

Nuclear Weapons in a Changing Security Environment in North East Asia

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Executive Summary

Although less explicit than in Europe, nuclear weapons have always been one of the defining elements in the security architecture of North East Asia. The region includes three nuclear weapon states and a group of non-nuclear weapon states and other non-state political entity with great potential to go nuclear. In the Cold War, the nuclear threat was always real in the region. In fact, it was precisely in North East Asia that the only actual use of nuclear bombs occurred at the end of the Second World War, demonstrating in physical terms the catastrophic consequence of a nuclear attack. The Hiroshima and Nagasaki bombings highlighted the unique value of these horrible weapons in military as well as political terms. Mankind has thereafter entered a new era clouded by nuclear horror.

Reflecting the wider international power structure, North East Asia saw a bi-polar nuclear architecture during the Cold War years. The two major nuclear powers – the US and the Soviet Union – dominated the nuclear interaction, while China maintained a small, non-provocative nuclear force. In the meantime, an effective non-proliferation mechanism was gradually built up, which succeeded in halting the spread of nuclear weapons to other countries. The region enjoyed a measure of strategic stability in relative terms.

The end of the Cold War dramatically changed the whole situation. Three major trends have been emerging which have most conspicuous impacts on the shaping of the security landscape in North East Asia. The first is the collapse of the Soviet Union and the end of the Cold War, leading to an unraveling of the bi-polar power structure. The second is economic globalization, which has not only contributed to the rise of the strategic importance of North East Asia, but also to a fundamental transformation of the balance of force in the region. The third trend – the development of science and technology also played an important role in changing the balance of force among major powers. Furthermore, scientific development makes the threats to regional security more fluid and diverse.

Combined, these three international trends have provided a new framework for the regional configuration of North East Asia, in which relations between major players are witnessing a growing amount of complexity and unpredictability. In this complex and uncertain context, two sets of major nuclear issues may arise that will contribute to the shaping of the security architecture in North East Asia. One is the evolution of nuclear relations among the three nuclear weapon states, namely, the United States, Russia, and China. The other is the possibility

of the proliferation of nuclear weapons in the region.

The nuclear relationships between the three major powers in the region have underlined the ambivalent nature of these relationships more generally. The good news is that, with the end of the Cold War, the possibility of a major nuclear exchange between them has become increasingly remote. All three capitals seem to find it in their fundamental interests to maintain strategic stability in their relations. They have succeeded in setting up channels for more dialogues and communication and adopting confidence building measures in the hope of enhancing mutual understanding and mutual trust. The three countries have also worked together in their efforts to strengthen non-proliferation of nuclear weapons and fight against international terrorism.

But for all the positive progress, the confrontational nuclear postures of the three countries have not fundamentally changed. Each of the three nuclear powers has been continuing to upgrade and modernize its nuclear assets in the name of hedging, and then using the other sides' acts as rationale for doing more.

The United States has been the primary driver for this new round of arms competition, particularly in the eight years since George W. Bush took office as US President in 2001. The nuclear strategy of the Bush administration was characterized by a greater reliance on the role of nuclear weapons, a greater focus on the Asia-Pacific, in particular on China, and an unusual enthusiasm for reenergizing the development of Ballistic Missile Defense systems (BMD). The new US nuclear posture has forced the other two nuclear weapon states, particularly Russia, to react by quickening the pace of their modernization programs. If something is not to be done to arrest this worrying trend, the region may well see an intensifying arms competition in which nuclear weapons would still be regarded as indispensable part of the security strategies of these states.

2009 has seen a change in the US presidency. President Obama has expressed his determination to lead the way to a nuclear free world. His position seemed to have attracted the support of Russian President Medvedev. But so far, all the world has been hearing is mere words. From all indications, President Obama would have an extremely tough uphill struggle to get the required domestic (from conservative forces and the military) as well international (from its allies like Japan) support for his commitment to the scrapping of nuclear deterrence, and excluding nuclear weapons from the US security strategy. Up until now, nothing has happened to that effect.

