

Nuclear Weapons and National Security

Far-Reaching Influence and Deterrence Dominance

MUTHIAH ALAGAPPA

A chief conclusion of this study is that nuclear weapons exert an indirect but far-reaching influence on the security thinking, practice, and interaction of nuclear weapon states, their allies, and nuclear weapon aspirant states in the Asian security region. On the surface nuclear weapons appear to play a modest role. Except for a brief period (1998–2002) in India-Pakistan relations, they have been less visible in comparison to the Cold War era, and they appear less salient than conventional military force in dealing with the immediate security challenges confronting states in the region. Even in the small number of situations where they are relevant, nuclear weapons remain in the background and appear to augment conventional forces. The emphasis in the region on modernizing and building conventional military capabilities would seem to further support the contention that nuclear weapons play a modest role in national security. A closer look, however, suggests that they are much more consequential.

Nuclear weapons cast a long shadow that informs in fundamental ways the strategic policies and behavior of major powers (all but one of which possess nuclear weapons), their allies, and those states facing existential threats. They induce caution and set boundaries to the strategic interaction of nuclear weapon states and condition the role and use of force in their interactions. The danger of escalation limits military options in a crisis between nuclear weapon states and shapes the purpose and manner in which military force is used. Although relevant only in a small number of situations, these include the most serious regional conflicts that could escalate to large-scale war. Nuclear weapons help prevent the outbreak of hostilities, keep hostilities limited when they do break out, and prevent their escalation to major wars. Nuclear weapons enable weaker powers to deter stronger adversaries and help ameliorate the effects of imbalance in conventional military

capability. By providing insurance to cope with unanticipated contingencies, they reduce immediate anxieties over military imbalances and vulnerabilities. Nuclear weapons enable major powers to take a long view of the strategic environment, set a moderate pace for their force development, and focus on other national priorities, including mutually beneficial interaction with other nuclear weapon states. Although nuclear weapons by themselves do not confer major power status, they are an important ingredient of power for countries that conduct themselves in a responsible manner and are experiencing rapid growth in other dimensions of power.

For allied states, the extended deterrence protection provided by a nuclear weapon major power assuages security concerns, reduces or eliminates the incentive to develop their own nuclear weapon capability, influences their force mix and posture, and enables them to gradually develop bridging capabilities to assume greater security responsibilities including strengthening their own conventional deterrence. It also restricts their military options, induces caution in their behavior, and enables them to pursue other national priorities without intensifying existing security dilemmas. For states and regimes confronting existential threats, nuclear weapons (their own or those of an ally) are perceived as the ultimate security guarantee. Although they do not rely solely or even primarily on nuclear weapons, possession or availability of such capability is perceived as essential to deter much stronger adversaries. The risk of uncertainty and potential for escalation induces caution and limits the military options available to adversaries. Under certain conditions nuclear weapons may enhance the diplomatic leverage of nuclear weapon states. The long shadow cast by nuclear weapons is also evident in the widespread international concern over the spread of nuclear weapons to additional states and especially nonstate actors, the danger of nuclear theft, smuggling, formal and black market trade in dual use technology and material, and in the national and international safeguard measures instituted to prevent such occurrences and practices.

The influence of nuclear weapons is manifest in the national security policies of states, their nuclear doctrines, in the modernization and development of nuclear arsenals, and in the development of ballistic missile defense (BMD) and counterforce capabilities. It is also evident in changes in regional security dynamics (strengthening alliances, mitigating or intensifying security dilemmas, stimulating regional initiatives), and in the international measures instituted to address concerns relating to the spread of nuclear weapons, technology, and material to additional states and nonstate actors. The influence of nuclear weapons in the contemporary era, however, is more subtle and implied than the explicit threats and deployments that characterized the Cold War period.

The study advances four propositions on the role of nuclear weapons in national security in the twenty-first century strategic environment. First, the primary role of nuclear weapons now and in the foreseeable future is basic or central deterrence. Nuclear weapons also prevent blackmail, preserve strategic autonomy

(freedom to act), and provide insurance to cope with unanticipated developments in a changing strategic environment. The offensive and defensive roles of nuclear weapons are relatively marginal in utility and appear unlikely to surpass the deterrence role or even increase much in importance in the foreseeable future. Only the United States is developing significant offensive and defensive capabilities. Technological limitations, funding constraints, the relatively low cost of maintaining a strike force that can penetrate ballistic missile defense systems, the preferences and capabilities (conventional and nuclear) of other states, and the generally stable political and strategic environment in the Asian security region are likely to limit the employment of nuclear weapons in these roles.

Second, although deterrence continues to be the dominant role and strategy for the employment of nuclear weapons, the conception and practice of deterrence is different from the mutual assured destruction condition that characterized the Soviet-American nuclear confrontation during the Cold War and varies across countries. Deterrence in the contemporary era is largely asymmetric in nature with weaker powers relying on nuclear weapons to deter stronger adversaries. Variations in goals and a broad range of capabilities have resulted in a spectrum of overlapping deterrence strategies ranging from existential deterrence through minimum deterrence to assured retaliation. At base all deterrence strategies rely on the threat of punishment. They differ in the force level required to deter, certainty of retaliation, and in the threats to be deterred. Existential and minimum deterrence rely more on uncertainty, the risks of escalation and early launch, and the absolute destruction that would result from a nuclear attack. As the name implies, there is a much higher degree of certainty in the capability to retaliate and inflict catastrophic damage in a strategy of assured retaliation. Existential deterrence is concerned primarily with state or regime survival; minimum deterrence is a default option for a state with a small nuclear arsenal concerned with deterring a stronger adversary. Assured retaliation seeks to deter a nuclear attack, including a first strike by a substantial nuclear weapon state. Both established and new nuclear powers are still defining and developing nuclear strategies to cope with a new strategic environment that is likely to further evolve. In addition, "new" nuclear weapon states often do not have the requisite capability to effectively implement their professed strategies. Consequently, there are inconsistencies between declaratory and operational doctrines, as well as behavior in a crisis situation.

Third, the absence of severe confrontations and the limited capabilities of the relatively small Asian nuclear arsenals have resulted in general deterrence postures. The United States seeks capabilities to deal with a wide array of threats, but it does not confront an immediate conflict or crisis situation that warrants actor-specific threats that could result in nuclear retaliation. Its threats to rogue states, for example, tend to be general; and those in relation to contingencies involving China are usually vague and implied. Other countries have chosen to

focus on their principal concerns. With the exception of India and Pakistan, they too do not confront situations that warrant nuclear threats. There are very few instances in which intense and immediate hostilities have resulted in the issuance of specific nuclear threats or the development of capabilities to carry them out. In all other cases, nuclear deterrence in Asia is implied and indirect. States maintain a broad range of capabilities, including nuclear weapons, and issue general threats to dissuade other states from thinking seriously about aggression.

Finally, extended nuclear deterrence continues to be important to the national security of U.S. allied states in East Asia. China and certainly India and Pakistan do not have the capability or the strategic imperative to provide strategic protection to an ally against a threat from another nuclear power. Russia has the capability and plans to extend the deterrence function of its nuclear arsenal to protect Byelorussia and Armenia. The circumstances in which such strategic protection would become necessary, however, are fuzzy. Only the United States has the capability and strategic imperative to extend the deterrence function of its nuclear arsenal to Japan, South Korea, Australia, and implicitly Taiwan. All these countries desire the strategic protection of the United States. Japan does not confront an imminent nuclear or large-scale conventional threat, but it is concerned about a rising China that is modernizing its nuclear force and a nuclear-armed North Korea. Viewing the U.S. extended deterrence commitment as essential for Japan's security, Tokyo not only seeks reaffirmation of that commitment but also to increase its credibility in the eyes of potential adversaries and its domestic public. Since the early 1990s the salience of extended nuclear deterrence for South Korea's security has declined. Nevertheless, Seoul sees the U.S. commitment as critical to maintain its nonnuclear posture in the context of a nuclear-armed North Korea and as a fallback while building a "national self-reliant defense" capability. For Australia, the U.S. extended deterrence commitment serves a rather remote but crucial function: to deter a nuclear attack on that country. The probability of an attack that would warrant U.S. nuclear retaliation is very low. Nevertheless, Canberra values the U.S. commitment because it is believed to contribute to global and regional security order and to provide other benefits to Australia. The American security guarantee continues to be critical for Taiwan, but nuclear weapons feature only indirectly in that guarantee.

