



Extended Nuclear Deterrence, Global Abolition, and Korea

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Introduction

This essay examines the role that nuclear weapons have played in Northeast Asia in creating a system of inter-state relations based in part on nuclear threat and the impact of North Korea on that system. The US-led alliances that rest on extended nuclear deterrence have been characterized as hegemonic in the forty years of Cold War in the Gramscian sense of hegemonic, that is, allied elites accepted US leadership based on its legitimating ideology of extended nuclear deterrence, institutional integration, and unique American nuclear forces that underpinned the alliances.² A crucial aspect of American nuclear hegemony in Asia was the guarantee that the hegemon would ensure that no adversary could break out of the system after China's 1964 successful nuclear test, as expressed by the Non Proliferation Treaty and IAEA safeguard system. The failure of the United States to stop and now reverse the DPRK nuclear over the previous two decades threatens its hegemonic leadership in Northeast Asia, and is linked to the decreasing ability of American power to shape events in other proliferation-prone regions such as South and West Asia.

On April 4, 2009, President Obama proposed global "Nuclear Abolition" as a new strategic goal for US foreign policy, thereby projecting it as an organizing principle under American leadership for all states. His Global Abolition policy promises to fulfill the pledge that is the foundation of the Non-Proliferation Treaty, namely, that non-nuclear states will forego nuclear weapons provided that the nuclear weapons states eliminate them. However, Global Abolition has not supplanted extended nuclear deterrence in managing regional challengers to the status quo distribution of power.

In relation to the DPRK, a classic upstart threat to the existing regional order, the United States appears to be headed towards a reassertion of strategic deterrence in the form of restated general commitments to extend nuclear deterrence to its regional allies against the DPRK. The goal is to deter the DPRK from attacking—not currently a realistic prospect given both the low level of the DPRK nuclear program, and the overwhelming nuclear power of the United States. More important, it seeks to compel the DPRK to cooperate in non-proliferation and in negotiations to end its weapons program—a strategy that has thus far failed to curtail North Korea's nuclear weapons program, and ironically, may even hasten, not slow, DPRK proclivity to export its capabilities.

In light of this prospective failure by the United States—the primary adversary of the DPRK and the only state capable of resolving this standoff—to deal with the actual as distinct from the imaginary DPRK threat that occupies many American minds, I propose that security analysts and leaders—especially in the ROK and Japan—revisit the relative risk-benefits of continuing to rely on extended nuclear deterrence. They should compare END strategies with the alternative strategy based fully on non-nuclear military power. The latter would include a declaratory posture that specifically excludes nuclear threat as a tool of deterrence or, after a deterrence failure (that is, DPRK attack or US pre-emption thereof), of compellence.

My overarching argument is that Obama's Global Abolition strategy should be adopted as the framework with which to reconstitute the US-ROK alliance. Doing so would force the United States and the ROK to review their joint priorities and recast the US nuclear posture and doctrine that pertains to the Peninsula. Should the United States do so, it could preserve its role as the hegemonic power in the region—but without recourse to its historical dependence on nuclear weapons. Should it not, then the ROK should consider crafting and adopting a regional non-nuclear security strategy that supplants alliance with the United States and is not based on nuclear threat.

This essay contains five parts. Part one reviews the historical evolution of the US nuclear umbrella in its alliances with the ROK and Japan. Part two describes North Korea's vulnerability to US nuclear threat projection, and the offensive political nature of its resulting nuclear weapons proliferation. Part three examines three alternatives to extended nuclear deterrence in response to the DPRK nuclear threat, namely, nuclear rejection, nuclear recession, and Global Abolition based on conventional deterrence. Part 4 weighs the costs and benefits of relying on extended nuclear deterrence versus shifting to a Global Abolition strategy to respond to the DPRK's nuclear weapons program. In conclusion, part 5 envisions a pathway of practical steps to implementing a non-nuclear response by the United States to the DPRK nuclear threat.

1. Extended Nuclear Deterrence in Regional Security

For nearly six decades, nuclear weapons have been a central element of international affairs in East Asia. Starting with the coercive use of nuclear weapons in 1945 to force Japan to surrender and signal American preponderance in the postwar order, nuclear weapons became a cornerstone of a rigid bipolar threat system based on strategic *deterrence* and organized around the global balance of terror between the former Soviet Union and the United States.

Early usage of American nuclear threat projection against China in the Korean War (compellence) and in the 1958 Quemoy-Matsu crisis (deterrence) and other high risk efforts to deter and compel adversaries led to a set of bilateral alliances created by John Foster Dulles, based in part on the concept of *extended nuclear deterrence* (END), which generated a third approach that shaped the way conflict was manifested in the region. This was *strategic reassurance* of allied leaders and publics.

Later, reassurance was used to stabilize the "central balance" by dampening escalation instability or the propensity of nuclear weapons states to strike first, in the form of arms control and disarmament treaties and agreements to curtail destabilizing nuclear forces and activities by nuclear weapons states. These cooperative measures among nuclear adversaries also deeply affected the region—for example, how naval forces interacted on the high seas.³

Korea played a special role in this system of nuclear threat projection.⁴ Nuclear threats were found to be difficult to exploit against China and DPRK forces during the war; and Soviet nuclear forces affected US naval deployments in Korea, revealing the first wartime “virtual” effect, prefiguring the emergence of the idea of Mutual Assured Destruction. American weapons were deployed first in Korea in 1958 as part of a global forward deployment of tactical and theater nuclear weapons under the rubric of Massive Retaliation. The deployments in Korea were also linked to the withdrawal of ground-based nuclear forces from Japan forced by the popular revulsion against the Japanese government in 1958, as a proxy for and litmus test of the credibility of END to Japan after 1960. For most of the Cold War, nuclear deployments in Korea were primarily aimed at the Soviet-Chinese bloc, initially treated as a single set of targets in the sixties; and later, with the deepening Soviet-Chinese antagonism clear by the early 1960s, were aimed primarily at the former Soviet Union, and only secondarily against North Korea itself.

Thus, countering threats to the ROK was not separable from sustaining the central balance wherein Chinese and Soviet forces targeted US forces in Korea; and there was therefore no question of separate provision of END for the ROK until Park Chung Hee began to develop his own nuclear forces and ended the presumption that the United States would choose who led the ROK and dictated its military strategy.⁵ By 1968, the United States and the Soviet Union had created the Nuclear Non-Proliferation Treaty framework in order to contain proliferation by small and medium states, and the United States firmly quashed Park’s attempt to gain an independent nuclear force. It was no coincidence that the DPRK began at about the same time to acquire elements of the nuclear fuel cycle needed to develop nuclear weapons, suggesting that the ROK proliferation attempt and the near-war in August 1976 over the poplar tree cutting incident at Panmunjon that month had convinced Kim Il Sung to counter the US nuclear threat in kind.