If the evolving nuclear relations among the major powers have set a new stage for the continuing role of nuclear weapons in North East Asia, nuclear proliferation is the most daunting challenge to the security in the region today. In this regard, the DPRK nuclear crisis has become not only the heart of the proliferation issue, but also has far-reaching

implications for the security of the whole region.

Seen in retrospect, the Six-Party Talks have offered the best venue for finding a solution to the nuclear crisis. The talks have achieved significant breakthroughs towards the goal of the denuclearization of the Korean Peninsula. The current impasse is only one of the setbacks in the long process of the multilateral efforts. What is important is not losing sight of the continuing presence of a strong political basis for a peaceful solution. For all Pyongyang's tough posture, its bottom line seems to be a desire to strike a deal to trade its nuclear assets for a more favorable international environment and economic assistance from outside, so that it can concentrate on its domestic development. And the Six-Party Talks seem still to be a valid venue for this purpose. Thus, the key to the nuclear issue really lies in Washington's future policy. Obama has to make a decision to prepare the way for the reactivation of multilateral negotiations through direct contact with the DPRK if he really wants to pick up the momentum generated by the spirit of mutual respect and compromise seen during the last months of the Bush administration. In the meantime, to ensure an enduring non-proliferation regime in North East Asia, attention should also be paid to Japan, South Korea, and even Taiwan, all of which may still see great incentives to take the nuclear option.

The international initiative for a nuclear-free world fits well with Beijing's long-sought objective of the complete prohibition and thorough destruction of nuclear weapons. The primary challenge for China is that it has to make a decision as to when and how China would be ready to join in the process of nuclear disarmament in the future. This could be a difficult situation. As a weak nuclear power, facing realistic nuclear threats, China would have to make sure its core interests would not be jeopardized in the process of nuclear disarmament. For China, though numerical reductions are certainly one essential part of nuclear disarmament, they alone cannot reduce the nuclear threat that China is faced with today or in the future. What matters more to China, as an essential condition for its participation in the disarmament process, is the reduction of threat, rather than the reduction of numbers of nuclear weapons in isolation.

Although less explicit than in Europe, nuclear weapons have always been one of the defining elements in the security architecture of North East Asia. The region includes three nuclear weapon states and a group of non-nuclear weapon states and other non-state political entity with great potential to go nuclear. Since the end of the Cold War, despite the gradual fading away of the danger of a fully-fledged nuclear exchange among major nuclear powers, new uncertainties have been emerging in the nuclear landscape, which threaten stability and peace in the whole region. The present paper gives a brief review of the nuclear relations among the major players in the Cold War, defines new issues that the region is confronted with in the post Cold War era, expounds China's position on nuclear disarmament, and explores the best way to address these issues in order to reduce the role of nuclear weapons and promote nuclear disarmament in North East Asia in the future. The paper ends up with some conclusions and recommendations.

Nuclear relations among major powers in North East Asia in the Cold War

The nuclear threat was always real in North East Asia in the Cold War years. In fact, it was precisely in North East Asia that the only actual use of nuclear bombs in history occurred at the end of the Second World War, demonstrating in physical terms the catastrophic consequence of a nuclear attack. The bombs dropped at Hiroshima and Nagasaki in Japan virtually leveled the two cities in a matter of seconds, resulting in several hundreds of thousands of immediate deaths. Many more died in subsequent years.^① But the Hiroshima and Nagasaki bombardments also highlighted the unique value of these horrible weapons in military as well as political terms. Mankind thereafter entered a new era clouded by nuclear horror. This all started in North East Asia.