The above discussion highlights the importance of the U.S. extended deterrence commitment to the security of America's allies in East Asia, especially Japan and South Korea. The U.S. commitment serves crucial symbolic and psychological functions; it reassures allies against long-range threats and prevents them from pursuing independent nuclear options. At the same time, it is relevant only in a narrow set of rather unlikely circumstances. And the competing interests and demands of allies make it difficult for the United States to move beyond declaratory statements. The pressure from Japan to consult and operationalize the U.S. ex-

tended deterrence commitment could create complications for the United States and possibly intensify security dilemmas in Northeast Asia.

Indirect but Far-Reaching Influence

Evidence can be adduced to support two competing claims on the salience of nuclear weapons for national and international security in Asia. One reading is that nuclear weapons are only marginally relevant to the many security challenges confronting the United States, Russia, and the Asian nuclear weapon states. They are irrelevant in dealing with internal ethnic and religious conflicts, political legitimacy challenges, international terrorism, and most international territorial disputes. And they appear only indirectly relevant in the management of the conflicts across the Taiwan Strait and on the Korean peninsula. China has articulated force as a key element of its Taiwan policy but its emphasis has been on building short- and medium-range conventional warhead missiles and an amphibious capability. Nuclear threat and nuclear attack will work against its political goal of unifying Taiwan with the mainland. However, nuclear weapons may be implicitly relevant in deterring U.S. intervention in the event of cross-Strait hostilities. Conventional deterrence seems strong on the Korean peninsula. South Korea and the United States have sufficient conventional military capability to defeat North Korean aggression. Although North Korea has tested a nuclear device, it does not have an operational nuclear arsenal. Pyongyang's primary instrument for defense and deterrence is still its large and lethal conventional military capability. Conventional military capability is also the mainstay of the force postures of Israel and Iran, both of which perceive existential threats. Nuclear weapons are in the forefront only in the India-Pakistan dyad. Even here, the two countries rely on their substantial conventional military capabilities as the first line of defense and deterrence.

All countries in the Asian security region are modernizing and building up their conventional military capabilities. And, except for the United States and Russia, the nuclear arsenals of the Asian countries are rather small. Nuclear modernization and development of additional capabilities are under way, but the pace is relatively moderate. There is no rush to build large nuclear arsenals, and there is no nuclear arms race in the region. All these elements would suggest that states rely primarily on their conventional military capabilities and other policy instruments (political compromise, diplomatic negotiations, economic incentives, international law) to deal with most of the immediate security challenges. In this line of argument the overall salience of nuclear weapons is low.

The second reading would be that, from about the late 1990s, nuclear weapons have become more significant in the national security policies and strategies of states in the Asian security region. The 1998 nuclear tests by India and Pakistan, the ensuing crisis between those two countries, and their ongoing development of operational nuclear forces; the 2002 Nuclear Posture Review (NPR) of the

United States (U.S. Department of Defense 2002), which identified several nuclear contingencies in Asia, including China, North Korea, Iraq, and Iran; the ongoing U.S. effort to develop a multilayered missile defense system; Moscow's emphasis on nuclear weapons as the ultimate guarantee of Russia's sovereignty and its vocal opposition to the United States' missile defense plans; North Korea's nuclear test and Iran's quest for nuclear weapons; the demand by Japan and South Korea for explicit reaffirmation of the U.S. extended deterrence commitment; continued Chinese nuclear modernization; the U.S. concern that Chinese nuclear modernization has proceeded faster than anticipated and that China is developing antisatellite weapons (U.S. Department of Defense 2007); and the ratification of the Southeast Asian Nuclear Weapons Free Zone (SEANWFZ) Treaty in 1997. All these developments attest to the growing significance attached to nuclear weapons.

This study supports the second reading and argues that nuclear weapons are becoming a crucial component of national security policies and postures of states in the Asian security region. Though less visible, their influence is far reaching in the strategic interaction of major powers, in the management of critical conflicts, including limiting military options in crisis situations, in addressing the national security threats confronting weak and isolated states, and in the international concern and response to the possible spread of nuclear weapons to additional states and nonstate actors.

Bound Major Power Strategic Interaction

The fear of escalation to nuclear war conditions the role of force in major power relations and circumscribes strategic interaction among them. By restraining measures and actions that could lead to conflict escalation, nuclear weapons limit the competitive strategic interaction of major powers to internal and external balancing for deterrence purposes; constrain their resort to coercive diplomacy and compellence; and shift the burden of international competition and adjustment in status and influence to the economic, political, and diplomatic arenas. They also render remote the possibility of a hegemonic war should a power transition occur in the region. More immediately, nuclear weapons enable Russia and China to deter the much stronger United States and mitigate the negative consequences of the imbalance in conventional military capability. Nuclear weapons reinforce India's confidence in dealing with China. By reducing military vulnerabilities and providing insurance against unexpected contingencies, nuclear weapons enable major powers to take a long view and engage in competition as well as cooperation with potential adversaries. Differences and disputes among them are frozen or settled through negotiations. Though they are not the only or even primary factor driving strategic visions and policies, nuclear weapons are an important consideration, especially in the role of force in major power strategic interaction. They prevent the outbreak of large-scale war. Military clashes when they occur tend to be limited.

Condition Regional Conflict Management

Nuclear weapons have a low profile in the conflicts across the Taiwan Strait and on the Korean peninsula. Conventional military capability dominates deployment, perception of immediate threat, and response to them. However, the danger of escalation to nuclear war determines the role and deployment of conventional military force. That danger also shapes the range and choice of military options in a crisis and the risks that states are willing to take in pursuit of their objectives. The risk of nuclear war not only tempers the means but also influences short- and medium-range goals. Although the nuclear threat is implicit in the Taiwan conflict, the danger of nuclear escalation and retaliation induces caution, deters large-scale conventional attack by China, restrains American military intervention, and limits the military options available to both countries. The nuclear consideration, along with others, also tempers the urgency of Beijing's unification goal and induces Washington to restrain Taiwanese leaders advocating the independence option. Similarly on the Korean Peninsula, nuclear weapons provide an important backdrop. North Korea views nuclear weapons as the ultimate guarantee of its security; this in turn has increased the relevance of the American nuclear umbrella for South Korea. Nuclear weapons figure more prominently in the India-Pakistan conflict. Pakistan attempted to exploit the danger of escalation to nuclear war to alter the status quo. However, that risk also conditioned how it used force and the Indian response to the Pakistani military action. In all three conflicts, the shadow of nuclear escalation circumscribes military action. Though small in number and appearing relatively stable, these conflicts are the most likely sources of major war in the region. Nuclear weapons condition their management in significant ways and in essence take large-scale war off the table.

Ultimate Security Guarantee

Among the states that perceive existential threats, Pakistan relies more immediately and substantially on its nuclear weapon capability to mitigate the negative effects of the imbalance in conventional military capability and deter large-scale conventional and nuclear attack by India. It also seeks to exploit the danger of escalation to nuclear war to support its Kashmir policy. Israel relies primarily on its strong conventional forces to deter and defeat Arab aggression. Its substantial nuclear arsenal remains opaque, and Israel has avoided explicit nuclear threats or reference to nuclear weapons in its security strategy. Despite this, nuclear weapons are perceived as providing the ultimate security guarantee, and Israel has steadily built up its nuclear arsenal. For North Korea, although it still has a large and lethal conventional military capability, its advantage in the conventional military balance has steadily declined. Diplomatically isolated and economically weak, North Korea sees nuclear weapons as an essential reinforcement of its conventional

military capability to deter American aggression. Likewise, Iran, witnessing the reluctance of the United States to attack a nuclear capable North Korea and the lack of regional support for such an attack, may perceive nuclear weapons as essential to deter a U.S. attack. Taiwan does not have nuclear weapons, but the implicit American security guarantee including its nuclear umbrella deters large-scale Chinese military attack.

Concern Over New Proliferation

The influence of nuclear weapons is also evident in the international concern over and response to the possible spread of nuclear weapons to additional states and nonstate actors. That the acquisition of a nuclear weapon capability by North Korea and Iran may undermine the nuclear nonproliferation regime, threaten neighboring states, and alter regional security dynamics in Northeast Asia and the Middle East underscores the international effort through the United Nations, the Six-Party Talks, and the European Union to address the nuclear challenges posed by these two countries. In addition to multilateral efforts, the United States initiated the Proliferation Security Initiative (PSI) to interdict transportation of nuclear material and technology from North Korea, retains the force option in dealing with the Iranian challenge, has reaffirmed its extended deterrence commitment to Japan and South Korea, and has taken measures to strengthen its security ties with allies and friends in the Middle East. The North Korean test has generated substantive discussion in Japan on its own nuclear option and on the effort to make the U.S. commitment more credible. At the regional level, Asian states have initiated the Asian Senior-Level Talks on Nonproliferation to discuss and evaluate regional commitments and efforts to prevent proliferation of weapons of mass destruction (WMD); some have joined the PSI; and the Southeast Asian countries have revived the idea of a nuclear weapon-free Southeast Asia to prevent spillover effects from the nuclearization of the Northeast and South Asian subregions (see Tan, Chapter 16 of this volume).