In 1978, the nearly complete withdrawal of nuclear weapons from Korea that began in 1976 under President Carter was reversed due to a conservative backlash, and Korea remained implicated in the provision of END to Japan by the United States. As part of a global reversal of the 1958 deployment in 1991, President Bush Sr. withdrew US nuclear weapons from the ROK, and US withdrawal became part of the drama that unfolded around the DPRK nuclear breakout that surfaced publicly in 1992 when the IAEA discovered that the DPRK’s nuclear declaration was inconsistent with environmental data collected from the Yongbyon facility.

Henceforth, the credibility of US END with allies in this region was tied up directly with the United States’ ability to stop and reverse (not merely contain by deterrence) the DPRK’s acquisition of nuclear weapons and use of nuclear threat to compel the United States and others to negotiate with it—what I term the DPRK’s “stalker strategy.”⁶ As a result of nearly two decades of slow motion nuclear wrestling with the DPRK culminating in 2009 in the latter’s second, this time successful, nuclear test, the credibility of US END has fallen to an all-time low.

Since 2008, US nuclear hegemony based on END in East Asia has begun to unravel due to the havoc wrought by the North Korean nuclear breakout on the NPT-IAEA system as a whole, by its rejection of the authority of the UNSC as enforcer of the NPT-IAEA system, as a spoiler state for cooperative security institution building in the region, and by its direct challenge to US hegemony in its alliance relationships. Of course, all the nuclear weapons states are responsible for the parlous state of the NPT-IAEA system. But in the case of the DPRK, the United States as a direct antagonist and primary player in the Peninsula is by far the state held most accountable for these dismal outcomes.

2. North Korea’s Nuclear Vulnerability

The challenge to END in East Asia came from North Korea. Unlike the other states in the region, the DPRK was not part of the international community (in contrast, Taiwan, while politically marginalized, was highly integrated into the global market system and also was covered by the US nuclear umbrella). Until 1989, the DPRK outright refused to adhere to international norms related to the NPT and IAEA safeguards system. Moreover, the DPRK had faced for decades direct American nuclear threat and the full array of forward deployed weapons and delivery systems, military exercises, rhetorical threats, and, during full-blown, near-war crises on the DMZ, the immediate prospect of nuclear annihilation.

The Korean People’s Army in the North sought to reduce its vulnerability to American nuclear threat by adopting a forward-deployed offensive posture so that, in the event that nuclear weapons were used, possibly even pre-emptively, by the United States, they still could not stop a North Korean conventional military sledge-hammer falling on Seoul and allied US-Korean forces. Such an attack would have been suicidal to both Koreas; but only severely damaging to US forces in-theater and would have barely affected the United States itself. But it was effective in communicating to the United States and ROK leaders that the DPRK would not accept nuclear threat and would field a conventional deterrent to offset American nuclear superiority while it began to develop a nuclear option. Surprisingly, US intelligence estimates at the time show a remarkable laxity in relation to DPRK nuclear weapons motivations at this time. Alarm bells only began to ring about its independent nuclear weapons potential in the mid-eighties.⁷

Thus, for decades, an unstable standoff and continuous confrontation took place at the DMZ where the two sides projected lethal threats at each other in the most direct and provocative ways—most unmistakably in the August 1976 near-war over the poplar trees. The weaponization of North Korean fissile material and the testing of longer range (albeit still unreliable) delivery systems now makes nuclear next-use⁸ in Korea a conceivable contingency during a war, and raises the possibility of unconventional delivery of DPRK nuclear devices to the United States itself—thereby forcing the United States to pay far more attention to this otherwise puny and impoverished adversary.

In my view, the DPRK decided to break out of the static game of positional political and military warfare in the late seventies, culminating in an agile DPRK nuclear weapons strategy a decade later intended to project nuclear threat right back up the American barrel aimed at Pyongyang. This was not primarily a defensive strategy, or even one aimed at strategic deterrence—that was a game in which the DPRK knew from the outset that it could not hope to ever match the United States, requiring as it would survivable retaliatory nuclear forces that it could not obtain, test and deploy for many decades, if ever. Rather, the DPRK sought to use its nuclear threat as a *compellence* strategy, as the leading edge of its political engagement of the United States aimed at forcing it to change its policies towards the DPRK. The North Koreans used nuclear threat, at first in ways highly opaque, then ambiguously, and finally explicitly and on display, to attempt to make the United States accept the legitimacy and sovereignty of the North Korean state and leadership; to change its policies of containment and sanctions that kept the DPRK isolated from the world, especially economically; to bring the US-Korean War to an end with a peace treaty; and perhaps even to enlist the United States as a security partner. The latter is the bit that most Americans find incredible given the nature of the North Korean polity, its alien values, and the antithetical economic systems—North Korea being rather like the Borg fictional cybernetic organisms in the popular American science fiction series *Star Trek* it seems inconceivable that it could seriously wish to become a security partner of the United States. Nonetheless, such a partnership is exactly what the North Koreans had in mind until 2004. The big question today is whether they can be persuaded to return to that position.⁹

Consequently, the DPRK and the United States have spent two decades in a slow motion confrontation over North Korea’s nuclear proliferation activity, testing each other’s intentions, creating confidence and then rapidly demolishing it, but always managing the risks at each stage of the DPRK breakout to preserve the possibility of reversing the latest gain of the DPRK’s incremental nuclearization and weaponization. In 2004, however, the North Koreans shifted gears with a loud crash heard by those who study its public pronouncements to

its own population—often far more accurate and direct than they are usually given credit for by American analysts who read primarily the propaganda aimed at external audiences.

Until 2004, the North Koreans had relied primarily on the leverage gained from nuclear proliferation threat in the future. In 2004, they became committed actual nuclear armament to strengthen their “stalker” strategy and to force the United States to adjust its policy of malign neglect under President Bush Jr. Thus, they began to refer to nuclear weapons not as “nukes,” an abstract noun, but instead, to their “massive deterrent” and then explicitly “nuclear deterrent” and finally, in 2006, linked nuclear weapons with the person of the great leader and his strategy, in an idiosyncratic form of North Korean nuclear nationalism.¹⁰ This reduction in ambiguity as to North Korean intentions was matched by increasing clarity as to their weapons capacity in the first (fizzle) and second (successful) nuclear tests, and the outright declaration that the DPRK had achieved nuclear weapons status, at least in its own eyes. As they state now:

Our strengthening of the nuclear deterrent is an irrefutable exercise of our independent right and sovereignty for the defense of our dignity, system, and the safety of the nation against the nuclear threat of the United States.¹¹

The DPRK thereby called the American bluff in the most serious challenge to American nuclear hegemony in the entire post Cold War period. The inability and unwillingness of the United States to halt or reverse North Korean nuclear breakout to the point where the DPRK can at least partly neutralize the United States’ “unique” nuclear weapons capacities are obvious to the leadership of all states in the region.¹² Recent discussions of the need to “shore up” extended deterrence in the US-Japan security alliance,¹³ thereby reinforcing extended nuclear deterrence to Japan and Korea¹⁴ and even reintroducing nuclear weapons into Korea itself,¹⁵ reveal the effects of North Korean nuclearization and the lack of an American vision for regional order based on Global Abolition—the new doctrinal framework introduced by President Obama for international relations without depending on nuclear threat.