Throughout the Cold War, the scramble for military supremacy by the two world superpowers – the United States and the Soviet Union – dominated international politics. This fierce competition first and foremost centered on their struggle for nuclear superiority, which set the stage for the increasing sophistication of their nuclear forces, and ended with their acquisition of a nuclear war-fighting capability. By the end of 1960s, the two superpowers had each built up a nuclear arsenal big enough to destroy the whole world.^② They also formulated nuclear strategies based on the actual employment of the nuclear weapons. Europe remained the focus in their war planning. But North East Asia was also a place where nuclear weapons were not only deployed but their use was also seriously considered (against China and on the Korean Peninsula). Thus, as in Europe, coping with the peril of a major nuclear attack always remained the central element in the war planning of the major players in the region.

Ironically, in those early Cold War years it was China which became the major target of nuclear strikes in the war games of the US and the Soviet Union in North East Asia, as its relations with either of the two nuclear powers went through various ups and downs. Faced with serious nuclear threats from these two powers, the US in particular, China had only one option, namely, to consider going nuclear itself in its best security interests. In October 1964, China became the third nuclear weapon state in the region. But from the very time it acquired its nuclear capability, China demonstrated itself to be a very different nuclear weapons state by explicitly declaring it would not be the first to use its nuclear weapons. Beijing also pledged that it would never use nuclear weapons against any non-nuclear weapons states. Nor did it intend to use its nuclear prowess to make up for deficiencies in its conventional capability vis-à-vis the two superpowers. In China's nuclear philosophy, since its nuclear weapons were meant purely for self-defense, these weapons should only have one role to play, namely, the role of retaliating against a nuclear attack. This nuclear doctrine precluded Beijing's nuclear arsenal developing beyond its defensive needs. It also ruled out any interest on its part in engaging in a nuclear arms race with either of the major nuclear powers.^③ More importantly, the total transparency of China's nuclear strategy and its consistency in maintaining a small nuclear arsenal (matching its nuclear self-defense doctrine) seemed going a long way towards diminishing the other two nuclear powers' fear of China's nuclear weapons. They apparently

^① Numerous writings are available on the magnitude of the nuclear catastrophe. See, for example, Anthony Kenny, "The Logic of Deterrence", The University of Chicago Press, 1985, pp. 1-5.

^② According to the estimate of the Institute of the International Strategic Studies at London, the United States deployed 294 ICBMs, 155 SLBMs, and 600 strategic bombers; the Soviet Union deployed 75 ICBMs, 75 SLBMs, and 190 strategic bombers. See Wang Zhongchun and Wen Zhonghua, "the Un-dissipated Nuclear Clouds" (in Chinese), the NDU Publishing House, Beijing, 2000, p. 75.

^③ On China's acquisition of nuclear capability and its nuclear strategic thinking, see John Lewis and Xue Litai, "China Builds the Bomb", Stanford University Press, 1988, pp. 1-10, and pp. 190-218.

thought they could afford to set China's small nuclear force aside as long as it remained restrained in its nuclear posture. Thus, despite China's joining the nuclear club, the nuclear equation in the region fundamentally remained within the framework of the bipolar structure of the two nuclear superpowers. A certain measure of strategic stability was maintained in relative terms in North East Asia.

In the meantime, these two nuclear powers soon found common ground in their fierce nuclear competition. First, although each side always based its war-fighting scenario on a major nuclear exchange, the extremely devastating destructive power of their increasingly expanding nuclear arsenals had made it virtually impossible for them to fight a major nuclear war. Such a war would literally eliminate these two countries – as well as the whole of mankind – from the earth altogether. Like two scorpions locked in a bottle, the two superpowers began to evince as strong an interest in avoiding a head-on nuclear confrontation as in striving to win a nuclear war. After several years of difficult haggling in arms control talks, Washington and Moscow finally succeeded in putting some constraints on their nuclear contention. The SALT I agreement was reached in 1972, putting a lid on the number of offensive strategic nuclear weapons. Moreover, they also agreed to ban the development and deployment of strategic defensive weapons when they concluded the ABM Treaty in the same year. The ABM treaty became extremely significant as it provided the two superpowers' nuclear strategy with the same doctrine – that of mutual assured destruction – and therefore provided the theoretical basis for global strategic stability.

