

Could Anything Be Done To Stop Them?: Lessons from Pakistan

A Paper for the Nonproliferation Policy Education Center

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This essay briefly narrates the basic story of Pakistan's quest for nuclear weapons and the U.S.-led international community's failure to end it. The *detailed* story remains unknown outside of a few individuals in Pakistan, many of whom are now dead. U.S. intelligence archives also contain bountiful details unavailable to me. Hence, this is the Disney version of the story.

The public record indicates that there was no magical moment when a particular covert action could have been taken, or a breath-taking policy decision made that would have caused Pakistan to abandon its nuclear enterprise full stop. If the "private" record affirms this assessment, then the Disney rendition allows us to derive useful lessons (morals?) from the Pakistan nuclear story. That is, there was no silver bullet action that could have diverted Pakistan from acquiring nuclear weapons, but this still leaves open the question whether a steady strategy of multiple thrusts could have changed Pakistan's course fundamentally. This is what I attempt to explore in the second half of the essay.

It is difficult to say precisely when Pakistan's nuclear quest began. We do know that the first Indian nuclear test in 1974 did *not* start Pakistan on its quest, as Pakistani propagandists used to insist. A seminal episode was the January, 1972 meeting in the Chief Minister of Punjab's home in Multan, where Prime Minister Zulfikar Ali Bhutto reportedly exhorted a gathering of Pakistan's nuclear technology establishment to produce a fission bomb in three years, as the Americans had with the Manhattan Project. Bhutto said he would spare no expense in helping them do it.¹

The timing was telling. Pakistan was still bleeding from the amputation of half its former self: civil war in 1971 had just severed East Pakistan from West Pakistan: the eastern part became the independent country of Bangladesh. Bhutto, convening in the Punjabi heart of West Pakistan, was launching the bomb initiative only a month after the ignominious defeat of the Punjabi-dominated government and Army at the hands of unmartial Bengaliis and their Indian supporters. Nuclear weapons would rebuild Pakistan's strength, heal its wounds, buttress its pride, and ensure better results in a future war. (The 1971 defeat followed unsuccessful Pakistani military campaigns in 1948 and 1965).

If nuclear weapons could equalize Indian power, Bhutto also felt they could equalize his personal power with that of the always-dominant Army. By inaugurating and overseeing the nuclear weapon program Bhutto would control an asset as strategically

¹ Shahid-ur-Rehman, Long Road To Chagai (Print Wise Publication, Islamabad, Pakistan, 1999), p. 18.

meaningful as the instruments controlled by the Army, a form of internal balance-of-power politics.

But a wrinkle should be added to the story here, a bit of back-story. In October 1964, China conducted its first nuclear weapon test. Days later, on October 24, the chairman of the Indian Atomic Energy Commission, Homi Bhabha went on All-India radio and gave his countrymen a professorial lesson that “atomic weapons give a State possessing them in adequate numbers a deterrent power against attack from a much stronger State.” He mentioned the remarkably low cost of a stockpile of fifty “atomic bombs” -- \$21 million, an example of the perennial false salesmanship of the Indian nuclear establishment – and described benign uses of peaceful nuclear explosives as well. Bhabha concluded his broadcast by urging the great powers to pursue nuclear disarmament in order “to create a climate favourable to countries which have the capability of making atomic weapons, but have voluntarily refrained from doing so.”² [Perkovich, *India’s Nuclear Bomb*, p. 68] Bhabha’s broadcast clearly intimated that India could build nuclear weapons if it wanted to, and that it would be cost effective to do so. He intended both to reassure the Indian public and to prompt political leaders to support whatever initiatives he may have then wished to pursue. Bhabha died 14 months later, but not before winning prime ministerial authorization to begin design work on peaceful nuclear explosives.

However, Bhabha’s message to reassure a *domestic* audience shaken by China’s nuclear achievement also was heard by an *external* audience, Pakistan. In terms of power, Pakistan was to India as India was to China. Bhabha’s implicit recommendation for India to balance China made sense for Pakistan to balance India. Zulfikar Ali Bhutto listened to Bhabha’s broadcast and became convinced that India was going to build the bomb and Pakistan would have to follow suit in order to deter its more powerful and domineering neighbor. Bhutto was then a minister in President Ayub Khan’s cabinet. He and other Pakistani elites had noted Bhabha’s broadcast and subsequent claims that India could make a bomb in eighteen months if it wanted to. As I detail in *India’s Nuclear Bomb*, a British journalist in early 1965 reported “deep anxieties...in the key ministries in Rawalpindi – particularly at Defence – over the possibility that 110 million Pakistanis will wake up one fine morning in the latter half of 1965 to learn from Radio Delhi that India has become the world’s sixth nuclear Power.”³ It was in this article by Patrick Keatley, in 1965(!), that Bhutto uttered his famous statement: if India got the bomb “then we should have to eat grass and get one, or buy one, of our own.”