Also of grave concern is the challenge posed by the possible acquisition of nuclear and other WMD by nonstate extremist groups. Though the possibility of such groups acquiring nuclear weapons is low, even a small possibility is considered highly dangerous because of the enormous damage that can be inflicted by such weapons (see Kapur, Chapter 11 of this volume). "Rogue" states like North Korea and Iran may be difficult to deter, but it is believed that traditional deterrence cannot work against nonstate groups that have no return address. This fear and the associated concerns relating to theft and illegal trade in nuclear weapon-related material and technology have resulted in a wide range of countermeasures with consequences for security interaction at the global and regional levels. In sum, though less visible, nuclear weapons have far-reaching influence on national security strategies, on the strategic interaction of nuclear weapon states and their

allies, and in the international response to the possible further spread of nuclear weapons. They have and could further alter security dynamics in Northeast Asia, South Asia, the Middle East, and the Asian security region as a whole. For nuclear weapon states and their allies, nuclear weapons serve important deterrence functions, help them cope with unexpected contingencies (insurance), and preserve their freedom to act (strategic autonomy). The nuclear arsenals of Asian states are likely to grow in quantity and quality, although such growth will be gradual. As capabilities increase, the salience of nuclear weapons in national security strategies would further increase. However, nuclear weapons appear unlikely to occupy center stage as they did during the Cold War. Barring unforeseen circumstances, the present development-focused national priorities and the generally stable Asian security environment are likely to prevent severe confrontations and intense strategic competition among major powers (see Alagappa, Chapter 1 of this volume).

The Primary Role of Basic Deterrence

The primary function of nuclear weapons in the Asian security region is basic deterrence—that is, preventing large-scale conventional attack and deterring any form of nuclear attack against the homeland of a nuclear weapon state. China, Russia, India, and Pakistan all see nuclear weapons as essential to balance and deter stronger powers that threaten or might threaten their interests and to preserve policy autonomy in a context of American dominance and a rising China and India. The United States views nuclear weapons as necessary for contingencies involving China and to deter Russia if relations with that country deteriorate. It is unclear if the U.S. nuclear arsenal has a counterforce role against Russia and China and if it is developing BMD against both these countries. Even if the United States were successful in developing these capabilities, the political purposes for which it would use them is unclear. Some states see a role for nuclear weapons to deter chemical and biological attacks on their homelands as well. And some countries have attempted to deploy nuclear weapons in coercive diplomacy, war fighting, and strategic defense roles. In 1999, Pakistan engaged in coercive diplomacy by exploiting the risk of escalation to nuclear war. In response, India too engaged in coercive diplomacy and explored limited war under nuclear conditions. In its 2002 NPR (U.S. Department of Defense 2002), the United States indicated a shift in emphasis from deterrence to offensive and defensive strategies. The ensuing discussion of nuclear policies and strategies of relevant states and their behavior in conflict situations reveals the limitations of the offensive and defensive roles of nuclear weapons and highlights basic deterrence as the most important role for nuclear weapons.

China-United States Dyad

The United States is the principal international security concern for China (see Chu and Rong, Chapter 5 of this volume). Although there are bilateral concerns

and disputes, China views Russia as too weak and India as too distant to constitute significant security threats. Further, relations with Russia are good and those with India are on the mend. In China's view, after the United States, Japan is the country most likely to present a future security threat. However, Japan is not a nuclear weapon state, and China has deliberately deemphasized its nuclear forces in relation to that country for fear of provoking it into acquiring nuclear weapons. For the foreseeable future, the principal Chinese nuclear concern centers on the United States.

For the United States, China is the principal concern in Asia. The 2006 Quadrennial Defense Review Report states "of the major and emerging powers, China has the greatest potential to compete militarily with the United States" (U.S. Department of Defense 2006: 29). Earlier, the 2002 U.S. NPR (U.S. Department of Defense 2002) identified China as a potential nuclear contingency because of the uncertainty over that country's strategic objectives and because it is rapidly modernizing its nuclear forces. That NPR also identifies Taiwan as an immediate nuclear contingency, although the public version does not state why it is a nuclear contingency and how nuclear weapons may be relevant to that conflict. The U.S. Defense Department's 2007 report on China's military power asserts that China's expanding military capability is a major factor in changing the East Asian military balance, that improvement in Chinese strategic capabilities may provide that country with new options, and that China's antisatellite programs have significant implications for antiaccess/area denial in Taiwan Strait contingencies and beyond.

War or intense rivalry between the United States and China could arise from one or more of three developments: escalation of a military conflict across the Taiwan Strait, an explicit U.S. strategy to prevent or contain the rise of China, or a Chinese decision to challenge the primacy of the United States. As highlighted in Chapter 1 of this volume, although Beijing is increasing its international power and influence, it does not have the capability or the imperative to challenge American primacy in the foreseeable future. For its part, Washington seeks to engage and constrain China, not contain it. The U.S. purpose is to integrate China as a responsible power into an international system dominated by American values. Neither country views confrontation as inevitable or useful. Except possibly on the Taiwan issue, it is in China's interest to avoid confrontation with the United States.

In regard to the Taiwan conflict, the primary function of nuclear weapons is to deter intervention and aggression. China does not threaten nuclear attack to prevent Taiwan's independence or to forcefully unify that island state with the People's Republic of China (PRC). It would be self-defeating for the PRC to threaten use of nuclear weapons against a territory and people it claims as its own. Further, because Taiwan is geographically close to China, the fallout from a nuclear attack on Taiwan would affect parts of China as well. Threatening to use nuclear

weapons against Taiwan would also tarnish Beijing's international image. For all these reasons, any use of force by China against Taiwan is highly likely to be conventional. For its part, Taiwan seeks to deter the PRC through its own conventional military capability and the American security commitment.

For the present, nuclear weapons are relevant only in the U.S.-PRC dimension of the Taiwan conflict. Beijing hopes that the implicit risk of escalation to nuclear war and the prospect of a nuclear retaliatory strike on the United States will induce caution in Washington, deter American military intervention, and compel Washington to rein in Taiwanese leaders who espouse independence. In some ways, the Chinese approach is akin to Thomas Schelling's "threats that leave something to chance," in which deterrence flows from a situation rather than from an explicit threat to escalate or retaliate (Schelling 1966: 121n). The American military objective is to deter Chinese military action against Taiwan and prevent unification by force. American deterrence is primarily conventional. However, by virtue of its nuclear arsenal, American deterrence of China inevitably includes a nuclear dimension. The 2002 NPR identifies Taiwan as a nuclear contingency. Although neither the United States nor China has articulated a policy or a strategy that would involve the use of nuclear weapons, this does not imply that nuclear weapons are irrelevant. The risk of conflict escalation is an ever-present possibility. That risk, however, helps deter the outbreak of hostilities and makes large-scale conventional war unlikely.

A few analysts in both countries have suggested that nuclear weapons could have an intrawar role in the conflict. Keir Lieber and Daryl Press (2006, 2007), for example, suggest that, in the event of military conflict across the Taiwan Strait, the United States might deploy its nuclear primacy to threaten China with a disarming first strike to prevent China from alerting its strategic forces and to keep nuclear weapons out of the conflict. This presumes China would introduce nuclear weapons in the event of overt hostilities. Despite remarks by some Chinese analysts that China should reconsider its no-first-use (NFU) policy and that the United States should expect nuclear retaliation if it intervenes in the Taiwan conflict, it is not in China's interest or its policy to pursue such a course of action (see Chu and Rong, Chapter 5 of this volume). And the United States would likely respond to Chinese military action in the Taiwan Strait with conventional military force unless Beijing attacks U.S. territory.

Beijing's objective in the nuclear arena is to build a robust strategic force to deter an American attack (conventional and nuclear) on its homeland. If deterrence fails, it wants to have a survivable and capable force to retaliate and inflict catastrophic damage on the U.S. mainland. As observed earlier, in the case of the Taiwan conflict, Chinese nuclear weapons have an implicit deterrence role. It is not in China's interest to introduce nuclear weapons into that conflict in support of coercive diplomacy or for war-fighting purposes.

Though not publicly articulated, it seems reasonable to assume that a primary function of the U.S. nuclear arsenal is to deter large-scale Chinese conventional and nuclear attack on American territory. Implicitly, the U.S. nuclear capability also deters a Chinese attack to alter the status quo across the Taiwan Strait. It is unclear how and when the United States will respond to a Chinese attack on Taiwan and whether nuclear retaliation will be contemplated. Much will depend on the situation and whether China introduces nuclear weapons. The United States appears increasingly concerned that Chinese space programs may undermine traditional American military advantages in relation to the Taiwan conflict. The deterrence function of the U.S. nuclear arsenal is not controversial, but some have argued that the United States is intentionally building nuclear primacy and that it is on the cusp of achieving the capability to disarm the long-range nuclear arsenals of Russia and China (Lieber and Press 2007).

