Pakistan's Nuclear Calculus

Immediately following the assault that killed Osama bin Laden in May, Pakistanis were furious that an array of specially-equipped U.S. Sikorsky Black Hawk helicopters was able to penetrate their sovereign territory so deeply and inconspicuously. That Pakistani authorities may have been providing cover to the world's most-wanted terrorist was, at best, a secondary concern. Pakistan's Army, unquestionably the country's most powerful institution, had been caught shockingly off guard, and the population was furious. General Ashfaq Parvez Kayani, the Chief of Army Staff, conceded that the raid constituted a significant intelligence failure, and ordered an investigation. At the same time, many Pakistanis were asking: what else might be at risk? The Army's Corps Commanders—the top of the military brass—hustled out an ominous statement: "Unlike an undefended civilian compound, our strategic assets are well protected and an elaborate defensive mechanism is in place."¹

Behind the bureaucratese hides a chilling reality: "strategic assets" is Islamabad's rhetorical reference to the country's nuclear arsenal. That an outside power could slip in under the cloak of night and strike a target with such impunity immediately raised questions about how far and wide such sovereign vulnerabilities spread. "Even if the country is not safe from Islamist terrorists and suicide bombers, or from drones, CIA agents run amok, and now U.S. helicopters and SEALS," remarks Zia Mian, who has taught in Islamabad and is an expert on nuclear weapons at Princeton. "They felt they had to reassure themselves and the public that the bomb was safe."²

The statement from the Corps Commanders did little to quell anxieties either at home or abroad, however. Before the end of May, the Pakistani Taliban

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overran the Mehran Naval Air Base in Karachi, about 15 miles away from a suspected nuclear weapons storage facility.³ They destroyed aircraft, controlled the site for a time, and set the base ablaze.⁴ The array of lapses revived international worries over the safety and security of Pakistan's nuclear arsenal, and even moved NATO's Secretary General Anders Fogh Rasmussen to raise a rare flag of caution when he said that the arsenal's security "is a matter of concern and we follow the situation closely."⁵ In June in Washington, Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff, was more explicit, "The thing that I fear in the future [in Pakistan], it's the proliferation of [nuclear] technology, and it's the opportunity and the potential that it could fall into the hands of terrorists, many of whom are alive and well and seek that in that

How can anyone be sure that Pakistan can keep its "strategic assets" in order? region."⁶ When one also considers the jihadist attack in October 2009 on the Pakistani Army's headquarters in Rawalpindi, the nightmarish question surfaces once again: how can anyone be so sure that Pakistan can keep its "strategic assets" in order?

Such a dilemma warrants excessive attention on the best of days, but these are not those. Since the beginning of the year, relations between Washington and Islamabad have spiraled toward outright hostility. The

raid on Pakistani territory that killed bin Laden will undoubtedly cast the longest historical shadow of the year. But it shouldn't be forgotten that only a few months earlier, in January, the CIA contractor Raymond Davis killed two Pakistani nationals on a street in Lahore, setting off a months-long diplomatic firestorm that threatened the foundations of U.S.–Pakistan intelligence cooperation. And ongoing drone strikes along Pakistani's western border have served as a persistent irritant on the wider Pakistani population's attitude toward the United States. In July, Washington cut off \$800 million in aid to the Pakistani military.⁷ Taken together, 2011 is shaping up to be nothing short of disastrous for U.S.–Pakistan relations.

The fact is that there is already a widespread concession at the highest levels of policymaking in Washington that the matter is urgent and must be addressed. But at the same time, focusing solely on the security facet of the issue actually misses a more fundamental facet of the problem: what is driving Pakistan's rapid nuclear buildup?

I argue that the decisions being undertaken in Islamabad are both strategic and rational. At the same time, it is unclear what the West is currently doing to disincentivize Pakistan from stockpiling fissile material and expanding its nuclear weapons arsenal. What is clear, however, is that to devise any long-term strategy to reverse the momentum in Islamabad, and in turn increase the trust and cooperation necessary to address the questions of nuclear security, one must understand exactly where Pakistan's nuclear program is heading, and why it is on a trajectory at odds with nearly every other nuclear-capable country in the world.