The United States and the Soviet Union had also found that it was in their common interest to keep their allies and other smaller countries out of the nuclear game. This was partly because neither wished to see their nuclear monopoly to be broken by the spread of nuclear weapons and partly because neither wished to be dragged into a nuclear exchange (even inadvertently) by nuclear-armed allies. Each superpower offered nuclear protection (called positive security assurances) to these countries in return for their renouncing the nuclear option. The two superpowers also made a great effort to institutionalize this obligation by the non-nuclear weapons states by creating a non-proliferation regime, through the Partial Test Ban Treaty, the NPT and other legally binding agreements that they had initiated.

All these had important implications for the security of North East Asia, as they also provided an important context in which rules of the nuclear game were worked out, and nuclear proliferation was somewhat checked in North East Asia. Non-nuclear weapon states like Japan, South Korea and North Korea had all at various points of time showed an interest in acquiring a nuclear capability, or at least in keeping the nuclear option open.^④ They were all persuaded, however, by one of the two superpowers to join the NPT, though sometimes not without some irritated grumbling. Although it formally signed the NPT in 1970, Japan did not actually ratify the treaty until more than six years later. South Korea signed the NPT in July 1968, but ratified it only in April 1975 after Washington took measures to stop Seoul's program of nuclear power development and even threatened to "cancel its security commitment to the ROK if Seoul persisted in its nuclear weapons program".^⑤ Meanwhile, the former Soviet Union played an important role in facilitating North Korean accession to the NPT in 1985, taking advantage of Pyongyang's interest in building a nuclear power plant with its help.^⑥

^④ See Kent E. Calder, "Asia's Deadly triangle", Nicholas Brealey Publishing Limited in London and William Morrow & Company Inc, 1997, pp. 72-73.

^⑤ Ibid. P.76.

^⑥ See Vladimir Orlov, "Russia's Non-Proliferation Policy and the Situation in East Asia" (a revised version),

The Changing Security Environment in North East Asia in the post-Cold War era

The end of the Cold War dramatically changed the whole situation in North East Asia. Three major trends have been emerging which have the most conspicuous impacts on the shaping of the security landscape in North East Asia. They have also provided a changing security environment for the role of nuclear weapons in the region.

The first is the collapse of the Soviet Union and the end of the Cold War, leading to the unraveling of the bi-polar power structure that had underpinned international relations during the Cold War years. Although the US has remained the only world superpower, North East Asia is evidently heading towards a multi-polar structure, in which no nation can enjoy complete freedom of action without considering the core interests of others.

Economic globalization is the second trend that is playing a pivotal role in reshaping state-to-state relations in North East Asia. Almost all countries in the region have benefited from increasing economic interaction. Countries like China and South Korea have demonstrated particular economic dynamism by achieving sustained economic development over recent decades. The growth of wealth has made the region of increasing strategic importance. But more importantly, it has also played a significant role in the fundamental transformation of the balance of force in North East Asia. China is rising while Japan is deemed to be declining in terms of strength and influence. North Korea has been facing an increasingly dire economic predicament, viewed as a “failed state” by the outside world.

The third defining trend is the development of science and technology, which has become another significant facilitator to the change of the balance of force among the major powers in North East Asia. It provides developed countries, the US in particular, with new material means to develop and deploy new weapon systems, and carry out the revolution of military affairs. But technological development also gives rise to new possibilities for the proliferation of weapons of mass destruction (WMD), including nuclear weapons. In a deeper sense, while high technology provides new impetus to economic development and social progress in various countries, it also greatly changes the way of life and thinking of ordinary people, having a strong impact on the traditional mechanisms of operation in a civilized society. Non-traditional security threats are emerging as increasing security challenges to the nations of the world with such high speed and great magnitude that no nation can single-handedly deal with them. As 9/11 illustrated, while a state builds greater strength, its society and individuals can become more and more vulnerable. The threats to the security in the region have become more fluid and diversified.