Whether the U.S. has a disarming capability against Russia is open to debate. Against China, which has a much smaller nuclear force, it is likely that the United States has substantial counterforce capability. Nevertheless, from an operational perspective, unless the United States can be absolutely certain it can destroy all Chinese strategic assets, having a substantial capability may not provide a military advantage. Even if the United States has a disarming capability against China, the key question is what political purpose would it serve. As noted earlier, an intense confrontation with the United States is not in China's interest, and Beijing has deliberately avoided such confrontation. In the absence of serious provocation, a disarming U.S. strike against China seems hardly credible. If the rise of China is posited as a credible reason, why has the United States refrained from striking China while its nuclear capability is still relatively weak? That Washington contemplated such a strike in 1964 is irrelevant. China was not a rising power then, and it was also not a nuclear power. Even under those conditions the United States chose not to carry out a preventive strike. It seems incredible that Washington might now or in the future carry out a disarming strike against a powerful and nuclear-armed China. The uncertainty of success and the catastrophic cost to both countries would outweigh any rational gain.

Lieber and Press posit that the United States may gain coercive leverage from its nuclear primacy in a future crisis over Taiwan. Washington could warn Beijing that China would face a disarming first strike if it alerted its strategic forces. As noted earlier, it is in China's interest to keep nuclear weapons out of the conflict. It does not have to be threatened with a disarming first strike to do so. The same coercive leverage can be had from a secure second-strike capability that can inflict unacceptable damage. The Lieber and Press argument is similar to the second-wave theorizing of deterrence that accorded priority to technology, military capability, and the logic of the destructive power of nuclear weapons rather than to politics and policy. Although scenarios for the offensive use of nuclear weapons

could be imagined, the indisputable primary role of U.S. nuclear weapons in relation to China is deterrence.

China relates its strategic deterrent force to American capability. If the United States develops effective counterforce and BMD capabilities that can threaten the credibility of its strategic deterrent, China will likely respond by increasing the number and effectiveness of its long-range missiles, MIRVing them, and developing counter-BMD capability, including antisatellite weapons. The purpose would be to sustain a strong deterrent force that can survive a first strike and retaliate. Such a nuclear force would also be able to deal with threats from other nuclear weapon states in its neighborhood. China may develop additional capabilities to further strengthen its deterrent posture, which appears to be transitioning from minimum deterrence to assured retaliation, and to increase its policy options.

Russia-United States-China

Russia's international security concerns derive not from any specific threat but from the perceived negative consequences of developments that have weakened its position and influence in the post-Cold War world (see Fedorov, Chapter 4 of this volume). The Russian elite has come to view the United States and its unilateral approach to international governance as marginalizing Russia and threatening its interests in Europe, the Middle East, Transcaucasia, Central Asia, and the Pacific region. Although Russia cooperates with China on several international issues and supplies advanced weapons and military technology to that country, the rapid rise of China is a source of apprehension in some Russian quarters.

Seen as compensating for its weakness in conventional military capability, nuclear weapons are depicted as the ultimate guarantee of Russia's "real sovereignty." Their principal function is deterrence of the United States and China, but it is unclear what specific threats that nuclear weapons are supposed to deter. America's development of BMD and its counterforce capability are perceived to weaken Russia's strategic deterrent. In response, Russia appears to be accelerating the production of a new missile system and has called for new arms control measures. Moscow has renounced its NFU policy and now appears to be considering demonstration (conflict deescalation) and war-fighting roles for its nuclear weapons. As with deterrence, the circumstances in which Russia's nuclear weapons might be used in war fighting and their specific intrawar roles remain unclear.

Although Russia-United States relations have soured during the last several years over the eastward expansion of the North Atlantic Treaty Organization, the planned U.S. deployment of missile defense in Eastern European countries, and over other issues, the United States does not view Russia as an adversary. Nevertheless, as indicated in the 2002 NPR, Russia still has a large nuclear arsenal, and deterrence of that country continues to be a function of the U.S. nuclear arsenal. China too does not view Russia as an adversary. Its primary focus is the United

States. Nevertheless, there is a latent apprehension in China of a resurgent Russia, as there is of a fast-rising China in Russia. If necessary, China's strategic deterrent against the United States can also deter Russia.

The Russian emphasis on nuclear deterrence appears to be grounded in symbolic and psychological considerations. Beginning in Vladimir Putin's second term, nuclear weapons, along with the command of vast energy resources in an energy-hungry world, are viewed as key ingredients of national power and proof of Russia's reemergence as a great power.

Pakistan-India-China

In the Pakistan-India dyad the primary role of nuclear weapons is deterrence. Islamabad views nuclear weapons as essential to offset Indian superiority in conventional arms and deter a large-scale conventional military attack on its homeland (see Khan and Lavoy, Chapter 7 of this volume). New Delhi too sees nuclear weapons primarily in a deterrent role, not only against Pakistan but also against China (see Rajagopalan, Chapter 6 of this volume). Despite scholarly and international predictions to the contrary, nuclear deterrence has worked in the Pakistan-India dyad during both the covert and the overt periods (Hagerty 1998). There has not been a large-scale war between the two countries since they acquired nuclear weapon capability. The nuclear shadow limited the objectives, means, and geography of the 1999 Kargil conflict.

In the early years of the overt nuclear period, Pakistan, and in response India, attempted coercive diplomacy and explored limited war under nuclear conditions. Deploying the risk of escalation to nuclear war as a shield, Pakistan sought to alter the actual Line of Control (LoC) and to force India to the negotiating table to discuss the Kashmir issue. Islamabad was partially successful in its effort. However, the defeat of Pakistani forces, their withdrawal from Kargil, and India's insistence that the LoC could not be altered demonstrate the limitation of nuclear weapons in a coercive diplomacy role. International support for India's position and the perception of Pakistan as a dangerous and irresponsible nuclear weapon state also highlight the political liability of using nuclear weapons in a revisionist role. In the wake of the 2001 terrorist attack on the Indian parliament, New Delhi seriously explored ambitious notions of limited war, including strikes on insurgent groups based in Pakistan; but these were considered too dangerous and dropped. India's attempt at coercive diplomacy and limited war failed (Basrur 2005). New Delhi recognized that nuclear deterrence is effective only against a narrow range of threats—essentially against large-scale conventional attack and nuclear attack. Nuclear weapons cannot deter lower-level conventional military incursions, militant insurgencies, or crossborder terrorism. Pakistan's and India's failed attempts revealed the limitations of nuclear weapons in the coercive diplomacy and limited

war roles in this dyad. A long view of the recent history suggests that basic deterrence is the primary function of nuclear weapons. Although India has expressed interest in missile defense and supports the American effort in this area, it is unlikely to develop substantial strategic defense capability in the near future. Any Indian advance in strategic defense would likely be neutralized by Pakistan.

Among the major powers, China is the primary concern for India. However, India does not fear an existential threat or a large-scale conventional or nuclear attack from that country. Unlike Pakistan, China is viewed as a responsible nuclear weapon state that is unlikely to engage in adventurism. Further, India is confident that it has sufficient conventional military capability to deal with limited and large-scale conventional attacks by China. India's strategic concern with China is twofold: one is Chinese strategic support for Pakistan; the second is the strategic (nuclear) imbalance with China, which it is believed could compromise India's strategic autonomy and disadvantage its quest for power and influence in the region (see Rajagopalan, Chapter 6 of this volume). Although India is not worried about a Chinese nuclear attack, New Delhi is vigilant and is developing long-range missiles that can reach most major Chinese cities. It aims over time to develop a robust nuclear deterrent against China to add to its already strong conventional deterrence.

North Korea-United States-South Korea

On the Korean peninsula, nuclear weapons are relevant primarily in basic and extended deterrence functions. As indicated earlier, nuclear deterrence has assumed greater salience for Pyongyang (see Park and Lee, Chapter 9 of this volume). In contrast, the salience of nuclear weapons in the security strategies of the United States and South Korea declined in the 1990s (see Choi and Park, Chapter 13 of this volume). The North Korean nuclear test, however, has resurrected South Korea's interest in extended nuclear deterrence.