Conversely, the reflexive reversion to END by Obama’s appointees shows the shallowness of the Global Abolition policy current, and the continuing reliance on nuclear weapons as the basis for US alliances in the region.¹⁶ The problem is that while this approach worked—albeit at the risk of real nuclear war—for the entire Cold War, it has not blocked North Korea’s nuclear breakout since the end of the Cold War. Given the asymmetric cost of containing the DPRK nuclear threat by nuclear threat projection to the United States versus the cost to the DPRK, it has not escaped the notice of allied security leaders that a pipsqueak state has effectively stalemated the nuclear hegemon in the domain in which it purports to wield unique power capacities, the very ones that underlay the Cold War alliance system created by John Foster Dulles half a century ago.¹⁷

3. Alternative Pathways

Unsurprisingly, some security analysts and political leaders in South Korea and Japan have begun to explore the conceptual basis for developing independent nuclear weapons capacities. Others have called for re-deployment of US nuclear weapons into Korea or on surface ships in the regional oceans, or for nuclear sharing with Asian allies by the United States. These varied reactions are to be expected given the failure to date of the Obama Administration to enunciate a vision of regional order and stability based on non-nuclear forces and built around security principles and institutions predicated on Global Abolition rather than END, combined with the residual salience of END in the force structures, planning and joint exercises, and the continued psychological dependence of allied elites on the “nuclear umbrella” to substitute for adjusting their own security policies to a world without nuclear weapons, and to negotiate and resolve their security dilemmas without resort to the use of military force.

It is time for regional leaders to step out of this system of nuclear threat projection and build a regional order that is not based on the threat of unilateral or mutual annihilation, but on constructive, positive cooperative engagement. There are three ways whereby this shift might be made.

The first is the New Zealand mouse-that-roared model, whereby small and medium states simply declare that they would rather live without a nuclear umbrella because doing so is safer than living under it. In effect, they reject outright the nuclear umbrella by declaring it to be a source of insecurity. New Zealand suggested, much to the discomfort of Americans from the Cold War era, that it is a security blanket that they preferred to dispense with. Of course, there are no serious security threats in the vicinity of New Zealand, and the issue of organizing a regional order without a nuclear hegemon is not a major issue in the South Pacific. Indeed, New Zealand happily acts as a hegemonic security state in its own sphere of influence in relation to the tiny South Pacific Islands that rely on its aid and conventional military and policing forces to keep order. Nonetheless, this pathway led directly to rupture of the ANZUS alliance wherein New Zealand was cast out while Australia remained under the umbrella—at least it would like to think so although there is no explicit US commitment to provide END to Australia on the public record. Thus, the roaring mouse model may not be apt for Korea and Japan given the very different regional circumstances.

The second pathway is to adopt a strategy that Patrick Morgan calls “nuclear recession.”¹⁸ This strategy entails the slow but continuous minimization of various elements of END including maintaining studious silence on public on END-related matters, substitution of conventional for nuclear forces in allied doctrine and postures, development of regional security institutions, resolution of major security dilemmas between states, and the lessening of residual salience of nuclear weapons over time to the point where they fade away. This approach is more likely to be acceptable to both the United States and its regional alliance partners than the mouse-that-roads. It does not attempt to reconfigure security relationships built partly around the role that nuclear weapons play in “order and stability,” that is, it is a cautious, phased approach to structural change that is consistent with what the nuclear powers committed to in the NPT. Its proponents suggest that calls for Global Abolition pose the prospect of too much change, too fast, for states to adjust without unwelcome instability, accelerated nuclear proliferation, and increased risk of inter-state conflict.

This risk is precisely the primary concern of security intellectuals in the region about Global Abolition and its implication that END may be obsolete and needs to be retired soon.¹⁹ Undoubtedly, a recession strategy could be implemented via existing bilateral security alliances. However, recession is unlikely to contain let alone reverse the damage already done by North Korea’s nuclear weapons program to regional stability. Should the Obama Administration quietly shift from reinforcing END to nuclear recession, the allies would be likely to revise critical aspects of alliance with the United States, with or without American concurrence. In this sense, recession would achieve too little, too late. Indeed, it could be read as regressive and backward-looking US strategy designed to sustain a broken *status quo ante* rather than providing pro-active leadership to deal with North Korea and other regional insecurities—a regional agenda that would require vision and far-reaching institutional change based on legitimate leadership, not just reliance on the old instruments of hegemonic power. This is the case because even without the inclination of the Obama Administration to reinforce END rather than shift to nuclear recession, such an incremental, even timid US strategy as nuclear recession does not substitute for pro-active leadership and institutional vision that is rooted in legitimate leadership. Put differently, the ideological, institutional, and unique capabilities that constituted nuclear hegemony during the Cold War are now so disjointed and contradictory that minor changes cannot overcome the trend towards rapid decline.

Surely the most hopeful future lies in a regional vision of shared cooperative security relations, one neither based on nuclear threat between regional states nor buttressed by nuclear threat in the form of END—that is, via a third pathway derived from Global Abolition principles that makes sense in this region. The Obama Administration has yet to articulate such a vision, although a few American security analysts such as George Perkovich are outlining diluted concepts of “21st century extended nuclear deterrence” that support rather than contradict Global Abolition.²⁰

After the early August 2009 visit by Bill Clinton to Pyongyang, the DPRK seemed ready to discuss with the United States issues related to proliferation (aka Syria and beyond), missile exports, and confidence building and tension reduction in the US-DPRK relationship. This limited agenda placed the United States in a bind in that to engage in talks on these issues before denuclearization and in the aftermath of Pyongyang's release of the journalists would be tantamount to accepting the fact that the DPRK is a nuclear weapons state, a claim still rejected outright by the United States. Conversely, for the United States to insist on a return to denuclearization talks first would enable the North Koreans to argue to third parties such as China and Russia that they tried to deal with the Americans who proved obdurately hostile to their existence, and therefore the only choice is to step up the pace of their nuclear program. To sustain the pressure, the DPRK revealed on September 4, 2009 that it has successfully experimented with uranium enrichment.²¹ Although the DPRK pointed to its light water reactor aspirations as the rationale for seeking enriched uranium—which could be interpreted as indicating interest in resuming talks that could lead to such a reactor being built in the DPRK—the signal also could mean the DPRK is preparing to create a second pathway to obtain fissile material for weapons. Since then, the United States has agreed to negotiate with DPRK officials on a bilateral basis, albeit in order to resume the Six Party Talks. As this essay goes to press (December 9, 2009), US envoy Stephen Bosworth is in Pyongyang to commence such discussions.