This back story further informs the subsequent Pakistan nuclear narrative. In early March 1965 Ayub and Bhutto had met Chou En-lai in Beijing. At this meeting -- Bhutto hinted in testimony in his 1977 trial -- he sought China’s help in acquiring nuclear weapons capability. Bhutto’s reliability deserves to be questioned, but we do know that China eventually provided fulsome assistance to Pakistan.

1965 also brought a war that foreshadowed how nuclear weapons capability would embolden Pakistani leaders to escalate efforts to wrest Kashmir away from India. I

² George Perkovich, *India’s Nuclear Bomb* (University of California Press, 1999), p. 68.

³ *Ibid.*, p. 108.

believe, but cannot prove, that Pakistan initiated the 1965 war to take the Kashmir valley from India before India acquired nuclear weapons, which Ayub and Bhutto feared would be sometime in the next year. Given how focused Bhutto and others were on the feared Indian rush to build the bomb, and the deterrent effects an Indian bomb would have on Pakistan, it is inconceivable that this factor did not enter into the Pakistani decision to launch the 1965 war. After Pakistan acquired basic nuclear explosive capability in 1987 it was emboldened in 1989 to invest heavily in a sustained insurgency against Indian occupation of Kashmir. And then, after the tests of 1998, the Pakistan Army still more boldly wrested away a chunk of Indian-held territory near Kargil.

To sum up this first Act, then, we see that Pakistani leaders' obsession with stymieing or besting India, and proving their nobility by taking the Kashmir Valley from it, determined that the first hint of India's acquisition of nuclear weapon capability would drive Pakistan to match. Nuclear weapons would be the ultimate equalizer, the denier of Indian superiority, the proof of Pakistani mettle and durability. As long as the Pakistani (largely Punjabi) obsession with India would remain, the determination to acquire an equalizer to its power would be unstoppable. And the depth of the desire and the importance of the object desired meant that deals would be sought and made with China and anyone else who could help to acquire nuclear capability, by hook or by crook. It is nearly impossible to conceive how the Pakistani obsession with equalizing India could have been temporized by the U.S. or anyone else, and how once India pursued nuclear weapon capability Pakistan could have been persuaded not to follow.

When the nuclear quest officially began in 1972, the technical leaders initially sought to follow something like an Indian model by using international nuclear cooperation to develop a large peaceful nuclear complex that would include plutonium reprocessing. One of Pakistan's major shortcomings was the lack of highly trained scientists and engineers. International cooperation would be necessary not only to acquire technology but also to develop cadres of engineers. By 1973, after an earlier dalliance with the United Kingdom Atomic Energy Agency, the Pakistan Atomic Energy Agency contracted with a Belgian firm to secretly build a pilot-scale reprocessing plant in Pakistan, which eventually became known as PINSTECH.⁴ This plant was not sufficiently large to be the source of an ambitious nuclear weapon capability, but cooperation in building and operating it could prepare Pakistani cadres to scale up a reprocessing program later. Pakistani nuclear officials also entered negotiations with France to acquire an industrial-scale reprocessing plant. Pakistan hoped to obtain the facility free from safeguards, a possibility insofar as France had not yet signed the Nuclear Nonproliferation Treaty and therefore was not legally obligated to insist on safeguards at plants it cooperated in building in other countries. But the talks proceeded slowly and fitfully.

The initial plan, at least as it was related to me years later by the then-Chairman of the Pakistan Atomic Energy Commission, Munir Ahmad Khan, was not to divert or mis-use foreign-supplied reactors and a reprocessing plant to produce nuclear-weapon fuel, but rather to use the know-how gained from this cooperation to indigenously produce

⁴ Ur-Rehman, op. cit.

parallel capabilities that could yield a bomb. It is probably more accurate to say that Pakistan was planning to use whatever assistance it could get away with using to acquire material for a bomb, and if it could be done via the French-supplied plant, it would, and if somehow material could not be diverted, then Pakistan would use the knowledge and contacts gained to build their own means later.