The decisions being undertaken in Islamabad are both strategic and rational.

The World's Fastest Growing Nuclear Program

In recent years, Pakistan has developed the world's fastest-growing nuclear weapons program.⁸ The most current estimates are that Pakistan now possesses enough fissile material for more than 100 warheads, which makes it the world's sixth largest arsenal, and is stockpiling enough material to manufacture as many as 20 additional weapons a year. These current growth rates will almost undoubtedly be proven to be conservative over the next 20–30 years, given the revelation in May that Islamabad is constructing a fourth plutonium reactor at the Khushab nuclear site about 140 miles south of the capital. That newest reactor will come online as soon as 2013 and significantly increase Pakistan's production capacity.

Considered in a global context, Pakistan's nuclear arsenal looks even more extreme. In the next decade, only two states—Pakistan and India—are expected to increase their nuclear weapons arsenal. (North Korea also could weaponize its program, and many in the West believe that Iran has nuclear weapons ambitions.) Granted, the United States and Russia still possess more than 90 percent of the world's nuclear weapons, but those two countries have now spent decades negotiating reductions of their arsenals and are expected to continue slashing for decades to come. By 2021, however, Pakistan is expected to double the number of weapons in its arsenal to at least 200, surpassing the United Kingdom. Soon thereafter, analysts say there is a good chance that Pakistan will even surpass France to become the world's third largest nuclear-armed state (see chart).⁹

Demonstrated by the rapid expansion at the Khushab nuclear site, Pakistan is significantly ramping up its capacity in particular for fissile material production. Because it has indigenous sources of uranium, Pakistan is able to mine it domestically and is therefore not hamstrung by the need to import the heavilymonitored source material from abroad. But the focus on plutonium enrichment at Khushab goes hand-in-hand with Islamabad's desire to expand its ballistic missile program. Simply put, with plutonium, engineers can manufacture much smaller warheads, which are easier to affix to a missile. The Pakistani military has already developed an array of medium- and



long-range ballistic missiles. Over the course of this year, the military has been making very public displays of its new short-range ballistic missile technology. In April, Khalid Ahmed Kidwai, who heads the Strategic Plans Division (which oversees the country's nuclear weapons program), announced the first test flight of the Hatf IX, the military's newest nuclear-capable battlefield range ballistic missile.¹⁰ The weapon is known as "Nasr," Arabic for "victory."

Pakistan's nuclear weapons program dates back to the loss of East Pakistan in the 1971 war with India. The following January, Zulfiqar Ali Bhutto, at the time Pakistan's president and chief martial law administrator, founded the program. The program lumbered along, prodded by, among other provocations, Operation Smiling Buddha, India's first nuclear test in May 1974. Bhutto went on to serve as prime minister from 1973–1977, all the while pushing the program forward. It wasn't until 1985 that Islamabad produced weapons-grade uranium, and two years later reportedly developed the know-how to detonate a nuclear weapon. In 1998, Pakistan conducted its first nuclear test explosions.¹¹

Parallel to these developments, Pakistani officials were also cultivating an illegal trade in black market nuclear materials and know-how. The Pakistani scientist A.Q. Khan, who was educated in Germany, Holland, and Belgium, played a key role in developing Pakistan's capability and capacity to manufacture fissile material. At the same time, Khan cultivated a wide network of international sources that would come to constitute a vast array of nuclear proliferation. He is believed to have seeded the nuclear programs of Libya, Iran, and North Korea (which is believed to have paid some \$100 million for what it needed to build a nuclear program from scratch).¹² Just this summer a 1998 letter came to light, written by a North Korean official to Khan, discussing \$3 million,

as well as diamonds and rubies, that had been paid to the Pakistani military for "agreed documents, components etc.," which are believed to have been involved in North Korea's budding nuclear program.¹³ In 2004, Khan publicly confessed to illegal nuclear transfers, calling his black market dealings an "error of judgment." Then-president Pervez Musharraf promptly pardoned him. Suspicions of Pakistani officials' involvement in nuclear black market networks persist today.