The primary function of North Korea's small and unproven nuclear weapon capability is basic deterrence: to neutralize the U.S. and South Korean balance of power advantage and deter a preventive attack by the United States (see Park and Lee, Chapter 9 of this volume). North Korea can threaten U.S. forces and allies in East Asia, but it does not have missiles that can reach the United States. Its present very limited capability cannot support offensive strategies. Any attack on U.S. forces deployed in East Asia or on American allies would be suicidal. North Korea's nuclear weapon program provides bargaining leverage in its negotiations with the other five countries in the Six-Party Talks. Pyongyang has skillfully used that leverage to secure economic benefits, political and diplomatic recognition, and security assurances that would help prolong the Kim Jong Il regime. Like Pakistan, North Korea may in due course seek to deploy the risk of escalation to nuclear war by engaging in lower-level violence to extract concessions from its neighbors.

But such action would be risky. Basic deterrence will remain the primary security value of nuclear weapons for North Korea in the next decade or two.

North Korea's nuclear test has resurrected interest in South Korea to reaffirm the U.S. extended deterrence commitment. Seoul views that commitment as crucial to maintaining its nonnuclear posture and as a fallback while building its own "national self-reliant defense" capability and resolving the conflict with North Korea through bilateral and multilateral negotiations. In the highly unlikely event that North Korea uses nuclear weapons against South Korea, other U.S. allies, or American forces in the region, the United States would certainly retaliate, although whether it would use nuclear weapons remains uncertain. In addition to deterring a North Korean attack, the United States may be developing the capability for offensive and defensive counterforce roles to destroy the limited strategic assets of North Korea. Whether the United States has the confidence to embark on an offensive course of action and whether any political and military purpose will be served by it remain unclear.

Israel and Iran

Dissuading preemptive or preventive military attack and deterring large-scale conventional aggression are the primary roles of nuclear weapons for countries that face existential threats. For Israel, nuclear weapons are an insurance against large-scale conventional attack by a coalition of Arab states that could threaten its viability as a sovereign state (see Cohen, Chapter 8 of this volume). Although what constitutes an existential threat has been debated, it appears that the crossing of certain red lines could trigger the retaliatory use of nuclear weapons. Possible scenarios include Arab penetration of Israel's post-1949 borders, destruction of Israel's air force, massive attacks on Israeli cities, and the use of nuclear weapons on Israeli territory. If Israel has developed the technology to produce battlefield tactical nuclear weapons (this is not certain), it would signal a shift in policy to include a war-fighting role for nuclear weapons. Israel's existential deterrence nuclear policy is linked to maintaining nuclear monopoly in the Middle East. To preserve that monopoly, Israel undertook a preventive military attack on the Iraqi Osirak reactor in 1981. In 2007, Israel undertook preventive military action against an alleged nuclear facility in Syria. Some observers believe that it might take similar action against Iranian nuclear facilities (Raas and Long 2007).

Deterrence of a U.S. attack is the primary driving force behind Iran's quest for nuclear weapons. Enhancing the theocratic regime's legitimacy at home and supporting its great power ambitions in the region are important considerations as well (see Hagerty, Chapter 10 of this volume). Should Iran acquire nuclear weapons, like Pakistan it may venture to use them in a coercive diplomacy role, but this is not a near-term prospect. Deterrence will be the key function. A nuclear Iran is likely to make the deterrence function of Israel's nuclear arsenal more ex-

PLICIT and Iran focused. It may also further strengthen the Arab states' security ties with the United States. The U.S. commitment to them may include an implicit extended nuclear deterrence dimension as in the case of the U.S. commitment to Taiwan, although the security commitment itself would be explicit.

From the foregoing discussion, it is evident that basic deterrence is the primary function of the nuclear arsenals of the major powers in the Asian security region. China, Russia, and India all seek to balance and deter a stronger power that is or could become an adversary. The United States seeks to deter a rising China and a Russia that still has a large nuclear arsenal.¹ Deterrence is also the key role for the nuclear arsenals (or nuclear quests) of states with acute or existential security concerns like Pakistan, Israel, North Korea, and Iran. Some states may seek to exploit the coercive potential of nuclear weapons to alter the status quo or blackmail non-nuclear neighbors. Such roles carry a high-risk premium and heavy political and economic costs with a low probability of success. Consequently these will not be central functions of nuclear weapons in the foreseeable future. The United States is developing offensive and defensive capabilities, but it appears unlikely that these will be sufficiently effective to blunt with confidence the strategic deterrent forces of China or Russia. They may be more potent against lesser nuclear powers but residual doubt would still induce caution in employing nuclear weapons against them in these roles.

Asymmetric, Diverse, and Dynamic Deterrence Strategies

The dominant conception of deterrence during the Cold War was grounded in the strategic interaction between the United States and the Soviet Union, two superpowers with vast nuclear and conventional arsenals who were locked in an intense ideological and strategic struggle. Deterrence between them that was focused on the Central European front was specific, immediate, and rested on mutual vulnerability to each other's secure second-strike capability. As elaborated in Chapter 2, other forms of deterrence, including existential, minimum, opaque, and recessed deterrence, also existed during the Cold War. These, however, remained on the periphery because the Soviet-American confrontation dominated international security.

There is no comparable overarching global security dynamic in the present period, and national power including nuclear capabilities span a wide spectrum. Except possibly between the United States and Russia, nuclear deterrence today operates largely in a condition of asymmetric power relationships. Using its still relatively large nuclear arsenal, Russia too seeks to deter a far more powerful United States from a position of weakness. China seeks to deter the dominant United States. India seeks to deter a fast-growing China that has a more advanced nuclear arsenal, as well as a weaker Pakistan, which has comparable nuclear capabilities.

Pakistan seeks to deter a far larger and conventionally stronger India. From its position of undeclared nuclear monopoly in the Middle East, Israel seeks to deter conventional military attack by a coalition of Arab states. And isolated North Korea and Iran seek to deter the world's only superpower, the United States. In all the above cases, weaker powers view nuclear weapons as an important means to deter states with greater nuclear and conventional military capabilities. The United States, on the other hand, seeks to deter multiple threats or contingencies from a position of unmatched military capability. In nearly every case, deterrence is a strategy between unequal powers. Asymmetry is now the dominant condition for deterrence. Combined with the small size of Asian nuclear forces and their limited capabilities, asymmetry has resulted in three basic types of deterrence strategies—existential deterrence, minimum deterrence, and assured retaliation.

No one conception of deterrence dominates thinking about nuclear strategy in the Asian security region. Each state's choice of strategy hinges on its strategic purpose, capabilities, and circumstances. Existential deterrence captures the nuclear postures of Israel and North Korea; it is also likely to be the posture of a nuclear Iran; minimum deterrence is the formal label attached to the nuclear strategies of Pakistan, India, and China; and the United States and Russia retain the capability for assured retaliation. Existential deterrence, minimum deterrence, and assured retaliation strategies are conceptually interconnected and overlapping. All three strategies rely on the threat of punishment but differ in the degree of certainty of retaliation and the force level required to deter. They can be viewed as part of a continuum. Existential and minimum deterrence are not necessarily preferred endpoints but convenient or necessary way stations on the path to assured retaliation.

Existential Deterrence

Existential deterrence is rooted in the belief that the very existence of a stockpile of nuclear weapons would induce caution if the political goal and military engagement were clear. It was advocated during the Cold War (as an alternative to the assured retaliation strategy) to argue against relative destruction capabilities and competitive armaments, and for the credibility of the American extended deterrence commitment in Europe. The idea of existential deterrence has been adapted in the contemporary period as a strategy for states that have only nascent or undeclared nuclear forces and whose primary security concern is survival. In this adaptation, as the stake and resolve are clear, a simple capability to carry out an undifferentiated countervalue strike is adequate to deter the adversary. Such a strategy was deemed to characterize Indian and Pakistani nuclear behavior in the 1980s and 1990s before they became overt nuclear weapon states (Hagerty 1998).

The Cold War-type existential deterrence is discernible now in the nuclear policy of Israel and the adapted version in that of North Korea. For Israel, a strong

conventional military capability remains the bedrock of defense. At the same time, it has developed a substantial nuclear arsenal, which is viewed as insurance of last resort. The sole purpose of Israel's undeclared but substantial nuclear arsenal is to deter existential threats and, if absolutely necessary, to retaliate against that adversary. However, it has not issued any explicit nuclear threat. The Israeli political leadership believes that mere knowledge by friend and foe that Israel possesses a substantial and operational nuclear arsenal is sufficient to deter adversaries (see Cohen, Chapter 8 of this volume). Should Israel's nuclear monopoly in the Middle East be threatened, say by a nuclear Iran, its deterrence strategy would become more explicit and possibly move in the direction of assured retaliation or even war fighting.