But Pakistan was not India, and an Indian-sized and paced nuclear program was infeasible for Pakistan. Moreover, the world after the Indian test of 1974 was not the world in which the U.S., Canada and others had supplied India with the reactor, heavy water, and reprocessing plant it used to produce its first nuclear explosive. Pakistan got bounced in the wake of the Indian test. The world's advanced nuclear technology states were now moving to tighten controls on exports of reactors, reprocessing plants and other sensitive technologies and know-how. Plans to develop a large nuclear establishment with foreign help and then build off it a weapon capability became much less promising. All the more so given that Pakistan had no remotely feasible economic rationale for needing the plutonium reprocessing plant it had contracted the French state-backed firm, Societe Generale Nucleaire, SGN, to build. In 1975, Prime Minister Bhutto evinced frustration at the slow pace of negotiations with the French over the reprocessing plant. The French were now insisting that Pakistan implement IAEA safeguards on the proposed facility.

The Indian test also reduced the appeal of the plutonium-route for Pakistan, given the amount of time it would take to build a production reactor and a reprocessing plant even if foreign cooperation was forthcoming. Pakistani leaders psychologically could not wait.

Prime Minister Bhutto therefore must have been highly receptive when a Pakistani engineer residing in Holland wrote him in 1974, after the Indian test, offering his services to Pakistan's nuclear program, particularly in the area of uranium enrichment. Bhutto responded by inviting Khan to meet the next time the latter was in Pakistan, which happened in December 1974. A.Q. Khan began what became a vicious rivalry by denouncing Munir Ahmad Khan's leadership of the nuclear program and his plans to base it on plutonium. Bhutto invited A.Q. to return to Pakistan and lead a uranium-enrichment effort, which Khan did in January 1976, as the plutonium route was looking more difficult.

A.Q. Khan is now a household name around the world, but he was a nobody when he departed his Dutch engineering firm, FDO, and returned to Pakistan to begin an illustrious proliferation career. Open sources do not specify which logistical means he used, but Khan provided to Pakistan blueprints for a URENCO uranium enrichment plant and, according to Shahid-Ur-Rehman, components of at least one centrifuge. In this sense, Khan himself was the first model for the proliferation network he later famously established, many of whose key personnel are/were based in Europe.

While A.Q. Khan was making his plans to return to Pakistan, Prime Minister Bhutto visited Washington in 1975 to play a game that the U.S. and Pakistan have repeated many times since. Bhutto knew that many people, especially Realists such as Secretary of State

Henry Kissinger, would expect Pakistan to build nuclear weapons after India's test. As Bhutto departed Pakistan he told the press that Pakistan's nuclear weapon policy was "under constant review" and depended on whether the U.S. would help Pakistan acquire sufficient conventional weapons to obviate the need for nukes. In Washington, Bhutto duly leveraged the promise of nuclear restraint for renewed U.S. arms sales. (The U.S. had cut off such sales since the 1965 war). American officials were not completely naïve. They sought a promise from Bhutto that Pakistan would "forego or at least postpone development of a nuclear explosion option," in the words of a draft State Department memo.⁵ Bhutto obliged by signing a secret note typed on a small piece of stationary promising that in "developing its nuclear technology, Pakistan would not divert any of its urgently needed development resources to the expensive efforts required to produce a nuclear explosion provided its defence in the conventional field is assured."⁶ Here U.S. officials were completely naïve if they thought that this formulation – or any promise, really – would in any way slow the Pakistani nuclear effort. Pakistani leaders, like those in many countries, have always thought (or been told) that nuclear weapons are inexpensive, the biggest bang or strategic asset for the buck. Moreover, if Pakistan did not lower its already paltry development spending in order to finance the bomb program, it would meet these terms. Furthermore, Pakistan was soliciting Arab states such as Libya and perhaps Saudi Arabia to underwrite the nuclear program, much as it later would sell nuclear assets to help pay for strategic programs. The best that can be said for the U.S. here is that its officials were probably willingly duped by Pakistani leaders, much as they are today.

Notwithstanding Bhutto's meaningless promise, Pakistan was gearing up to launch an enrichment program that would proceed as fast as its procurement and engineering efforts would allow. To the extent that he was trading time for military cooperation and good will, Bhutto, like Iranian officials today, was cunningly selling the liability of his state's technical program as an asset. Pakistan could not technically go faster, but it could be paid off for promising to go slow.

Meanwhile, the U.S. was pressing hard to minimize, if not eliminate, the threat posed by the French-Pakistan reprocessing plant. Pakistani officials had not intended this plant to be a decoy, but in some ways it was becoming one, while the real action was in the enrichment field. Bhutto visited Paris in late 1975 and encountered stiff insistence that Pakistan accept safeguards on the proposed plant. By early 1976, the Ford Administration was openly pressing Pakistan to abandon the bid for the plant and France to pull out of its agreement to provide it. Pakistan had retroactively in 1976 announced plans to build eight nuclear power plants that would give a technical-economic rationale to the reprocessing plant. (This resembles Iran's announcements of reactor building plans after its otherwise alarming uranium enrichment and heavy water production plants were discovered under construction in 2002). The U.S. encouraged Canada to use its leverage as supplier of Pakistan's KANUPP reactor near Karachi to press Pakistan to drop its reprocessing plans.