Of course, these are all tactical considerations, and however these issues play out in the aftermath of the Bosworth mission to Pyongyang, the DPRK has made it clear that having gained nuclear weapons, they will not give them up without the United States withdrawing END from Japan and South Korea. Given other DPRK demands for reduction in US hostility towards the DPRK including potentially a peace treaty and diplomatic recognition, ending END might only be a necessary, not a sufficient condition for them to dismantle their nuclear weapons. But unless something along these lines is done, it is hard to see what would induce the DPRK leaders to even consider seriously actual denuclearization.

4. A Non-Nuclear Abolition-Based Strategy

Rather than reinforcing END to counter the DPRK's nuclear weapons or adopting nuclear recession, after first consulting with regional states, including allies, the United States should declare that conventional weapons, and only conventional weapons, will be used to deter and if necessary, to respond to the DPRK should it project nuclear threat or actually use a nuclear weapon, under all circumstances. Underpinning this posture would be the declaration that the United States would militarily and politically terminate the DPRK regime should it use nuclear weapons. This position is tailored specifically to the DPRK, but it transforms the DPRK from effectively challenging the Global Abolition strategy to making it into a precedent that establishes the ground-rules governing proliferation during the transition to Global Abolition. It also recognizes the reality that neither China nor the Russian Federation would ever use nuclear weapons in Korea, a strategic reality that has been apparent since the end of the Cold War.

It may be argued that to not respond to DPRK first use in a hot war would simply invite further use by the DPRK until it runs out of nuclear weapons, whereas END could suppress DPRK first use (by actual or threatened US pre-nuclear pre-emptive strike or retaliation) or any subsequent use of nuclear weapons by the DPRK. However, this escalation pathway exists with or without END, and once nuclear weapons are used, from a deterrence perspective (inside a DPRK leader's mind), all bets are off—whatever the US declared posture. Non-use in response to DPRK first use of nuclear weapons is far more likely to avoid further DPRK use of nuclear weapons than a nuclear riposte. Should the DPRK find itself pulverized by nuclear attacks in retaliation to its own insane first use, it would have little incentive not to fire its remaining weapons in an all-out, last-ditch stand to defeat the United States politically and militarily in the Peninsula and region—assuming its command-and-control system was making and enacting “rational” decisions at all. If the DPRK leadership was insane, or had lost control leading to unauthorized use, then American nuclear threats and attacks would not be based on strategic calculus aimed at terminating the war or minimizing the damage, but would be based on fear or revenge, neither of which is a sound political or legal basis for authorizing nuclear war.

It might also be argued that an apparently DPRK nuclear first-use is in fact ambiguous as to origin, or might be designed by the DPRK to be ambiguous. There are indeed many possibilities in this vein. Was a nuclear attack on US or allied forces in this region by an authorized DPRK unit, or by a rogue element? Did the weapon employ DPRK-originated fissile material, but cannot be attributed to direct DPRK-delivery, and therefore could be an attack on US or allied forces from a third party? Can an offshore explosion, or a high-altitude nuclear explosion that results in crippling EMP effects on unprotected electrical and electronic systems in Korea and Japan be attributed to the DPRK? In such circumstances, there are severe risks of rapid escalation due to degradation of decision making under severe stress, organizational cybernetics in command and control systems that lead to grotesque and unintended outcomes that amplify the risk of nuclear retaliation, or simply the near-automatic execution of warplans that prove impossible to stop.

Conversely, no one should ever assume that the US commander-in-chief would automatically launch a nuclear reprisal. It follows that the reduction in putative deterrence effects after first or nth use from committing to non-nuclear response is arguably small or non-existent in such circumstances. After such an attack, it is highly likely that all the nuclear weapons states would stand behind the attacked party to hold the aggressor to account, and conventional force would suffice for this purpose. In fact, because conventional force takes more time to mobilize and deliver, it provides a built-in escalation brake that would enable the United States to conduct forensic analysis, intelligence operations, and diplomatic warfare whereas a countervailing strategy that is based on nuclear counterattack entails the opposite, a compression of decision-making time to absurd levels.

A completely non-nuclear strategy to deter and defend against DPRK threat of attack is militarily feasible. Indeed, although the United States has kept a target list for nuclear attack in North Korea and allocated warheads and delivery systems to implement the nuclear war plan at all times, the non-nuclear defeat of the DPRK has been the primary basis for military war planning in the Korean Peninsula since the withdrawal of American nuclear weapons in 1992 (and some would argue in the US Army, for decades before 1992). Making a solely non-nuclear strategy explicit would devalue the DPRK's nuclear weapons far more effectively than reliance upon END. Reasserting US nuclear threat via reinforced END simply validates the DPRK's nuclear breakout in their own and third party eyes and provides de facto recognition that the DPRK is an actual nuclear weapon state requiring a deterrent response. The North Koreans themselves have pointed this out:

Ultimately, the stipulation of the “extended deterrence” in writing does nothing but add more legitimacy to our possession of nuclear deterrence and will only result in bringing on themselves a tragic situation that will bring the fiery shower of our nuclear retaliation over South Korea in an “emergency.”²²

Moreover, as has been pointed out many times, if non-nuclear weapons states conclude from observing the DPRK's situation that only by proliferating will they gain sufficient power to compel nuclear-weapons states to provide assurance that they will not be subject to nuclear attack or threats thereof, then the DPRK model of nuclear breakout embodies the lesson that the NPT non-proliferation regime cannot provide security to non-nuclear weapons states in conflict with nuclear weapons states. The reversal of new proliferation today also prefigures the "nuclear breakout" problem after global nuclear abolition is achieved, at which time conventionally armed great powers that were nuclear weapons states might have to respond to nuclear breakout by a big or small power while maintaining non-nuclear principles. If this problem can't be solved by primary or sole reliance on conventional deterrence on the "way down" to abolition in relation to a few, relatively weak states attempting to proliferate, then it is hard to envision how conventional deterrence could contain nuclear breakout from a state of abolition. This is why the DPRK is a crucial test case for Global Abolition, not just a regional sideshow.

At a regional and local level, adopting policies henceforth that downplay or abandon END prefigures the eventual strategic landscape in Korea wherein the DPRK either collapses or is absorbed into the ROK, that is, one in which there is no security threat from the DPRK against which END is counterposed. Preparing for this contingency is a primary responsibility for the ROK, Japan, and China, especially for South Korea and pushing the United States to make this shift is an allied responsibility, to be undertaken in their own self interest. Instead of bandwagoning with the United States and demanding enhanced END, allies like the ROK can and should use their own leverage on the United States to use its unsurpassed power to reshape the whole strategic landscape, not just respond to parts of it. Putting it another way, relying on END to respond to the DPRK's nuclear threat allows the DPRK to determine the regional security agenda and time the pace and type of change in strategic relations that arise from nuclear weapons and proliferation. By contrast, the Global Abolition approach would put the United States in the driver's seat again, imposing a different set of relationships based on conventional deterrence and regional security institutions based on cooperation and interdependence rather than nuclear threat and END.