Combined, these three international trends have provided a new framework for regional configuration in North East Asia, in which relations between major players are witnessing a growing amount of complexity and unpredictability, unknown in the Cold War. The complex and uncertain nature of the state-to-state relations finds expression particularly in the extreme difficulties which major powers face when trying to develop threat assessments and pinpointing where the threats come from. No longer is the line so clear-cut between an ally or a friend on one side, and an adversary or even an enemy on the other. This is not a white and black picture. In many cases, countries could be friends and adversaries at the same time. They could be friends and partners in some fields, but adversaries in others; or friends and

partners now but adversaries probably in the future.

In such an uncertain context, major powers prefer to pursue a security policy characterized by cooperation plus hedging. They become increasingly interdependent and mutually constrained. Incentives abound for nations to carry out political and security cooperation. States have found greater common ground in their strategic interests, leading to a shared request for working together to address common security problems, and to manage their differences through peaceful consultations. But despite all the progress in bilateral and multilateral cooperation, deep-rooted suspicion and mistrust remain in almost every bilateral relationship among powers in the region. This mistrust has become the major obstacle to the deeper development of major power relations. All countries are pursuing a hedge policy to guard against an uncertain future. This is particularly so in the military and security fields. But often, one state's hedging measures are conveniently interpreted by others as provocations. Thus, there are already signs of a vicious cycle of measures and counter-measures going on, which could well become the cause of a regional arms race in the future.

Recent development on the Korean Peninsula has added to the complexity and difficulty of the situation in North East Asia. Although the Cold War itself passed into history almost two decades ago, the Korean Peninsula remains one of the few major relics of the Cold War in the world today, where the military confrontation structure along the 38th Parallel Line has not fundamentally changed. Tensions have been even further aggravated by the fluctuation in the relations between the North and South in the Peninsula, and particularly by the acquisition of nuclear weapon capability by the North. Being desperate for better security, Pyongyang's act has brought new instabilities to the already volatile situation on the Peninsula. The region is facing the prospect of either escalation towards a military conflict in the Korean Peninsula, or of a chain of nuclear proliferation throughout North East Asia.

It is against the backdrop that two sets of major nuclear issues arise that will contribute to the shaping of the security architecture in North East Asia. One is the evolution of nuclear relations among the three nuclear weapon states, namely the United States, Russia, and China. The other is the possibility of the proliferation of nuclear weapons in the region.

Evolution of nuclear relations among the US, Russia and China in the post Cold War era

The nuclear relationships between the three major powers in the region have underlined the ambivalent nature of these relationships more generally. The good news is that, with the end of the Cold War, the possibility of a major nuclear exchange between them has become increasingly remote. All the three capitals seem to find it in their fundamental interests to maintain strategic stability in their relations.

The US and Russia have continued to cut back their nuclear arsenals through bilateral agreements. Both countries have reduced their nuclear stockpiles each by more than a half, compared to the number of warheads at the height of the Cold War. The two have also withdrawn about 14,000 tactical nuclear weapons from forward deployment. In the meantime, the US, Russia and China have taken confidence building measures, through various channels of bilateral security dialogues among the three powers, to avoid misunderstanding or miscalculation. In 1994, Russia and the United States reached a bilateral de-targeting agreement as a nuclear confidence measure. The same year saw China and Russia conclude a similar agreement. The two countries went even further in reaching an agreement on the no-first use (NFU) of nuclear weapons against each other that year, marking a new strategic

cooperative relationship being established between the two countries. China also succeeded in reaching a non-targeting accord with the US in 1998. De-targeting and non-targeting are said to be two concepts with slightly different connotations, but they both essentially mean a pledge not (or no longer) to target its strategic nuclear missiles against the other side. As both the US and Russia could change their targeting codes within minutes, the measure was only of symbolic importance. It nevertheless still carried significance, by demonstrating the three powers' strategic intention of seeking greater confidence and trust and avoiding inadvertent or accidental nuclear disaster.