⁵ Perkovich, *op. cit.*, p. 195.

⁶ *Ibid.*

Nonetheless, France and Pakistan proceeded with the reprocessing plant deal in March of 1976, as Pakistan capitulated to France's late insistence that the plant operate only under IAEA safeguards. In August, as Secretary of State Henry Kissinger was visiting Pakistan, the U.S. offered to sell Pakistan A-7 attack aircraft if Islamabad would agree to abandon the reprocessing plant deal with France. The multilateral dispute continued, as the U.S. and Canada pressed Pakistan, and the U.S. pressed France, to forego construction of the plant. In November, the U.S. Defense Department agreed to sell Pakistan 110 A-7 attack planes, contingent on congressional and State Department approval, the latter of which would be contingent on Pakistan's abandonment of the reprocessing plant. (The U.S. was less successful in the 1980s using conventional arms sales to motivate Pakistan to abandon its uranium enrichment program). By December 1976, the French government tried to relieve pressure by announcing it would not supply nuclear reprocessing plants in the future, after the Pakistan project was completed. French officials hinted they would not be displeased if Pakistan canceled the contract.⁷ The Canadian government pressed on and announced that it would suspend its nuclear cooperation agreement with Pakistan and not supply uranium fuel for the Karachi Nuclear Power Plant.

1977 brought changes that further dampened enthusiasm for Pakistan's overt nuclear program: General Zia ul-Haq launched a military coup and placed Zulfikar Ali Bhutto in prison, from where he would be hanged in 1979. The U.S. in 1977 also had imposed economic sanctions on Pakistan, invoking the Symington Amendment of 1976, which called for withholding military and economic aid to any country that, without fullscope safeguards, imports uranium enrichment or plutonium reprocessing facilities.

Throughout this period from 1976 through 1978, the U.S. led the formation of the Nuclear Suppliers Group and, at the instigation of Congress, the passage of legislation that would set tough American standards for nuclear exports, which would then be promoted internationally. The most fundamental rules of what we now refer to as the nonproliferation regime were being established. Central among them was the demand that states receiving international nuclear technology or material should put all of their nuclear facilities under safeguards, not merely the facilities to which assistance is directed. If upheld, such a fullscope safeguards rule would deprive Pakistan of the sort of assistance its initial nuclear plans counted upon, much as India's had. Fortunately, for Pakistani bomb seekers, however, A.Q. Khan already had stolen foreign assistance. Khan also had brought with him valuable knowledge of individuals and businesses that could supply components for a centrifuge plant. Thus, as the elements of the nonproliferation regime slowly took shape, Pakistan was already tunneling around them. (The fullscope safeguard requirement was not adopted by the Nuclear Suppliers Group until 1992, although it became part of U.S. law in 1978.)

In August, 1978, with growing U.S. pressure and doubts about Pakistan's intentions, France revoked its nuclear cooperation contract with Pakistan. The French decision reflected not only appreciation of the dangers of nuclear proliferation, and the

⁷ Information Bank Abstracts, New York Times, 31 December 1976; in Lexis-Nexis Academic Universe, 31 December 1976, <http://web.lexis-nexis.com>.

effects of international pressure and the loss of civilian government in Pakistan, it also stemmed from internal political dynamics as the deal's chief high-level proponent, Prime Minister Jacques Chirac had stepped down, leaving the more skeptical President Valéry Giscard d'Estaing a freer hand to terminate the contract.

Meanwhile, for all of the concentration and ultimately successful international effort to persuade France – a modern, Western democracy – from helping Pakistan on the plutonium route to the bomb, Pakistani engineers and procurement specialists raced secretly to build the undeclared enrichment plant at Kahuta.