Admittedly, there are risks associated with such a dramatic break with fifty years of END as a structural underpinning of inter-state relations and the possible disruption of the expectations and perceptions of security elites in all the countries of the region. But a rapidly emerging new nuclear-armed state represents such a rupture in the regional order in any case, especially given the near nuclear anarchy that has erupted in South Asia where both India and Pakistan have deployed operational nuclear weapons. Nonetheless, in Northeast Asia at least, replacing nuclear threat with a more constructive basis for security relations seems realistic, feasible, and desirable given the urgency of common problems, the emergence of what Japanese nuclear analysts have termed Asian "Mutually Assured Dependence" between the economies of otherwise antagonistic states, and the need for shared solutions.²³

It is time, therefore, for regional security analysts to conduct a careful, honest, and complete risk-benefit analysis of END versus non-nuclear alternatives. In Korea, this re-examination should include the following putative benefits from END that would be foregone by switching to Global Abolition and non-nuclear forces:

- Deterrence of any DPRK first-use of nuclear weapons against allies;
- Deterrence or negation of attempts by the DPRK to gain psychological advantage over other nations in the region by projecting nuclear threat in negotiations or in a political-military crisis in Korea;
- Deterrence of DPRK nuclear alliance with third parties such as Iran (an exchange of Iranian centrifuge technology for DPRK plutonium and nuclear test data, for example), DPRK-style nuclear extended deterrence to third parties, or DPRK export of nuclear hardware and knowledge;
- Reassurance of allied leaders and publics that the United States will neither abandon the ROK to face alone the DPRK nuclear threat or first use of nuclear weapons, nor create tension that escalates to war, nuclear next use, or to the ROK being caught in a US-DPRK cross-fire;
- Compellence of the DPRK to undertake expensive defensive measures to protect itself and its population against US nuclear first-use by projecting nuclear threat under the rubric of END that is in fact indistinguishable from the threat of nuclear pre-emption;
- Compellence of the DPRK to return to the denuclearization bargaining table, dismantle its nuclear weapons, restore its NPT and IAEA membership in good standing, rejuvenate the 1992 Joint Denuclearization Declaration with appropriate monitoring and verification procedures, possibly in the form of a new Korean or regional nuclear weapon free zone.

The costs to the allies of continuing to rely on END to gain these putative benefits and many of these costs would be avoided or reduced by switching to purely conventional deterrence (although being qualitatively different, some of these costs are not easily weighed against the benefits). These costs include:

- The risk that North Korean leaders perceive US nuclear threats projected against the DPRK as offensive in nature, including the possibility of pre-emptive first strike, an impact indeed sought in US declaratory doctrine in the form of rejection of a no-first use policy, leading the North Koreans to accelerate their nuclear weapons program, conduct more provocative tests, and develop a DPRK-style nuclear operational doctrine that may not be easily recognized nor countered by American strategists accustomed to the "civilized" precepts of strategic nuclear warfare inherited from the Cold War;
- The risk that North Korea's leaders are already highly deterred by allied conventional forces, as well as by the irremovable "existential" deterrence that is created by the mere existence of long range nuclear weapons even if END is abolished; and that while concentrated nuclear threat in the form of END induces zero marginal deterrence, it evokes from the North Koreans irrational or misguided political and military excursions to either deter nuclear attack or alternately, to exploit the tension created by the state of nuclear threat in the Peninsula;
- The risk that continuing the confrontation with the DPRK in part due to the nuclear standoff could actually induce its collapse and thereby bring about loss of control over fissile material and nuclear weapons in the midst of war or civil war in the DPRK, with potential escalation and/or export in the ensuing chaos;
- The likelihood that enhanced END will be perceived by third parties, especially China, as justifying the DPRK's nuclear weapons program as "defensive" in nature;

- The foregoing of security benefits that otherwise would be gained from tension reduction between the allies and the DPRK, both within Korea, and at a regional level, should the nuclear standoff represented by END continue for the indefinite future;
- The high probability that if the United States fails to stop the DPRK from expanding its nuclear weapons capacities, then over time, Japan, the ROK, and other regional states will review their own non-nuclear commitments and seek increased weapons-related technological capacities; and as the failure of renewed END to curtail the DPRK nuclear weapons program becomes increasingly evident, their long run proliferation propensity may increase;
- The risk that unrestrained conventional deterrence in Korea without engagement and reassurance could stimulate the DPRK to either upgrade its own ailing conventional offensive forces, or to retain nuclear weapons with which to offset the US “revolution in military affairs” that promise to degrade the relative force ratios to the DPRK’s disadvantage, especially the long-range rockets north of the DMZ and within range of parts of Seoul that are especially vulnerable to US and ROK precision-guided munitions, even if the United States were to abandon END in Korea;²⁴
- The blockage of genuine regional security institutions based on cooperative security and community that is created by continued reliance on nuclear threat between the United States and China to manage their relationships in relation to regional conflicts;
- Continuing END affirms that nuclear weapons are necessary to manage a regional conflict, instead of demonstrating that a regional security system based on non nuclear principles is feasible.

In the long run, the most important practical effect of retracting END from Korea (other than the possibility that it may be more effective in achieving the denuclearization of the DPRK) would be the termination of the historical linkage between US nuclear commitments to Korea and its commitment to defend Japan with nuclear weapons. Whether this rupture would be a liability or a benefit depends largely on the state of Sino-Japanese relations, and in turn on whether the Japanese feel directly threatened by Chinese nuclear weapons. By providing a far more effective antidote to the threat that many Japanese perceive to arise from the DPRK, with or without nuclear weapons, the end of END in Korea may also provide Japanese policymakers with more freedom to develop a less ideological foreign policy. At the very least, the change in Korea’s “litmus” test role for the US-Japan alliance may indicate to the Japanese that the United States will no longer feed the neurotic dependency of Japan’s security elite on END, and counter their demand that nuclear weapons be used to deter every significant threat faced by Japan. It would also expose the metaphysical basis of recent Japanese claims that “invisible” but forward-deployed nuclear-armed sea-launched cruise missiles on US nuclear attack submarines are somehow more “credible” nuclear forces than ballistic or airborne nuclear missiles from US territories in the region, and must be retained to sustain Japanese confidence in END.²⁵

These are matters that are amenable to leadership and pro-active policies. The United States is still sufficiently powerful to shape the strategic environment in this region, but only if it exercises its power in a visionary and legitimate manner. This leadership is now under severe pressure in the Obama Administration’s relationship with the new government in Japan,²⁶ making the resolution of the issue in relation to the DPRK even more urgent than in the past when the United States presumed that Japan would never revisit the alliance.