In several ways, Islamabad currently stands in stark defiance of the international legal regimes overseeing nuclear matters. Pakistan is one of four nuclear weapons states that are not a signatory to the Nuclear Nonproliferation Treaty (NPT)-along with India, Israel, and North Korea. Western diplomats point to negotiations over the Fissile Material Cutoff Treaty (FMCT) as the diplomatic front where it's most beneficial to negotiate with Islamabad about its nuclear program, but this has proven to be a dead-end strategy. Throughout 2011, largely as a result of Pakistan's intransigence, the FMCT has stalled completely. The most blatant public comments on the failed negotiations came in January from Rose Gottemoeller, assistant secretary for the Bureau of Arms Control, Verification, and Compliance at the U.S. State Department, when she said that one country-out of 64-has "been standing in the way of launching negotiations" on the FMCT and that the United States' "patience won't last forever."¹⁴ While Western diplomats still discuss the FMCT as the primary arena for potentially moving talks forward, few—if any—of them will even speak on the record to chastise Islamabad for the fact that no progress has been made on the treaty.

The Pakistani Calculus

Flash back to March 2011 when more than a billion people tuned in to watch India and Pakistan stare each other down in the semifinal match of the Cricket World Cup. Given the nature of the international tournament, the anxiety among the players was clearly palpable. But also consider the decades of war-torn tension underlying the meet: since partition in 1947, the two countries have fought three major wars, all of which Pakistan has lost. Today, the countries wage a grueling low-intensity conflict over Kashmir, arguably the most fiercely contested tract of land in the world. The resulting firebrand and nationalistic rivalry meant that the cricket battle was more than just a forum for competitive sport.

What a scene it was when Indian Prime Minister Manmohan Singh and his Pakistani counterpart Yousuf Raza Gilani shook hands, radiated jolly smiles, and then enjoyed the match together side by side. Newspapers quickly dubbed it a glorious accomplishment of "cricket diplomacy," and, for a day at least, it proved to be a soothing respite to the continuous anxieties which make up much of the India–Pakistan relationship. Too bad the Cricket World Cup comes around only once every four years, because behind the idyllic photo-op lies a far more troubling nuclear rivalry. And there is a question that nobody, including the Pakistanis themselves, can seem to answer: if Pakistan is indeed increasing its nuclear capacity, how much is enough?

When intelligence officers gear up to tackle a problem, a first-order question follows: is this a secret, or is it a mystery? "In this case, exactly how many nuclear weapons Pakistan thinks it needs to build appears to be more of a mystery," says Ambassador Eric Edelman, who recently worked on the issue of Pakistan's nuclear program as Under Secretary of Defense for Policy in the George W. Bush administration. "But with the latest announcements, you're talking about even potentially passing France at some Pakistan That's point. extraordinary."¹⁵ The Pakistani military is looking out over the next 30 years, and they are trying to stay ahead of the target. They are studying Indian defense planning, monitoring what U.S. and Israeli defense contractors consider as threats, and in the words of George Perkovich, a vice president at the Carnegie Endowment for International Peace, "They have decided that they need to build up. But I guarantee you they don't have a number right now."¹⁶

Asked directly, Pakistani officials explain their calculus explicitly. An exact number "cannot be quantified," according to Khalid Banuri from Arms Control and Disarmament Affairs of the Strategic Plans Division. "Regretfully, there are several destabilizing developments that have taken place in recent years," he remarked, pointing to India's conventional military buildup and the U.S.-India civilian nuclear deal as two examples that have destabilized the regional security balance. To the point, he writes, "Restraint cannot be divorced from the regional realities and conventional imbalances."¹⁷ Banuri argues that "journalistic analyses" and the "Western think tank community" propagate unnecessary skepticism about Islamabad's nuclear program. It's incorrect, he says, to suggest that world leaders "hold misperceptions about Pakistan's nuclear weapons program." He says that Pakistan, which "was a reluctant entrant into the nuclear club," is not competing in "any kind of nuclear arms race." Deterrence against India is the ultimate goal, and "unlike the prestige and political considerations associated with nuclear weapons programs of some nuclear weapons states, Pakistan's nuclear weapon program is purely security driven."¹⁸