In 1979, the Soviet Union invaded Afghanistan. Pakistan became the United States' indispensable partner in compelling the Red Army to leave, an absolute and immediate strategic imperative. In the ensuing years, intelligence services would occasionally report evidence of Pakistan's further progress in acquiring nuclear weapons capability, but Pakistan's indispensability on the frontline of the Afghan war immunized it from severe punishment or pressure. It is important to remember that the Pressler Amendment of 1986 was encouraged by the Reagan Administration as a means to deflect Congress (encouraged indirectly by Israel) from imposing serious sanctions on Pakistan over its nuclear weapon program. The Amendment forestalled sanctions as long as the president could certify that Pakistan did not possess a nuclear explosive device. From 1986 through 1989, the president made this certification annually, to the discomfort of some nonproliferation officials who felt that intelligence and veracity were contorted beyond recognition to do so. And then, once the Soviet forces had been fully withdrawn, and the Berlin Wall had fallen, in 1990, President Bush acknowledged that he no longer could certify Pakistan's non-possession of a nuclear explosive. Major sanctions were imposed on Pakistan.

It was too little too late, however. Pakistan already had achieved a rudimentary nuclear weapon capability in 1987.

The 1990s were in many ways a lost decade for Pakistan and for U.S. relations with it. The Pressler sanctions hastened the practical withdrawal of the U.S. from Pakistan. To Pakistanis – of all classes – the U.S. was now acting like an abusive, arrogant man who seduced and lavished gifts on his mistress when he was desperate in the 1980s and then discarded her when his fortunes improved with the Soviet Union's demise. Being sanctioned across the board for a nuclear weapon program that the U.S. had indulged as long as it was convenient, Pakistanis lost what little sense of propriety they felt toward international nonproliferation rules. The A.Q. Khan proliferation network flourished. And while we may never know the degree to which Pakistani state officials at high levels knew about this proliferation, it's safe to believe that their contempt for the discretionary way the U.S. had applied proliferation sanctions to Pakistan made most of them undisposed to lose sleep over whatever norms and rules the Khan network was transgressing. These were norms and rules that tolerated (if not tacitly endorsed) Israel's possession of a nuclear arsenal, treated China's nuclear activities inconsistently, and had been switched on and off toward Pakistan as it served U.S. interests.

As the U.S. sanctioned itself out of Pakistan and basically ignored Afghanistan, Pakistani intelligence was cultivating the Taliban. The freedom fighters of the Afghan War were becoming the Taliban and Al-Qaeda of 2001. This dangerous effect of nonproliferation sanctions need not have arisen – the U.S. could have stayed involved at least in Afghanistan – but the tendency of sanctions to isolate the sanctioner – the U.S. – from the targeted country needs to be considered more openly.

In May, 1998 Pakistan followed India and tested nuclear weapons (though the number of devices actually detonated is unclear from open sources). One could recount this episode in detail – who argued against testing, what the U.S. offered Pakistan not to do it, how Pakistani intelligence fabricated reports that Israel was about to launch pre-emptive airstrikes against Pakistan's nuclear assets. But the key point is simple: Pakistan's obsession with matching India overrides all else, so there was no way Pakistani leaders would not test. The most telling thing to note is that India claimed to have tested five nuclear devices (on May 11 and 13) and Pakistan claimed that it had detonated six. Mythology is more important than veracity: the myth that Pakistani leaders seek to maintain is that anything India can do, they can do one better.

Importantly for our story, the nuclear tests of 1998 strengthened the logic established in 1989 of nuclear weapon capability shielding low-intensity warfare. The Pakistan Army was now emboldened by the public demonstration of Pakistan's nuclear weapon prowess to infiltrate and take a piece of Indian-held Kashmir, begetting the Kargil War of 1999.

This invites a provocative argument: if the U.S. did not try hard enough to stop Pakistan's nuclear weapon program, placing other objectives higher, the same can be said for U.S. and international interactions with Pakistan over the Kashmir conflict and the terrorist tactics used therein (still today). Indeed, the two phenomena or threats are related. Pakistan's nuclear weapons provide deterrent cover for the insurgency/terrorism it has nurtured. Once nonproliferation sanctions had been imposed, there were few other policy options open to the U.S., and it basically withdrew, leaving the Pakistani relationship with terrorist organizations unaddressed. In hindsight, the two threats – proliferation and terrorism – should have been treated together, and the effect of sanctions in removing the U.S. from the scene should have been analyzed more carefully. The key challenge – which was overlooked or dodged – was and still is to reduce the Army's dominance of Pakistani politics, economics, and ideology, because the Army's obsession with bleeding India produces the security threats that Pakistan poses to the U.S. The situation today in Iran may pose a similar challenge – proliferation emboldening Iranian actors to increase support for insurgents/terrorists in Israel and Lebanon – while the U.S. has long sanctioned itself out of any relationship with Iran.