Who in the region might commence a serious dialogue on these issues? South Korea is the obvious candidate. Given the incumbent in the Blue House, however, it is unlikely that the South Korean government would explore such a future. Thus, this task likely falls to a regional network of security intellectuals and non-governmental organizations anchored in Korea to explore what South Korea might do in this regard. For example, given political will, South Korea might reiterate that it forever renounces nuclear weapons, promote the concept of a strong Korean Nuclear Weapon Free Zone (building on the 1992 Korean Denuclearization Declaration but including protocols for nuclear weapon states to commit to not firing nuclear weapons in or out of the zone, etc.); and work to strengthen the 1995 and subsequent declarations by nuclear weapon states that they will not use nuclear weapons against non-nuclear weapons states and might (based on the earlier, 1968 UNSC resolution) even come to the aid of a non-nuclear state facing nuclear aggression.²⁷

Of course, it is always possible that some dramatic event might drive the United States and the DPRK to come to an understanding on the nuclear issue. Just as President George H.W. Bush’s removal of tactical and theater nuclear weapons in 1991-92 from Korea and from surface warships in the region made it possible to negotiate seriously with the DPRK, basing its DPRK policy on Global Abolition would enable it to meet the DPRK’s demand for the US nuclear umbrella to be removed from Korea, with possible follow-on leverage on the DPRK’s nuclear weapons program. This issue remains the ultimate stumbling block in any US-DPRK negotiations, as the North Koreans reiterated in their October visit to the United States.²⁸ But continuing standoff between the DPRK and the United States seems more likely for the foreseeable future, and the only way forward at this time seems to be via a bottom-up mobilization of concern and new thinking from within the region, grounded in a generational change of perceptions of threat and the need for interdependence and cooperation.

5. Conclusion

This essay contains a series of linked arguments. The first is that US nuclear hegemony emerged during the Cold War, and was built around stopping proliferation by US allies and in turn, by adversaries who could threaten the United States or its allies. The second is that the nuclear threat projected by the United States in this hegemonic system drove the DPRK to adopt a nuclear weapons proliferation strategy that was aimed at compelling the United States to change its policies towards the DPRK. The latter’s successful nuclear breakout demonstrates that today, the hegemon has no clothes, that is, it is not capable of stopping nuclear breakout by a key adversary. The third argument is that the allies’ reflexive response to the DPRK’s nuclear threat—reinforcing extended nuclear deterrence to Korea and Japan—will not contain the DPRK’s political offensive using nuclear threat projection, may validate its stance with third parties, and risks leading to eventual nuclear proliferation by the allies themselves. The fourth argument is that of the three conceivable alternatives for the allies to reliance upon extended nuclear deterrence, viz, nuclear rejection, nuclear recession, and conventional deterrence, only the third option (supplemented by other positive incentives at the political and economic levels for the DPRK to denuclearize) is likely to curb the DPRK’s nuclear threat, head off long-run proliferation by the ROK and Japan, and by realigning its legitimating ideology (“Global Abolition”) with alliance institutions and force structures, restore the now rapidly dwindling US hegemony in the region. The fifth and final argument is that detailed examination of such a shift to purely conventional deterrence in the US-ROK and US-Japan alliances is now called for in order to test the validity and soundness of these arguments, given the multiple and complex tradeoffs entailed in making such a radical shift. Until this investigation and subsequent debate takes place, in the region and in the United States, many of the key tradeoffs will remain undefined and key policy issues unresolved, left to erupt in the political and military ambushes that characterize security affairs in this region.

Practically speaking, what might such a shift away from END to Global Abolition look like? The following indicative pathway shows some of the steps entailed retracting END more deliberately and rapidly, perhaps in a few years, than envisioned in the gradual fading away over

generations of nuclear weapons that is envisioned by "recessionists." One could equally imagine other pathways based on recession; and there are many possible pathways based on END, some of which end in nuclear war.

The actions proposed in this Global Abolition pathway are not listed in a necessary or chronological sequence. There are too many unknown factors and too much uncertainty in the domestic and international factors that create enormous complexity in this region's security dilemmas. The pathway contains a number of possible crossroads based on whether the DPRK denuclearizes or continues to arm with nuclear weapons in response to the proposed removal of END as such choices may be pivotal for the whole pathway.

- Immediately, US policymakers would stop making public declarations that reassert, reinforce, or even upgrade the salience of END to the ROK, substituting for this public and official dialogue...silence. The United States would no longer refer to nuclear deterrence in relation to North Korea, nor repeat the alliance mantras about extended nuclear deterrence.
- After consultation with the allies, the United States would unilaterally issue a statement to the effect that nuclear weapons will not be used in Korea, period, even in response to DPRK first or subsequent use; and that should the DPRK use nuclear weapons, the United States will use all necessary non-nuclear means to remove the DPRK government from power and hold its leadership to account under international law relating to the use of nuclear weapons.
- The ROK government and/or civil society-based security organizations would launch a regional study group of eminent security specialists to examine the future of END in regional security affairs (this could feed into discussions with China and the DPRK in the context of denuclearization negotiations, and push the US security establishment to start connecting the dots between the President's Global Abolition policy, the DPRK issue, and regional alliance "management").
- In the context of denuclearization negotiations, the ROK would redefine the 1992 Joint Denuclearization Declaration and outline its commitment to promoting a post-Armistice Korean Peninsula NWFZ, with protocols for the NWS to sign about non-targeting, not firing NWS into or out of the zone, etc.
- In this context, the two Koreas would establish an inspection system on the Peninsula aimed at establishing a) first and foremost, US confidence that the DPRK is not proliferating; b) DPRK confidence that there are no nuclear weapons in Korea; and c), establishing the two Korea's confidence that neither is proliferating; d) IAEA and regional confidence in the robustness of this monitoring and inspection regime (many configurations are possible, and need careful study).
- If the DPRK refuses to denuclearize, then the ROK and Japan would establish a two-country nuclear free zone, harmonizing various elements of their existing commitments in this regard, and jointly implementing via a treaty a new set of non-nuclear commitments. The door would remain open for the DPRK to join this zone. Should it collapse, it would likely automatically become part of the system by virtue of absorption into ROK territory covered by the treaty.
- The regional nuclear and non-nuclear weapons states would conduct an expert and inter-governmental dialogue on reiterating and expanding the nuclear weapons states' negative and positive security assurances made in 1968 and 1995 to not use nuclear weapons against non-NWS that are state parties to the NPT, to come to the aid of non-nuclear weapons state parties to the NPT subject to nuclear aggression; and the ROK would launch a regional initiative to this effect at the NPT review conference in concert with other regional non-NWS such as Japan, Australia and even New Zealand.
- When and if the DPRK denuclearizes, the DPRK and the United States would define and create a security partnership with the DPRK starting inside the DPRK with the KPA (military forces and bases conversion, MIA-recovery, tension reduction and redeployments related to the DMZ, etc), and outside the DPRK on security issues (DPRK contributions to anti-terror efforts, peacekeeping forces, anti-piracy operations, joint coast guard operations on environmental or vessel traffic control or search and rescue operations, etc). Of particular interest would be post-Armistice roles for USFK in the Korean Peninsula consistent with security partnerships with both Koreas.
- A regional, multi-issue security institution would be established (possibly as an outgrowth of the Six Party Talks) to develop systematic habits of dialogue and institutionalized ways to resolve long-standing security dilemmas in the region to ensure that US conventional deterrence does not create new tensions and instabilities in the region—as the Bush Administration arguably did by militarizing the US-Japan alliance and undoing decades of past foreign policy work to reduce regional tensions.²⁹
- A regional inter-governmental or eminent persons study group would examine the strategic implications of Global Abolition over time, either parallel to or supplanting the existing institutional apparatus devoted to reinforcing allied acceptance of and belief in END. Understanding and encouraging the role of China in Global Abolition is particularly important in this region.³⁰ As the United States' main partner in the early Global Abolition agenda, Russia could also play an important role in such a review of END in the regional security context.