The adapted version of existential deterrence characterizes the strategy of North Korea. The purpose of its nascent nuclear weapon capability is to offset the growing imbalance in conventional military capability and deter the United States. Although estimates vary, Pyongyang is believed to have enough weapon-grade plutonium for about six to ten bombs (Cirincione, Wolfsthal, and Rajkumar 2005). It has also developed short- and medium-range missiles that can potentially carry warheads to regional targets. North Korea does not have missiles that can reach the United States. A long-range missile was tested in 1998 with mixed success. North Korea still has several problems to overcome before it can be deemed to possess an operational nuclear arsenal. Nevertheless, Pyongyang believes that the possession of even a fledgling ability provides North Korea with a deterrence capability that can augment its conventional deterrence against the United States (see Park and Lee, Chapter 9 of this volume). The potential to inflict quick and substantial damage on targets in South Korea and Japan would deter the United States from undertaking preventive military action against North Korea like the action it took against Saddam Hussein's Iraq.

Existential deterrence of the second kind is also likely to be Iran's strategy if it succeeds in its quest for nuclear weapons (Hagerty, Chapter 10 of this volume). As in North Korea, the foremost concern of Iran's political elite is the survival of the revolutionary Iranian state and the incumbent leadership. Nuclear weapon capability is believed to be essential to regime security. It would offset Iran's weakness in conventional military capability, substantially increase the cost of confrontation with Iran, and deter the United States from invading Iran to topple the theocratic regime and reverse the revolution. Nuclear-capable North Korea has been relatively successful in fending off U.S. aggression, and gaining acceptance of the Kim Jong Il regime that was previously condemned as morally despicable. The other nonnuclear member of the axis (Saddam Hussein's Iraq), however, was invaded twice by the United States, and ultimately the regime in that country was toppled. The lessons from North Korea and Iraq may drive Iran to continue its covert quest for nuclear weapon capability. The danger for Iran,

however, is that it is still several years away from acquiring even a fledgling capability. Meanwhile it is subject to preventive attack by the United States or Israel.

Minimum Deterrence

The strategy of minimum deterrence is rooted in the premise that a small, easily concealable nuclear force has an inherent retaliation capability and that the level of damage caused by a small number of nuclear weapons in a countervalue strike is sufficient to deter countries with much stronger nuclear arsenals. Minimum deterrence is the formal label used by governments in Pakistan, India, and China to describe their national nuclear postures. All three countries have made only a few brief official statements on their nuclear strategies. These have at times been contradictory, reflecting the secrecy and ambiguity that surround their nuclear weapon capabilities but also suggesting that their nuclear strategies are still evolving. Official statements and interpretations by analysts suggest that Pakistan, India, and China seek to deter large-scale conventional and any form of nuclear attack on their homeland by threatening nuclear retaliation.

The minimum deterrence strategy of Pakistan appears to place a higher premium on risk and uncertainty than that of India, which emphasizes certainty of retaliation and massive damage, and of China, which appears to have characteristics of an assured retaliation strategy. Pakistan has rejected India's proposal that the two countries adopt an NFU policy. It sees the possibility of first use as strengthening its deterrence strategy. Making public its nuclear threshold would provide space for India to use its huge conventional military capability and reduce the deterrent value of Pakistan's nuclear force (see Khan and Lavoy, Chapter 7 of this volume). Islamabad seeks to constrain and deter India by exploiting the risk of escalation to nuclear war as well as by threat of nuclear retaliation.

India and China have committed themselves to an NFU policy because it serves their strategic interests, but also in the belief that the value of nuclear weapons is primarily political and that they are weapons of last resort. Both countries have since qualified their commitments, and the security value of the NFU policy is now being debated in China. In the wake of the 1998 tests, India quickly committed itself not to use nuclear weapons first and to use such weapons only in retaliation against a nuclear attack. However, subsequent statements that India might retaliate with nuclear weapons against chemical and biological attacks, and against attacks on Indian forces anywhere, have loosened its earlier commitment to limit retaliation to nuclear attack on its territory, opening up the possibility that India might use nuclear weapons first in other situations (see Rajagopalan, Chapter 6 of this volume). China has qualified its earlier absolute commitment that it would "never at anytime or under any circumstances be the first to use nuclear weapons." The emphasis in its NFU commitment has shifted to nonnuclear weapon states. Although NFU is still the official policy, some Chinese analysts believe it should

be reconsidered in relation to the Taiwan conflict. They have argued that a first-use policy would strengthen deterrence against American intervention. Others argue that, given the American threat of prevention, a first-use policy would create uncertainty and invite a preemptive strike. In Chapter 5 of this volume, Chu and Rong argue that the NFU policy safeguards China's interests by contributing to greater certainty and preventing escalation to nuclear war. From an operational perspective, the NFU pledge may not be meaningful, as states cannot be certain that the pledge will hold in crisis situations.

The minimum deterrence strategies of India and China have also been trending in the direction of assured retaliation. In India, this shift is more evident as an idea than in terms of capability (see Rajagopalan, Chapter 6 of this volume). Emphasizing credibility, the Indian strategy of minimum deterrence seeks to move beyond the risk and uncertainty that are characteristic of the minimum deterrence strategy. By stressing certainty of retaliation, it opens up the possibility of moving to a full assured retaliation strategy in due course. For now, however, the emphasis remains on a small nuclear force that can survive a first strike and inflict a high level of retaliatory damage on the adversary. The interpretation of minimum deterrence in China has shifted from existential deterrence in the early years to minimum deterrence as understood in the literature; it is now trending toward assured retaliation. Iain Johnston (1995-96) labels China's present strategy as "limited deterrence" while Chu and Rong (Chapter 5 of this volume) call it "large-scale minimum deterrence." Although the labels may be different, there is agreement that the Chinese understanding and practice of minimum deterrence is dynamic. The contemporary Chinese understanding of minimum deterrence reduces the emphasis on risk and places much greater emphasis on survival and certainty of retaliation. Unlike in India, this shift is reflected in the development of capabilities as well. The Chinese conception of minimum deterrence has also become more relational; that is, it has become more sensitive to change in adversaries' force structure. Over the longer term, the minimum deterrence strategies of China, and possibly India and Pakistan, will likely acquire assured retaliation characteristics.

Assured Retaliation

The United States and Russia still have large nuclear arsenals and secure second-strike capabilities that can inflict unacceptable damage on each other and on China. China and Russia believe that the strategic defense capabilities under development by the United States would erode the effectiveness of their strategic deterrent forces. If the United States is successful in building effective strategic defenses against Russia and China, and these two countries are unable to neutralize them, one key basis (lack of defense against nuclear weapons) for deterrence dominance would be undermined. The development of effective defense capabilities by China and Russia would also have a similar effect. However, even

if deterrence is no longer technologically dominant, this does not automatically imply that the strategy of deterrence would cease to be the preferred strategy for employment of nuclear weapons. The choice of strategy is a function of both political objectives and capabilities.

In addition to diversity, deterrence strategies in the Asian security region are in the midst of change and likely to evolve further. The late entrants are still coming to terms with their status as nuclear weapon states and are developing strategies appropriate to their security situations and capabilities. The older nuclear weapon states are adapting to new strategic circumstances, threats, and capabilities. The United States made a bold attempt in the 2002 NPR to map its nuclear strategies and capabilities for a new era. Though it is still official policy, the NPR has failed to crystallize support, and with the termination of the Bush administration in January 2009, its future remains uncertain. Although Russia has expressed its view that nuclear weapons remain important, it also has not developed a coherent strategy for the new era. Chinese nuclear strategy has evolved and will likely continue to do so with a focus on the United States.

General Deterrence Postures

Contemporary deterrence postures are more in line with the idea of general deterrence than immediate deterrence; the latter applies in very few cases with limited systemic consequence.² The dominance of general deterrence postures is due to the absence of severe confrontations. Although the United States, Russia, China, and India all face several threats, immediate situations that may involve nuclear weapons are small; most other threats are long range and still hypothetical. Of the immediate situations, only in the India-Pakistan conflict are the two protagonists locked in a military confrontation. The Taiwan conflict has witnessed periodic tensions and relatively minor military clashes, but the United States and China are not locked in a military confrontation. A military standoff persists on the Korean peninsula, but the intensity of conflict has declined over time. Although general deterrence postures also existed during the Cold War, in large measure they were extensions of the severe confrontation and the immediate deterrence situation between the United States and the Soviet Union in Europe.