Thoroughness argues for extending the story and describing how Pakistan has continued to expand its stockpile of fissile materials, now including plutonium, and how its arsenal has grown unabated and in parallel with advances in missile delivery systems. Yet there is little that outside actors could do to channel or abate this activity, other than

promote a global halt to fissile material production and a framework for limiting nuclear and missile arsenals that would include China, which in turn would not participate without the U.S. and Russia agreeing to limit military programs that threaten China.

Pakistan's management and control of its nuclear arsenal and infrastructure is a more productive object of interaction. There is little one can narrate here based on public sources, other than to say that since 2000, the Pakistan Army under General Kidwai, the man in charge of the strategic forces, has taken great pains to establish systems and procedures to reduce the risk that unauthorized actors could acquire nuclear materials and weapons. At the same time, the Pakistan Army (unlike Indian political leaders) treats its nuclear arsenal as a useable, vital military instrument, and so establishes doctrine and operations to be able to deploy this arsenal quickly and decisively. This preparation to use nuclear weapons necessarily entails risks that could be seen as part of the proliferation problematique.

Thus, this simplified story ends with a focus now not on preventing Pakistan's acquisition of a nuclear arsenal, but rather on preventing its loss of control over this arsenal. The concern now includes how Pakistan's ongoing imports to sustain its strategic force can be prevented from morphing once again into an export program, a nuclear Wal-Mart. And, less widely appreciated, the Pakistan story should require us to think harder about how to keep Pakistan and Iran and perhaps others from being emboldened to increase insurgent or terrorist activities under the deterrent cover of nuclear weapon capability.

Pakistan's nuclear experience and the effects of the United States' and other actors' efforts to shape it offer many lessons. Specifying what one wants to learn can illuminate the nature of the proliferation challenge. The following are questions that lead the inquiry in diverse directions.

- 1.1. What does the Pakistan case teach about why countries seek nuclear weapons?
 - 1.2. What does it teach about whether and how countries can be *persuaded* to abandon the *desire* to acquire nuclear weapons?
 - 1.3. What does the Pakistan case teach about the feasibility of *blocking states from acquiring* nuclear weapons and the means of such prevention?
 - 1.4. What does Pakistan teach about the risks and/or benefits of nuclear weapon acquisition, for the acquiring state and for international security? What can be done to lower the risks and raise the benefits?
- Deterrence: if deterrence does not emerge automatically, what are the conditions under which it arises? (This could be a benefit).
 - Low-intensity-conflict: deterrence may be created at one level of potential conflict – i.e., major war – but nuclear-weapon-possessing states may be emboldened to undertake aggression at lower levels of conflict thanks to the belief that escalation can be blocked by nuclear deterrence. Such lower levels of conflict can include

support of insurgents, terrorism, or seemingly limited state intervention. Since 1987, Pakistan has undertaken each of these sorts of aggression.

- Onward proliferation: a state's capacity to produce weapon-grade fissile materials and nuclear weapons inherently raises the potential of proliferation from that state to other actors, through acts of state commission or omission of effective controls.
- Domestic politics: acquisition of nuclear weapons may affect the power of ruling regimes and institutions, and/or it may affect the dynamics of political contests within a state. This has many potential implications. For example, if democracy is an antidote to major aggression – the democratic peace theory – but nuclear weapon acquisition helps entrench non-democratic regimes, then proliferation can exacerbate international security via domestic politics.
- Unauthorized use: acquisition of nuclear weapons creates multiple problems of decision making and control. There are risks associated with the acquiring state's goals, decision-making and command and control. There are risks that the state could lose control of nuclear weapons or material to actors that do not share state attributes and could be less deterrable.

1.5. Who are the key actors who in the past could have affected Pakistan's nuclear behavior and who might in the future? The U.S. is the principal external actor to be analyzed here, but could U.S. action have been more effective if others had cooperated with it? Who? How?

The narrative half of this essay implicitly answers most of these questions. Let me here treat the most relevant of them explicitly, although briefly so as to avoid repetition.

Conventional wisdom holds that the Pakistan case teaches that a state facing a larger, more powerful adversary, especially one that possesses nuclear weapons, will seek nuclear weapons to protect its security by balancing the adversary's power. I would argue that this proposition is correct (and obvious), but that it misses equally important dynamics. Many states face more powerful nuclear-armed adversaries and do not seek nuclear weapons. And this forbearance cannot be explained by U.S. security guarantees, alliance, or extended nuclear deterrence. The *physical* security variable underlying the Realist conventional wisdom misses the key point about Pakistan. Pakistani elites, particularly the Punjabi-dominated Army, share a political-psychological obsession with proving national self-worth and strength in comparison to India. This obsession with matching, surpassing, or frightening and weakening India made it inevitable that Pakistani elites would seek nuclear weapons if this is what India was doing. No form of security guarantee or military alliance by the U.S. would have kept Pakistan from seeking nuclear weapons.