My unspoken premise is that Obama's Global Abolition policy is not just a political-symbolic stunt. Rather, I assume he intends it to become the new framework for reconstituting American hegemonic power that will rapidly devalue nuclear weapons and eventually remove them altogether from the US arsenal as well as from that of other nuclear weapons states. To date, the Global Abolition agenda is limited to fissile material security and reduction, and to stopping nuclear terrorism—important steps to reduce short-term nuclear threat, but not core issues with respect to the role of nuclear weapons in international insecurity. If and when this takes place, then END will be found to be fundamentally inconsistent with Nuclear Abolition and will be discarded, one region and relationship at a time. Also, I have suggested that reasserting END is especially counterproductive to American power at this specific juncture in dealing with the DPRK, especially in the East Asia region.

This is not how many American policy makers view the situation. They see themselves as firmly anchored via bases, forward deployments, nuclear weapons, and alliance relationships. They feel comfortable relying upon nuclear threat to contain North Korea for the foreseeable future. They believe that they have firmly under control the allies' propensity to proliferate. In reality, US leadership is much more tenuous than Americans like to believe due to the cumulative impact of the wars in Iraq and Afghanistan, nuclear proliferation, and the economic crisis originating in the United States. In this context, the revival of END hastens the demise of American hegemony, at least in this region.

Ironically, actual American forces today are primarily non-nuclear rather than "dual-capable" as was almost universally the case during the Cold War when allies were told that the United States military did not distinguish between its nuclear and non-nuclear forces. Although the United

States maintains strategic nuclear forces at home, these have little to do directly with realistic military planning or force postures in the alliances, and even less to do with the expanding scope of military operations by US allies working alongside the US military including peacemaking, peacekeeping, disaster relief, nation building, humanitarian intervention, anti-terrorism operations, and rarely, prosecuting conventional war.

Unfortunately, Global Abolition as a framework for a new hegemonic leadership is far from displacing the old habits and instruments of nuclear coercive diplomacy, and is almost completely ignored in the core alliance institutions. It has barely begun to take root as a substitute for failing nuclear hegemonic policies, as is most obvious in the case of the DPRK. Generations of Cold War warriors committed to maintaining alliances and comfortable with Cold War habits and ways of thinking are entrenched in alliance institutions and have paid little or no regard to Global Abolition.

It is not just up to Obama and the proponents of Global Abolition to counter END and expanded reliance on nuclear threat in the current period. It is also up to regional states to use effective diplomacy to create authentic regional security institutions that overcome past antagonisms and by which future conflicts can be resolved, without resort to weapons of mass destruction, whether directly or indirectly. The agenda includes not only dealing with the DPRK and its nuclear threat; but also establishing a regional nuclear fuel cycle, and ways to cooperate on interrelated global problems that affect the salience of nuclear weapons to regional conflicts and cooperation. Eventually, it entails building a depth and range of political, economic, and security inter-dependence in this region whereby nuclear targeting of other states becomes unimaginable and absurd.

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See the others in the series:

- 1. Peter Hayes and Michael Hamel-Green, The Path Not Taken, The Way Still Open: Denuclearizing the Korean Peninsula and Northeast Asia*
- 2. Richard Tanter, Rethinking extended nuclear deterrence in the defence of Australia*
- 3. Richard Tanter, Arabella Imhoff and David Von Hippel, Nuclear Power, Risk Management and Democratic Accountability in Indonesia: Volcanic, regulatory and financial risk in the Muria peninsula nuclear power proposal*

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Notes

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² D. Puchala, "World Hegemony and the United Nations," *International Studies Review*, 7, 4, December 2005, pp. 575-577 provides a short account of Gramscian hegemony; see also P. Hayes, "North Korean proliferation and the end of US nuclear hegemony," in S. Lodgaard et al, edited, [Nuclear Proliferation and International Security](#), Routledge, 2007, pp. 118-136; and "[American Nuclear Hegemony in the Pacific](#)," *Journal of Peace Research*, volume 25, no 4, December, 1988, pp. 351-364. The term hegemony has many different usages in political science and the author uses it here strictly as defined above, and only in relation to "nuclear alliances" in East Asia. Thus, this essay does not claim that the DPRK nuclear breakout is the only nuclear breakout to affect American power negatively, or that there have not been many other failures of American power to achieve objectives since the end of World War II ("loss of China" 1947, stalemated Korean War, 1953; defeat in Vietnam, 1975, and so on to the setbacks in Iraq and Afghanistan in 2009) for reasons unrelated to nuclear weapons and therefore, not accounted for by problems in American hegemony. The usage in this essay is modest in its scope and limited to its application to the East Asian post-war context.

³ See P. Hayes, et al, *American Lake, Nuclear Peril in the Pacific*, Viking/Penguin, 1987., online [here](#).

⁴ See P. Hayes, *Pacific Powderkeg, American Nuclear Dilemmas in Korea*, Lexington Books, Lexington Massachusetts, 1990, at: also published by Hanul Press in Seoul, translated into Korean; English text [found here](#).

⁵ Until the late sixties, USFK maintained a war plan to use military force to replace the South Korean government with a US appointed government should the South Korean government be threatened with overthrow from below.

