive technological systems. The scale, size, and complexity of these systems-from nuclear power stations, large dams, chemical factories and oil supertankers to intercontinental airplanes and their associated sub-complexes of airports, stations, pilots and traffic controllers, etc.-bring with them two things. For all their superb engineering and the material ease they make possible, the size of these complexes also entail a scale of destruction and damage that is beyond most imagining; more important, they carry a built-in danger of breakdown and failure due to their very complexity. Indeed, we have developed entirely new notions of risk and uncertainty, in both actuarial and phenomenological terms, in order to cope with the dangers embedded in these systems.

These systems are, of technical necessity, extremely centralized and hierarchical in organization, involving small numbers of highly trained skilled workers and expert managers to run them. Information flows are carefully coordinated and only run along approved circuits. The difficulty of maintaining this rigorous system requires constant policing of the boundaries of the complex. Endless screens are set in place to prevent the intrusion of extraneous factors: whether environmental or infrastructural. However, due to the complexity of these systems, this policing is directed not towards eliminating all potential sources of disaster, but reducing the inherent likelihood of failure to 'acceptable levels.'

The public is rarely or never consulted about the trade-offs embedded in the definition of 'acceptable levels' of risk, about failure rates, or international standards of fault tolerance. Rather, once a system is in place, the lay public must be kept at bay for their foolish, uninformed concerns constitute a threat to the ongoing efficiency of the system. Over time, and especially as system failures are limited or managed in-house, the distance between those within and without the system grows. The privileging of scientific expertise produces a sense of infallibility: this eventually becomes a license to claim a superior understanding of the common good. Of necessity, restricting information-secrecy-becomes the standard operating procedure of these systems.

With a number of the more every day technological complexes, the public has developed an ad hoc consensus for trusting their functions and accepting their costs. At various moments, especially just following a major disaster—an air crash, tanker spill, or reactor meltdown—the public has been drawn into expert discussions about the conditions under which the functioning of these systems takes places. Even if the public is not polled about its opinions, it is represented in the discussions: as victims of these catastrophes, if nothing else. The interiors of these black boxes become partially visible in a crisis, creating over time a tacit social understanding which helps absorb the fear of their presence. But with the nuclear power complex that is not possible.

Nuclear power, apart from epitomizing all the centralized, hierarchical and concentrated tendencies of large technological systems, is always clouded in the public eye because of its association with national security. From its arrival in the world, nuclear power's first association was with massive destruction, a destruction that soon became identified as the defining feature of national security. Since then, even when associated with peaceful uses, as with producing electricity, nuclear power carries with it the trace of its original sin. We know only too well from the Indian experience, public scrutiny is habitually rejected, ridiculed, or denied through the exaltation of expert knowledge, imposition of definitions of risk and efficiency that favor these systems, or by the invocation of larger social interests. The most opaque and powerful of these larger interests is national security.

What Next ?

Where should we go? Even as the BJP government's definition of real and imagined threats to national security is being contested on many fronts, other tasks need to be taken on.

The first step to breaking the chain leading to nuclear disaster lies in far greater domestic oversight of the nuclear and space complexes-India's 'strategic enclave.' The current omnibus legislation that insulates the atomic energy complex from all scrutiny needs to be replaced by more specific, targeted laws that recognize the public's right to know what goes on in their name. Given the Lok Sabha's historic lack of will to take on the task of oversight, an independent commission staffed by judges, scientists, economists and doctors needs to be set up to conduct a complete social accounting of the Indian strategic enclave. This commission must be given access to all official records and data and allowed to conduct its own interviews with those within this enclave as well as affected by it. Apart from informing us what has been done with the enormous funds spent on this sector, public accountability for decisions taken over the last fifty years will finally become possible.

These activities must be carried out in conjunction with citizen's groups from around the world, especially in the declared nuclear weapons states. Names of military scientists and weapons developers from around the world must be made public, so as increase pressure on them to relinquish these activities and to remind them that they are being constantly monitored. Pressure must be put on national legislatures to ratify signed treaties. A parallel system of verification of weapons states' treaty obligations by domestic groups with the necessary expertise to carry out scientific studies and publish reports must be created. Countries like China without internationally credible domestic monitors must be pressured to permit teams of international observers from non-nuclear weapons states to verify treaty compliance. This set of linked activities will not be complete until internationalized, but need not wait until the whole system is in place. The people of India can take the lead.

Dr. Itty Abraham is the author of the forthcoming book, ***The Making of the Indian Atomic Bomb: Science, Secrecy, and the Postcolonial State,*** *(London: Zed Books).*

MAPS

Lost on the confusing journey to
womanhood
there were no charts to
guide her
only a mass of streets
without signboards
crossroads without
arrows.
Having no map of her own
she took the road that
looked right
Sounded familiar
"marry a good man
who will take care of
you".

Now, abused and
old at twenty nine
she asks the wizened
fortune teller,
predictor of futures
what he sees in her
Callused palm;
He says with a sigh
"There are so many lines,
so many worries-you will
have, you are having
so many troubles".
These lines on your hand
Are like roads of
a city without maps.

Vivimarie Vander Poorten