Pakistan could not be persuaded to give up the desire for nuclear weapons, so the only viable nonproliferation strategy was to block it physically from acquiring the capability to make them. Here the lessons are too numerous and complicated to summarize here. The

foregoing narrative demonstrated how national and international nonproliferation rules could not be negotiated and then enforced quickly enough to keep up with Pakistan's dedicated technology acquisition program. As long as there are multiple technological pathways to the bomb, and new ones that can be discovered, the task of mobilizing governments to devise, negotiate, implement and enforce proscriptions on this or that technology will take so long that smart proliferators will adapt. While the U.S. and Canada spent years pressing Pakistan and France to shut down the plutonium option, A.Q. Khan was secretly importing everything Pakistan needed to enrich uranium. After the international system concentrated on blocking centrifuge proliferation, the Pakistanis beat the system by constantly breaking into smaller sub-components and materials the elements they needed to import. They stayed ahead of the global technology control and customs system.

Pakistan's capacity to avoid physical-denial efforts by the U.S. and the international community does not mean, however, that such denial will not work in other cases. The international community can and should learn much by studying the Pakistani case. Pakistan benefited enormously by not being a party to the NPT: there were not fullscope safeguards in Pakistan, there was nothing like the Additional Protocol and teams of IAEA inspectors roaming around possibly to discover illicit imports. Most importantly, Pakistan was not violating major treaty commitments in acquiring the bomb, so the risks of doing so were much smaller than those facing treaty parties. U.S. intelligence learned that Pakistan was enriching uranium to build the bomb long before Pakistan achieved its goal; it merely learned too late to block key acquisitions of designs and prototypes. Then conflicting interests and Pakistan's NPT-non-member status kept the U.S. from wanting or being able to rally international pressure sufficient to give Pakistan pause.

The one major benefit of nuclear proliferation conceivably would be to create deterrence relationships that lower or eliminate the risk of war between a certain set of adversaries. Kenneth Waltz has been the most illustrious proponent of this view. Indian and Pakistani champions of nuclear weapons celebrated the tests of 1998 by proclaiming that deterrence and stability were now at hand. However they spoke to soon. The two states now may (or may not) have established tacit understanding of the imperative of avoiding war under the nuclear shadow, but they had to experience a war in 1999 and a major crisis in 2001-02 to get there.

The major problem is that deterrence works best (and perhaps only) if the antagonists accept the territorial status quo among them. If one or more nuclear-armed adversaries does not accept the status quo and instead still harbors ambitions to act physically within the territory held by the adversary, nuclear weapons can embolden the unsatisfied actor to undertake provocations of an intensity low enough that the provocateur calculates will make the victim unlikely to respond massively, for fear of escalating to the possible use of nuclear weapons. This famous stability-instability paradox has operated in Indo-Pak relations since Pakistan first acquired basic nuclear weapon capability in 1987. As long as Pakistan does not accept the territorial status quo in Kashmir, the risk remains. (Similar risks could attend proliferation in the Middle East if acquirers of nuclear weapons identify sufficiently with the Palestinian cause to provide

a form of extended deterrence to cover actions to wrest away Israeli-occupied territories in the West Bank, Jerusalem, or even perhaps the Golan Heights.)

The Pakistan-backed insurgency in Kashmir began as the Cold War was ending. With this geopolitical shift, U.S. favoritism toward Pakistan over India would shift, too, and the U.S. and India would gradually grow closer while Pakistan began to be seen in a much more troubling light. Still, the Kashmir conflict has been so intractable, and India has so strongly resisted any mediation, that U.S. officials understandably stayed away from it. Washington could not escape entanglement in the Israeli-Palestinian conflict; if it could stay out of the Kashmir conflict, that would be one less mission-impossible for U.S. officials. The Kargil War under the shadow of possible nuclear escalation forced the U.S. to get more involved. The 9/11 events pushed us farther into subcontinental affairs. But then a tension emerged in U.S. policy: Pakistan's President Musharraf ordered his government to provide enough cooperation in hunting Al-Qaeda and Taliban leaders in Pakistan and the Afghan border areas that Washington was disinclined to push him harder on Pakistan's nurturing (or tolerance) of jihadi groups operating against India in Kashmir and elsewhere. Top U.S. officials are still reluctant to see that Pakistan's nuclear import/export networks, its arsenal build up, the risk of nuclear war, and continued nurturing of terrorist groups are all rooted in Pakistan's refusal to accept formally the territorial status quo between India and Pakistan. Pakistan cannot win by force or negotiation that part of Kashmir that India now controls. But the failure to resolve the matter and formalize the status quo sustains the nexus of threatening actions and actors mentioned above. Washington cannot compel Pakistan to accept the status quo, or India to offer concessions that would better enable Pakistani leaders to do so. The point here is merely that top U.S. officials have never recognized the conceptual and strategic imperative of seeing the connection between these issues and working the problem comprehensively.