⁶ P. Hayes, "The Stalker State: North Korean Proliferation and the End of American Nuclear Hegemony," Nautilus Policy Forum Online 06-82A, October 4th, 2006, [found here](#). My "stalker state" theory of DPRK nuclear weapons motivations contrasts with two others schools of thought as to what prompted the DPRK to develop nuclear weapons, viz, the "strategic state" theory that argues that the DPRK has always single-mindedly and shrewdly pursued nuclear weapons; and the "soprano state" theory which asserts that the DPRK is a narco-criminal syndicate aimed at accruing profits from rent extraction from the population and from trading in the shadow global economy. Each of these theories contains elements of truth, but I believe that only the stalker state theory is consistent with the decadal slow motion style and politically determined use of nuclear threat by the North Koreans. A good example of the soprano theory is David Asher (formerly Senior Advisor, East Asian and Pacific Affairs, US State Department in the Bush Administration) "The North Korean Criminal State, its Ties to Organized Crime, and the Possibility of WMD Proliferation," Policy Forum Online 05-92A: November 15th, 2005, [found here](#). The best proponent of the strategic theory is Nicholas Eberstadt; see, for example, "Kim Jong Il's Nuclear Ambitions," Policy Forum Online 07-010A: February 6th, 2007, [found](#)

[here](#).

⁷ See R. Wampler, "North Korea and Nuclear Weapons: The Declassified U.S. Record," National Security Archive Electronic Briefing Book No. 87, April 25, 2003, [found here](#).

⁸ For the concept of nuclear next use, see P. Hayes, "Global Insecurity And Nuclear Next-Use," NAPSNet Special Report, May 2004, [here](#).

⁹ North Korean officials recently stated: "North Korea hopes "to find common ground" and "common stakes" with the U.S. in order to bring about a "long range accommodation." The U.S. and the DPRK "share some strategic interests" including the prevention of any single nation from dominating the region. And the DPRK "may welcome" a U.S. presence in the region if it has good relations with the U.S." As reported in D. Zagoria, "U.S.-DPRK Relations at a Crossroads: Danger of Drift," Summary Record of a Conference Organized by the National Committee on American Foreign Policy (NCAFP) and The Korea Society, October 30, 2009, unpublished record.

¹⁰ See P. Hayes, "Embrace Tiger, Retreat To Mountain, Test Nuke," Nautilus Policy Forum Online 06-60A, July 21st, 2006, [found here](#); also published in Open Democracy as "Nuclear little brother: North Korea's next test" [found here](#).

¹¹ *Nodong Sinmun* Commentator's article, 25 June 09

¹² M. Richardson, "N-clouds over a US umbrella," August 5, 2009, [found here](#).

¹³ J. Schoff, *Realigning Priorities, the U.S.-Japan Alliance and the Future of Extended Deterrence*, Institute for Foreign Policy Analysis, March 2009, p. xiii, [found here](#).

¹⁴ I. Reynolds, "U.S. wants to boost Japan nuclear umbrella: paper," Thu Jul 16, 2009 10:55pm EDT, TOKYO (Reuters); "U.S., Japan to hold official talks on nuclear umbrella," *Kyodo News*, Washington, July 7, 2009; "U.S. may maintain tactical nuke arms for attack submarines," *Kyodo News*, Washington DC, July 30, 2009.

¹⁵ Lee J.H, "Calls for nuclear weapons in South Korea," UPI, Oct. 21, 2009, [found here](#).

¹⁶ See, for example, J. Nye, "Obama's nuclear agenda," *Daily Times*, October 13, 2009, [found here](#).

¹⁷ The DPRK imposes a vastly greater cost on the United States than it incurs--on the order of 3 billion \$/year or greater for the United States calculated as a roughly 10 percent increased cost of sustaining US forces in Korea and region at a state of higher readiness in response to the DPRK's nuclear threat, versus perhaps 0.3 billion \$/year for the DPRK's nuclear weapons program--a ratio of 10:1--although this cost is relatively higher for the DPRK than the United States.

¹⁸ P. Morgan, "Considerations Bearing on a Possible Retraction of The American Nuclear Umbrella Over the ROK," communication, June 21, 2009.

¹⁹ T. Suto and H. Tosaki, "Abolishing Nuclear Weapons: A Japanese Perspective," in G. Perkovich and J. Action, *Abolishing Nuclear Weapons, A Debate*, Carnegie Endowment for International Peace, 2009, p 214, [found here](#).

²⁰ G. Perkovich, *Extended Deterrence On The Way To A Nuclear-Free World*, International Commission on Nuclear Non-proliferation and Disarmament Research Paper, May 2009, [found here](#).

²¹ Choe S.H and D. Sanger, "North Korea Reveals Second Path to Nuclear Bomb," *New York Times*, September 5, 2009, [found here](#).

²² *Nodong Sinmun* Commentator's article--25 June 09.

²³ As proposed by T. Suzuki et al, "A Proposal on Nuclear Disarmament and Non-Proliferation Policy from Japan : 10 Recommendations Based on "Asian Mutually Assured Dependence (A-MAD)" Concept," presentation at Stanford, Washington DC, Stockholm and Beijing, September 13-23, 2009, Japan Cooperative Security Initiative, [found here](#).

²⁴ This dilemma--the emergence of overwhelming US-ROK counter-attrition capacity over DPRK conventional forces targeting Seoul and combined forces which could create crisis via increasing DPRK propensity to use their forces first rather than lose them--is explained by A. Long, *From Cold War to long war: lessons from six decades of Rand deterrence research*, Rand Corporation, 2008, [found here](#), pp. 77-80; J. Matsumura et al, *Assessment of Crusader: The Army's Next Self-Propelled Howitzer and Resupply Vehicle*, RAND Corporation, MR-930-A, 1998, provide detailed analysis of technical difficulties faced by US-ROK forces in overcoming multiple rocket launchers attacking northern Seoul; pp. 22-26, [found here](#).

²⁵ B. Blechman, "Extended Deterrence: Cutting Edge of the Debate on Nuclear Policy," May 28, 2009, [found here](#).

²⁶ J. Pomfret and B. Hardin, "U.S. Struggles To Keep Step With Japan's Shifting Foreign Policy," Washington Post, December 5, 2009, Pg. 8.

²⁷ A good summary of these pledges is found in J. du Preez, "Security Assurances Against the Use or Threat of Use of Nuclear Weapons: Is Progress Possible at the NPT Prepcom?" Center for Nonproliferation Studies, Monterey, April 24, 2003, [found here](#).

²⁸ "In order for North Korea to denuclearize, the North Koreans said, there is a need for a permanent peace regime on the Korean peninsula to replace the present armistice agreement, not just oral security assurances. The present arrangement is simply a cease-fire. This cease-fire needs to be transformed into a permanent peace regime. "Until we get (such a permanent peace regime) we are not free to give up nuclear weapons." In Zagoria, *op cit*.

²⁹ See W. Overholt, *Asia, America, and the Transformation of Geopolitics*, Cambridge University Press, New York, 2008, for a good description of this process and its outcome with regard to US relations with China.

³⁰ For Chinese perspective on these issues, see Major General Pan Zhenqiang (ret), *Nuclear Weapons in a Changing Security Environment in*