So, if it is impossible to determine exactly what Islamabad considers a sufficiently sizeable arsenal, the next most beneficial puzzle to solve is: what's driving Pakistan's nuclear program? Pakistani officials state several factors explicitly. Chief among them is India's supersonic military buildup, one of the "imbalances" to which Banuri referred. In the next five years, New Delhi will spend some \$50 billion to upgrade its military,¹⁹ and it has become the world's

top weapons buyer.²⁰ Pakistan has always had a few more nuclear weapons than India, and that will continue to be true for the foreseeable future.²¹ So, while

many describe the India–Pakistan security situation as a nuclear arms race, it would be more accurate to say that what's unfolding between the two South Asian rivals is a security imbalance which India is fueling by modernizing and stockpiling conventional arms. Only, India has its eye on China's buildup, and Pakistan in turn has to react. The problem is that Pakistan does not have the money to match India's military spending and is turning to nuclear weapons and fissile material to bridge the gap.

In the next two decades, Pakistan could become the world's third largest nuclear state.

Also, Pakistani officials point to the special relationship that has evolved between India and the United States. In 2005, President Bush and Prime Minister Singh came together to sign a civilian nuclear power agreement in which the United States opened up nuclear trade—after three decades of its being halted—between Washington and New Delhi. (Many in the nonproliferation community criticized the deal for making an end-run around the NPT.) U.S. officials who worked on the deal argue that it had nothing to do with India's nuclear weapons program—it was all about providing the Indians with the means to make more nuclear energy. Pakistani officials, however, accuse the United States of violating not only the NPT but also U.N. Security Council Resolution 1172, which was adopted after India and Pakistan conducted nuclear tests in 1998 and sought to deter both countries from carrying out more.

In a February 2010 speech to the Council on Disarmament, the Pakistani representative called the deal a *carte blanche* for India to pursue a nuclear future and "along with the commitments to build up its strategic and conventional capabilities has encouraged its hegemonic ambitions, which are aimed at charting a course of dangerous adventurism whose consequences can be both unintended and uncontrollable." Accordingly, the argument went, Pakistan would not move forward with negotiations on the FMCT, and by extension, it would continue to expand its stockpiling of fissile material.²²

But more complicated dynamics—which go unmentioned by Pakistani officials—are involved in Islamabad's nuclear buildup as well. First, in many ways, Pakistan's "strategic assets" have become a guarantor of support from the West. Analysts have said that Islamabad capitalizes on the "moral hazard" created by its nuclear program.²³ In a sense, the nuclear arsenal—and the significant dangers of its being compromised in any way by jihadist factions, of which there are many in Pakistan—makes the country too dangerous to fail. As a

result, despite tough talk from the United States, Europe, the International Monetary Fund (IMF), and other multilateral donors urging Pakistan to impose

The nuclear arsenal makes Pakistan too dangerous to fail. tough economic and fiscal reforms, the government and lawmakers have little incentive to put Pakistan's house in order. Case in point: they are dragging their feet on a long-delayed and crucial restructuring of the tax system, among other much-needed domestic policies. Only some two percent of Pakistanis pay taxes, making the country's per capita tax revenues among the lowest in

the world. The feudalistic agricultural sector, which benefits many wealthy Pakistanis, goes untaxed, as do profits from real estate and the stock market. But given Pakistan's so-called strategic importance, the Pakistani elite seems confident that stalled loans, such as the IMF's \$11 billion rescue package, will eventually be delivered in full.

There is evidence to support their confidence. The IMF and Islamabad agreed that the latter would cut its budget deficit to 4.7 percent for 2010 and 2011, but Pakistan is on track to run a seven percent deficit this year, which doesn't seem to have strained the IMF's patience all that much. "For Pakistan's generals and diplomats and politicians," says Zia Mian, "securing the national totem has become a perverse substitute for real national security, which surely begins with providing basic protection for people's lives and well-being."²⁴

There is also a bureaucratic explanation for the expansion of Pakistan's program. Over the last few decades, the country has built a very real nuclearweapons industrial complex. At the top, very few people—and they almost all wear uniforms—have the power to make decisions about the direction of the program. Outside of the elite group in the Strategic Plans Division, there are few, if any, other factions inside Pakistan's government or civil society with the power or the gumption to try to change the current line of thinking. In addition, in a country where jobs are scarce, the scientists, engineers, and desk clerks who make up the nuclear establishment—not to mention the two Army divisions constituting some 18,000 troops—have an intensely personal investment in the future of the program, and even its expansion. And with no clear voice inside the country arguing against an enlargement, the nuclear-industrial complex has been able to snowball its operations, and will continue to do so in the coming decades.