Reflecting the multiple threats confronting the United States, the 2002 NPR categorizes contingencies as immediate (well-recognized current dangers), potential (plausible, but not immediate), and unexpected (sudden and unpredicted). North Korea, Iraq, Iran, Syria, and Libya are identified as countries that could be involved in immediate, potential, and unexpected contingencies. China is an immediate contingency (Taiwan) and a potential contingency (modernization of its military capability combined with conflicting strategic objectives could result in a hostile situation). Russia is identified as a possible concern in the event that Russo-American relations deteriorate. Moscow is dissatisfied with American

dominance, and some Russian quarters worry about a rising China; but neither country poses an immediate threat to Russia. For China, the most urgent concern is American military intervention in the event of a conflict across the Taiwan Strait, and a medium-term worry is American containment of China; the formidable nuclear arsenal of Russia and a nuclear India are also of concern. For India, Pakistan is the more immediate challenge; the threat from China is long term but considered more important. For Pakistan, India is an immediate threat; for North Korea the United States poses an immediate threat. The existential threat posed by Arab states is the primary challenge for Israel, but the immediacy of this threat has declined. Iran's nuclear quest is emerging as a key security concern in Israel (see Cohen, Chapter 8 of this volume; Inbar 2008).

Except possibly in the India-Pakistan dyad, the states concerned have attempted to deal with their security concerns by adopting general deterrence postures. The United States, for example, has opted for a nuclear doctrine that Wirtz (Chapter 3 of this volume) terms a "strange mix of deterrent, war-in-sight, and disarmament policies." Although the 2002 NPR (U.S. Department of Defense 2002) identifies several contingencies and seeks to develop an array of capabilities, it does not specify precise actions that would result in nuclear retaliation. Even in relation to North Korea and Iran, despite the rhetoric, Washington has not specified red lines that, if crossed, would cause it to retaliate. In the case of Taiwan too, the American deterrence posture is general. Washington has stated its general goal (no unification by force) and responded to crisis situations like that in 1995-96. It has not specified particular developments that could result in nuclear retaliation. It hopes that U.S. military might, combined with Washington's response to earlier crisis situations, will be sufficient to deter China from taking military action and that uncertainty about the U.S. response would dissuade Taiwan from seeking to alter the status quo.

Likewise, China has opted for a general deterrence posture, toward both the United States and other nuclear weapon states. In the case of Taiwan, the Chinese military buildup emphasizes missile and conventional military capabilities. The deterrent role of nuclear weapons is implied in the situation; there have been no explicit Chinese threats to use nuclear weapons in a war-fighting or deterrent role. Beijing also hopes that its military modernization, its growing power and influence, and political and economic interaction and cooperation will dissuade other nuclear weapon states from contemplating the use of force to resolve disputes with China.

Similarly, India seems to be opting for a general deterrence posture toward China. India's lack of urgency in developing a deterrent force against China should be seen in this light. Despite its bluster, Russia has not identified specific developments that would require nuclear retaliation. Moscow hopes that its formidable nuclear arsenal will induce respect and caution in other states. Finally, although Israel's nuclear force has a very specific mission (the survival of Israel), Tel Aviv

has not publicly specified acts that would prompt its nuclear retaliation. Shimon Peres has indicated that it is sufficient for Israel's friends and foes to know that it has this capability (Hoffman 2006).

The effectiveness and shortcomings of general deterrence are discussed in Chapter 18. For now I want to emphasize that an immediate deterrence-like situation exists only in the India-Pakistan dyad and that the consequences of this situation are geographically and strategically limited. In all other instances, general deterrence dominates thinking about nuclear deterrence, including extended nuclear deterrence.

The Continuing Relevance of Extended Deterrence

Among the nuclear weapon states, only the United States possesses the motive and means to extend the deterrence function of its nuclear arsenal. Japan, South Korea, Taiwan, and Australia view the American extended nuclear deterrence commitment as contributing to their national security. Russia has the capability to provide extended deterrence commitment and plans on it for Byelorussia and Armenia, although the threats against which these two countries would require such strategic protection remain unclear. China, India, and Pakistan do not have the strategic imperative or the capability to provide strategic protection to an allied country against a threat from another nuclear power.

U.S. extended deterrence commitments help deter possible attacks against allies. Such attacks, however, are not imminent. Most threats are long range and hypothetical. Thus, for the most part, extended deterrence is general and psychological, designed to reassure allies against long-range threats and to prevent them from pursuing independent nuclear options. Extended deterrence also helps allies preserve their strategic autonomy. However, it also constrains their strategic choices, limits the flexibility in employment of their conventional military force, and creates fears of abandonment and entrapment. Maintaining a fine balance between relying on the U.S. commitment and developing their own defense and deterrence capability is a key challenge for South Korea and in some ways for Taiwan, which has only an implicit U.S. commitment. It is less of a challenge for Japan and Australia. Both these countries seek strong alliance relationships with the United States.

The formidable U.S. nuclear arsenal makes its extended deterrence commitment effective and credible; at the same time national sensitivities, differing threat perceptions, competing demands among its allies, the lack of an integrated command structure, and U.S. worry about entrapment make crafting and implementing a viable strategy of extended deterrence more difficult.

Among America's allies in Asia, nuclear weapons have become a key concern primarily in Japan. It does not face an existential threat and does not have serious international disputes that could involve the use of nuclear weapons. Tokyo's

concerns center on the strategic vulnerability of a Japan surrounded by nuclear weapon states, the negative strategic consequences of nuclear weapons in the hands of competitors for the nature and content of order in East Asia, and the constraints they may impose on Japan's policy options (see Green and Furukawa, Chapter 12 of this volume). Although Japan has periodically explored the nuclear option since the Chinese nuclear test in 1964, for a number of reasons (strategic considerations, domestic politics, financial cost, and international repercussions), reliance on the American nuclear umbrella was seen as a better alternative. North Korea's nuclear test in October 2006 stimulated such an exploration, and the conclusion again was to seek reaffirmation of the U.S. extended deterrence commitment.

Tokyo sees the U.S. extended deterrence commitment as the central pillar of its nuclear policy. The other pillars are nuclear disarmament of North Korea, development of BMD, maintenance of a latent nuclear weapon capability, and strong support for the international nonproliferation regime. The key question for Japan is how to ensure the effectiveness and credibility of the U.S. extended nuclear deterrence commitment in a new security environment. Although declaratory statements by high-ranking U.S. leaders were deemed sufficient in the past, Japan now seeks more concrete assurance. Tokyo's credibility concern centers on three issues: (1) a strategic perception gap, (2) a possible decoupling of extended nuclear deterrence for Japan from basic deterrence in defense of the U.S. homeland, and (3) the inequality in the United States-Japan Mutual Security Treaty. That the U.S. approach to China, North Korea, and Russia may differ from that of Japan's underlies the strategic perception gap. Washington may take unilateral policy actions that leave Japan in a vulnerable position. The decoupling concern is informed by a modernizing Chinese nuclear arsenal that can increasingly hit a wide set of targets on the U.S. mainland, and the development of long-range nuclear missiles by North Korea. Would the United States be willing to engage in nuclear retaliation in the defense of Japan if such action could result in substantial damage to its homeland? Finally, prohibitions or restrictions issuing from constitutional, legal, and normative considerations prevent Japan from fully sharing in the collective defense of Japan and the United States. This may weaken American commitment to the security of Japan.

To shore up the credibility of extended deterrence, certain quarters in Japan advocate relaxing its commitment to the Three Non-Nuclear Principles and amending legislation that prevents Japan from intercepting missiles targeted at the United States, building a layered BMD system against North Korea and China, and maintaining a latent capability to develop nuclear weapons. Japan is also seeking greater dialogue with the United States; input into and a measure of control over U.S. nuclear policy in Asia; and institutional mechanisms to implement dialogue, input, and control. These measures would move the U.S. commitment beyond the declaratory position with which the United States has been comfortable. For a

number of reasons—including secrecy and lack of trust in Japan's ability to handle highly classified information, inadequate capacity on the Japanese side, perceived constraints on U.S. flexibility, and the complexities of crafting an extended deterrence strategy that would adequately meet not only Japan's requirements but also that of its other allies—Washington has been unwilling to move in the direction urged by Japan. Nevertheless, Washington may have to take some measures to reassure its key ally. Because Japan does not confront an immediate security threat, those measures could still be largely process oriented within the framework of general deterrence, with the United States retaining full control over decision making.

In South Korea, the American extended deterrence commitment can be traced to the 1953 Mutual Defense Treaty and more specifically to the 1957 New Look policy of the Eisenhower administration. The extended deterrence commitment was crucial for the security of South Korea in the first three decades of the Cold War. In the 1990s South Korea's perception of the North Korean threat declined markedly and extended nuclear deterrence became almost a non-issue except during the first nuclear crisis.