To extend the point, the dangers posed by Pakistan will not be fundamentally reduced if the Army's role in the society and state is not curtailed and a broader civilian elite is developed. In this sense, U.S. proponents of "regime change" as a tool of counterproliferation are correct. Regimes do matter in causing the demand for nuclear weapons, in regulating onward proliferation, and in determining the risks of nuclear weapon use. The military regime in Pakistan has acted the "wrong" way in each of these areas. However, the Pakistan case also shows the limitations of a regime-centered nonproliferation strategy. Technology and materials matter, too, wherever they are, not merely when they are in a state led by "evil-doers." Global rules are necessary to control distribution of technology, material and know-how, and to establish the bases for improved deterrence of proliferation and enforcement against those who violate rules. Double standards undermine the formation and enforcement of rules, in part because they give actors the moral and political license to violate rules that they or their countrymen believe are unfair to their group, be they Pakistanis, Muslims, etc. The existence of proliferation chains also makes universal rule-based approaches necessary, and regime-change strategies insufficient: Pakistan sought nuclear weapons because India did; India sought them because China did and because major powers lorded their nuclear status over countries like India; China sought nuclear weapons because the U.S. threatened it during

the Korean War and Taiwan Straits crisis, and the Soviet Union became a competitor....When causality implicates so many actors, it is untenable to rely on regime change as the central strategy for countering proliferation.

The Pakistani case alerted the world to the danger of onward proliferation and the risks of multinational networks of individuals, small businesses, and complicit or lax states. Nothing more needs to be said about this here. Many of the necessary policy responses to proliferation networks must occur outside of public view, so it is difficult for me to judge success or failure, especially in U.S. efforts to persuade and/or assist Pakistani officials to preclude repeats of past proliferation episodes. The global environment certainly will affect the prospects of proliferation networks. If international rules will continue to allow states to build new uranium enrichment and/or plutonium reprocessing facilities under national control, then the demand for the services of proliferation networks will grow as will the supply, and the “legality” of new construction one place will help provide cover for component manufacturers and others to conduct illicit trade with lowered risks of detection. There are several proposals for curbing fissile material production and establishing multinational fuel cycle centers. Progress in this direction could partially drain the pool of illicit suppliers.

Fortunately, history has not provided enough cases of nuclear proliferation to allow useful generalizations about proliferation’s domestic political effects. Pakistan has never enjoyed genuine democracy, in part because it lacks the political cultural attributes of democracy. This in turn stems from and reinforces the Army’s domination of the state, and of politics and, now, economics. The country will not evolve genuine democracy without the Army’s cooperation. It is safe to assume that whatever democratic trends may emerge in some avenues of Pakistani life, the Army will not relinquish its real control over nuclear infrastructure and weapons for as long as one can imagine. Call it Bhutto’s irony, but physical control over nuclear weapons is a core measure of power within the state. Bhutto tried to build nuclear weapons to have this power for himself, to balance the Army. The Army hanged him and took over the weapon program and it would likely see retaining ultimate control over nuclear weapons as a final guarantor of its privileged and potent role in Pakistan, even if formal democracy returned.

Finally, while the United States has been the external actor most capable of influencing Pakistan’s nuclear choices it has not had sufficient power to impose its will. Pakistan’s obsession with India is so great that it would not willingly have abandoned its demand to acquire nuclear weapons to match or surpass India’s nuclear capability. To deny Pakistan the opportunity to fulfill its demand would have required at a minimum close cooperation between the U.S. and China. This did not exist during the seminal period when China supplied Pakistan with a nuclear weapon design and other vital materiel and technology and know-how. Thus, while the U.S. could have exerted itself harder in the 1970s and 1980s, it could not have sharply curtailed Pakistan’s project without Chinese cooperation. China, in fact, was working in the opposite direction. Other vital assistance to Pakistan came from small-scale technology providers in Europe, the U.S., Canada, and elsewhere. This suggests, at a minimum, that without much more threatening international legal proscriptions, tighter export controls, more effective

customs management, etc., the Pakistani supply network could not have been blocked. The necessary changes would have had to have been global, a prospect no more likely in the 1970s and 80s than today.