While it is surely the most conceptually-elusive driver of the program, a significant element of national emotion also is tied up in the program. The country's nuclear weapons program constitutes a source of national pride, one that Pakistani politicians regularly exploit in their discussions of the country's

foreign affairs. "Our program is an issue of extreme sensitivity for every man, woman, and child in Pakistan," says former president Musharraf. "If you want to get into a firefight with the forces guarding our strategic assets, it will be a very sad day."²⁵ And from a strategic perspective, Perkovich has argued that nuclear weapons play the role of a "psychological equalizer" in Pakistan's staring down India.²⁶

At the same time, however, an intense paranoia pervades all levels of society about a master plan that's being hatched in Washington to attack Pakistan and either steal or destroy its nuclear arsenal. Even a surprising number of Pakistan's elite are firm believers in this conspiracy theory. TV anchors, many politicians, and top analysts are completely convinced that the country's most valuable possession is what everyone wants to steal. No doubt the U.S. raid that killed bin Laden in the dark of night only deepened the paranoia. However, it is highly unlikely that the United States has accurate intelligence even on the storage locations of the weapons, partly because the Pakistani military is doubtlessly deploying dummy, look-alike warheads, and partly because the assets are mobile. Pakistan is believed to have an extensive maze of underground tunnel connections through which the assets can be moved secretly. Any storage sites would also be heavily guarded, which means an attacking force would get caught up in a firefight that would make any clandestine removal or spiking of the weapons impossible.

Washington's Silent Fury

What's remarkable is actually the stunning lack of diplomatic sticks, or even rhetorical barbs, that Washington has been willing to wield at the Pakistani nuclear program. And few other governments are using them either. The nonproliferation parts of the world nuclear community—Ireland or Sweden or the Netherlands, for instance—are missing right now. That is not to suggest, however, that leaders in the West do not consider the current situation a threatening dilemma. "The less that is said publicly, the better," says Stephen Hadley, national security adviser to President George W. Bush. "But don't confuse the lack of public discussion for a lack of concern."²⁷

Could public discussion only make matters worse, though? Perkovich argues that the complications presented by the virtually impossible optics between the United States and Pakistan mean that public discussion of the issue offers little benefit. "When Americans especially talk about nuclear issues, and in particular about the security of nuclear weapons and fissile materials in Pakistan," he explained recently, "that gets heard in many ways in Pakistan, and almost all of them are not helpful. Often it's because the message, as it's spoken here, in fact is unhelpful." Subsequently, the Pakistani press and official outlets transform—almost always to a detrimental effect—news, events, and pronouncements, so that what's done and said in the United States ends up aggravating the perceptions, many of which are negative already, of Washington's intentions.²⁸

Yet, Pakistan's ballooning program is taking the wind out of President Obama's efforts to make nuclear arms reductions a signature goal of his foreign policy. The White House rarely even comments on Pakistan's nuclear program, but when one considers the Obama administration's nonproliferation agenda, it quickly appears simply irreconcilable with the current state of Pakistan's program.²⁹ Rather than address that fact, however, the White House routinely ignores it. Take the op-ed written by National Security Advisor Thomas Donilon in the *Financial Times* marking two years since Obama's 2009 speech in Prague, which set as a goal "a world without nuclear weapons." While Donilon argues that "the record so far is strong," pointing to weapons reductions with Russia and the administration's efforts on North Korea and Iran, there was no mention of Pakistan, its growing program, or the larger reality that a chronically unstable state known for coddling jihadists is stockpiling fissile material.³⁰