The 2006 North Korean nuclear test, however, resurrected South Korean interest in extended nuclear deterrence. Upon Seoul's insistence the term *extended nuclear deterrence* was included in the joint communiqué of the thirty-eighth Security Consultative Meeting that occurred soon after the North Korean nuclear test. The South Korean rationale for insisting on the inclusion of extended nuclear deterrence is that the American commitment provides a bridging capability while South Korea builds its defense capabilities to take the lead responsibility for its own defense. The American nuclear umbrella will remain relevant until North Korea gives up its nuclear weapon capability (see Choi and Park, Chapter 13 of this volume). It also prevents South Korea from exploring a nuclear option. At the same time, the South Korean public and political leaders are deeply conflicted and divided on the security alliance with the United States. They fear becoming entrapped in U.S. preemptive military action against North Korea and elsewhere. Reliance on the American nuclear umbrella is also inconsistent with its nonnuclear posture, its policy to improve relations with North Korea, and its goal to be free of the vagaries of American policy.

For its part, the United States no longer subscribes to a traditional trip-wire strategy. It is reluctant to spell out details of its commitments, including which threats could result in nuclear retaliation or how nuclear deterrence is linked to U.S. and South Korean conventional forces. The United States seeks to deter North Korea by issuing general threats and demonstrating its vastly superior military capability in different parts of the world. Since the United States and the Republic of Korea have sufficient conventional forces to deter and defeat a North Korean military action against South Korea, extended nuclear deterrence is

largely symbolic and psychological; the general deterrence posture of the United States can serve this function. However, the commitment will become complicated if North Korea develops long-range nuclear missiles that can hit targets in the United States.

Taipei is less conflicted; in fact, the outgoing Democratic Progressive Party government desires and would be happy to secure a more firm American commitment to the defense of Taiwan against a Chinese attack (see Wang, Chapter 14 of this volume). However, since the Sino-American normalization of relations in 1978, the American security commitment to Taiwan has been implicit under a policy of strategic ambiguity. U.S. nuclear weapons may have an implied role in deterring a large-scale Chinese attack on Taiwan and on any Chinese propensity to escalate hostilities to the nuclear level. However, this is not an explicit commitment. The United States will decide unilaterally whether, when, and how to intervene in a conflict across the Taiwan Strait. As China modernizes its nuclear arsenal and further develops its capability to hit military and civilian targets in the United States, the likelihood that Washington would consider using nuclear weapons in hostilities across the Taiwan Strait will become more remote. Should Washington decide to intervene, it would rely on conventional military capability. The limited American intervention in the 1995–96 crisis served not only to show U.S. resolve against Chinese intimidation of Taiwan, but also to demonstrate American military prowess to restrain China and others from seriously contemplating, threatening, or using force against America's interests in Asia.

Unlike Taiwan, Australia is a formal and close ally of the United States, and Washington is firmly committed to the security of that country. Despite this, the nature of the American extended nuclear deterrence commitment to Australia both during the Cold War and now lacks specific operational content (see Lyon, Chapter 15 of this volume). The only purpose of extended deterrence was and is to deter a nuclear attack against Australia. This is a remote possibility and a limited mandate that could be fulfilled through general assurances without issuing specific threats and developing specific capabilities. Nevertheless, Australia views the extended nuclear deterrence commitment as important in security and symbolic terms and also for other benefits (access to American military technology for conventional force modernization, and the elevation of Australia's international status and role, for example).

Further, Canberra has all along viewed the possession of nuclear weapons by risk-averse, responsible major powers and nuclear deterrence among them as contributing to global and regional stability. The contributions that nuclear deterrence can make to Australia's security and to global and regional stability are the basis on which Canberra rationalizes its conflicting nuclear policies—support for nuclear nonproliferation, opposition to nuclear testing, support for the Comprehensive Test Ban Treaty, and membership in the South Pacific Nuclear Weapon

Free Zone while relying on the American nuclear umbrella and hosting certain U.S. nuclear facilities. In the wake of 9/11 and the entry of new risk-tolerant nuclear weapon states such as Pakistan and North Korea, Australia is reevaluating the salience of nuclear deterrence for its security and for stability in the Asia-Pacific region. Rather than dilute security relations, the changed security environment has deepened Australia's security alliance with the United States and it still values the U.S. extended deterrence commitment.

Conclusion

This chapter has argued that although they appear relevant to a small number of situations, nuclear weapons have a far-reaching influence on the national security strategies and interaction among nuclear weapon states and their allies. They circumscribe the strategic interaction of major powers, play an important role in the management of key regional conflicts that could escalate to major war, and condition the role of force in the international politics in the Asian security region. They also make a significant contribution to regional peace and stability, which is the subject of the final chapter. Before I turn to that, I would like to make brief observations on two issues that were raised in the Introduction. Time and space considerations prevent a more detailed discussion of these issues. One, the roles and strategies of nuclear weapons discussed in this chapter are not unique to Asia. They are a function of specific histories, strategic circumstances, security challenges, and national nuclear capabilities. As these circumstances change, so will the roles and strategies, which are also a function of the nuclear revolution. The dominance of deterrence, for example, is a consequence of the nuclear revolution. Asian countries are not immune to the logic of that revolution. The tendency toward ambiguity and secrecy is not a cultural trait but a function of the belief that such ambiguity and secrecy enhances the deterrent value of small nuclear forces. Ambiguity also characterized nuclear policies and strategies during the Cold War (Kissinger 1957); now it characterizes American policy on the Taiwan issue and Israel's nuclear policy and strategy.

On common discourse, although certain countries use similar terms like *minimum deterrence*, *limited war*, *no-first-use*, and so forth, the understanding and operationalization of these ideas vary substantially across countries. The development of a common discourse is hindered by several factors, including the tendency to downplay the significance of nuclear weapons for reasons of political correctness and in the interest of secrecy and ambiguity. As nuclear weapons will continue to exist and national arsenals will grow in size and complexity, it is imperative and useful to begin bilateral and multilateral dialogues to foster common understanding of the roles and strategies of nuclear weapons and their implications for national and regional security. Such dialogues will help build a common vocabulary and contribute to the development of expertise on the subject in Asia.

Notes

1. That deterrence continues to be a key function of the U.S. nuclear arsenal is indicated in a joint statement issued by the U.S. Secretaries for Energy, Defense, and State (National Security and Nuclear Weapons 2007)
2. On the meaning of and distinction between immediate and general deterrence, see Morgan 2003.

References

- Basrur, Rajesh M. 2005. "Coercive Diplomacy in A Nuclear Environment." In *Prospects for Peace in South Asia*, Rafiq Dossani and Henry S. Rowen, eds. Stanford, Calif.: Stanford University Press.
- Cirincione, Joseph, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*. Washington, D.C.: Carnegie Endowment for International Peace.
- Hagerty, Devin T. 1998. *The Consequences of Nuclear Proliferation: Lessons from South Asia*. Cambridge, Mass.: MIT Press.
- Hoffman, Gil. 2006. "Peres: Ambiguity has achieved its goal." *Jerusalem Post*, December 12. Online edition.
- Inbar, Efraim. 2008. "An Israeli View of the Iranian Nuclear Challenge." Philadelphia, PA: Foreign Policy Research Institute. Available at <http://www.fpri.org/>
- Johnston, Alastair Iain. 1995-96. "China's New 'Old Thinking': The Concept of Limited Deterrence." *International Security* 20 (3): 5-42.
- Kissinger, Henry A. 1957. *Nuclear Weapons and Foreign Policy*. New York: Harper Brothers.
- Lieber, Keir A., and Daryl G. Press. 2006. "The End of MAD? The Nuclear Dimension of U.S. Primacy." *International Security* 30 (4): 7-44.
- . 2007. Correspondence in "The Short Shadow of U.S. Primacy?" *International Security* 31 (3): 174-93.
- Morgan, Patrick M. 2003. *Deterrence Now*. Cambridge, U.K.: Cambridge University Press.
- National Security and Nuclear Weapons: A Statement by the Secretary of Energy, Secretary of Defense, and Secretary of State*, 2007. Washington, D.C. Available at <http://www.nnsa.doe.gov/docs/factsheets/2007/NA-07-FS-04.pdf>.
- Raas, Whitney, and Austin Long. 2007. "Osirak Redux? Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities." *International Security* 31 (4): 7-33.
- Schelling, Thomas C. 1966. *Arms and Influence*. New Haven, Conn.: Yale University Press.
- U.S. Department of Defense. 2002. *Nuclear Posture Review in the DoD Annual Report to the President and the Congress*. Washington, D.C.: Department of Defense. Available at www.defenselink.mil/execsec/adr2002/toc2002.htm.
- U.S. Department of Defense. 2006. *Quadrennial Defense Review Report*. Available at <http://www.defenselink.mil/qdr/report/Report20060203.pdf>.
- . 2007. *Military Power of the People's Republic of China*. 2007. Washington, D.C.: Office of the Secretary of Defense.