The chief reason that Washington looks the other way is that it has depended so heavily on Pakistan's cooperation in the battle against al-Qaeda and the war in Afghanistan against the Taliban. But when one considers the last four decades of Washington–Islamabad relations, it becomes readily evident that such short-term strategic pursuits have continually given Islamabad the space to aggressively push its nuclear agenda forward. Remember back to the summer of 1979, when the Carter administration sanctioned Islamabad over its nuclear program. Those sticks broke quickly—by the fall, the Soviets had invaded Afghanistan, and Washington needed Pakistan's assistance in backing the mujahideen in a covert war that would last more than a decade. The historical echoes ring loudly today: "Does the U.S.'s strategic partnership with Pakistan include a tacit or implicit acknowledgement of their nuclear program?" asks Rolf Mowatt-Larssen, a former CIA officer who has worked extensively on nuclear issues and terrorism. "People bristle at the suggestion, but it follows, doesn't it? The irony is that the U.S. presence in Afghanistan and Pakistan and the money we're giving them to fight terrorism could inadvertently aggravate the very problem we're trying to stop. After all, terrorism and nukes is the worst-case scenario."³¹

How to Stem the Tide

Giving Islamabad a free pass on its nuclear program could soon prove to be a cataclysmic miscalculation. Granted, in spite of the problematic history between India and Pakistan, the last decade has witnessed no all-out conflict between the two countries. But this period of relative calm has not created the diplomatic

space for trust and communication, it has led to domestic aggravation and international complacency. As time passes, many are beginning to think that deterrence works, but the notion that this is sustainable is a falsehood—the

catalyst for conflict is more lethal and unpredictable than in decades past. It was only a little more than a decade ago when, having just completed its first successful nuclear test, Pakistan pushed into Kargil, setting off the 1999 war with India. Now the threat is more unruly, however. Evidenced by the 2008 terrorist attack in Mumbai and the 2001 attack on the Indian parliament—both were executed by

What has appeared manageable in recent years is quickly looking like a strategic imbalance.

Pakistani-based jihadi networks such as Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed—there's devastating potential for tensions to escalate quickly. Add in the rapidly-escalating arms buildup on both the Pakistani and Indian sides, and what has appeared manageable in recent years quickly begins to look like a strategic imbalance that is being escalated by a severe mismatch of strike capabilities, rather than a balance-of-power that has reached some kind of continuing equilibrium.

The most agreeable and practical way forward is on the economic front. Consider the way that India and China are going about their business. They have a border dispute. They fought a war a long time ago. There's still friction. But both countries have decided to grow trade to put the dispute over the boundary on the back burner, and instead develop all kinds of win–win economic linkages. Pakistan and India don't have to settle Kashmir tomorrow—it would be absurdly naive to think it will happen anytime in the near term—but they could certainly take advantage of their status as natural trading partners. Right now, there's very little trade. The Mumbai attacks in particular deadened business linkages between the two countries—what had been a \$2 billion trade relationship dropped by some 25 percent.³² "If you try to approach the Pakistani military about their nuclear program, you will get nowhere," says Michael Krepon, co-founder of the Stimson Center. "But if you approach them in the context of economic decline, you may. It's a far better strategy than banging your head against the wall."³³

At the same time, Washington could do more to assuage Pakistan's security concerns vis-à-vis India. Though Congress may have no appetite for it, a serious, and public, discussion ought to be had about what a workable civilian–nuclear deal with Islamabad would look like. Whether Washington wants to be involved in Pakistan's expanding civilian nuclear program or not, China has shown that it is entirely prepared to be involved (Beijing is currently providing extensive assistance to Islamabad). If Washington were to roll out a plan with Pakistan, as it did with India, it would provide new leverage on nuclear issues, open up a much-needed dialogue, and bring Islamabad more into the Western conversation about nuclear development.

Lastly, it is time for Washington to publicly talk tough about Pakistan's program. While some argue this is a delicate matter only for discussion behind the scenes, the Pakistani nuclear program presents a far greater danger to global peace and security today than a possible Iranian program could, at the earliest, years from now. To address the latter with such rhetorical scorn and outright threats while allowing the former to grow so rapidly and unchecked is not only geopolitical hypocrisy, it is a strategic blunder with potentially devastating consequences. That U.S. forces had to go it alone to catch Osama bin Laden on Pakistani territory demonstrates the problems with Washington's strategic partnership with Pakistan. Now that the battle with al-Qaeda is coming to a close, the time has come to begin a serious conversation with Islamabad about what is now a more menacing threat.

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