The three nuclear powers have also seen greater common interests in strengthening cooperation on nuclear non-proliferation and combating nuclear terrorism in North East Asia. There is almost a consensus among all the three countries plus Japan and South Korea to work together with the DPRK for a peaceful and diplomatic solution of the nuclear crisis in the Korean Peninsula through the Six-Party Talks. Efforts have also been made at the unofficial level to explore the possibility of turning the region into a zone free of nuclear weapons. Although no substantial results have come from these efforts so far, they have an important impact on the attitude of the various governments on the issue. In 1998, Mongolia won the support of the UN General Assembly in declaring its status as a nuclear-weapon-free zone (NWFZ). This was the first time the concept had been applied to a single state.

But then for all the positive progress, the confrontational nuclear posture of the three countries has not fundamentally changed. Furthermore, as noted above, each of the three nuclear powers has been continuing to upgrade and modernize its nuclear assets in the name of hedging, and then using the other sides' acts as rationale for doing more. All seem locked in a pattern of action and reaction reminiscent of the Cold War. This does not suggest that North East Asia is going to enter a nuclear arms race of the scope and magnitude of the one between the US and Soviet Union in those years. But it is safe to say the region may well see an intensifying arms competition, in which nuclear weapons would still be regarded as indispensable part of the security strategies of these states, if something is not done to arrest this worrying trend.

The United States has been the primary driver for this new round of arms competition, particularly in the eight years since George W. Bush took office as US President in 2001. In the nuclear field, the administration pursued what people liked to label as unilateralism, aimed at seeking the maximum freedom of action and greatest flexibility in developing new military capabilities. In early 2002, Washington revealed part of its nuclear posture, sending a strong signal that it would dramatically readjust its nuclear strategy with quite a few highlights that had an enduring impact on the changing nuclear relations in North East Asia.

The first is that despite the claim of seeking to reduce the role of nuclear weapons, the new US nuclear strategy in fact envisaged the use of nuclear weapons in a much wider range of circumstances than before, with a particular emphasis on tactical uses. Such an emphasis in a declaratory policy has not been seen since the days of flexible response forty or so years ago, when tactical nuclear weapons were deployed in Europe and East Asia. The assumption of the new tasks was based on a strongly held view by the Bush administration that nuclear deterrence would continue to underlie all US strategic objectives. A New Weapons Employment Policy was formulated to provide guidance for the requirement of development of a formidable nuclear force, which demanded:

“US nuclear forces must be capable of, and be seen to be capable of, destroying those

critical war-making and war-supporting assets and capabilities that a potential enemy leadership values most and that it would rely on to achieve its own objectives in a post-war world”.^⑦

In order to achieve this nuclear supremacy, the new nuclear posture put forward the concept of a “new triad” of military capabilities. To the “old triad” of ICBMs, nuclear-armed bombers and ballistic missile submarines, the “new triad” would comprise non-nuclear and nuclear striking capabilities, strategic defense and responsive infrastructure. Thus, in addition to the ultra-powerful conventional bombs and conventionally-armed cruise missiles, this new posture particularly required the US to invest heavily in the nuclear field: not only to keep an adequate number of warheads as well as all three arms of nuclear forces, but also to shore up its nuclear weapons infrastructure for the possible development of new warheads or missiles, and even for the resumption of new nuclear explosion testing. For the same reason, emphasis was put on the upgrading and modernization of the nuclear assets, while numbers became less important, sometimes even a burden as too many weapons would only mean a waste of badly needed resources, and the risks of bad management.

Against the backdrop, one could perceive an interesting development, that is, while the US continuously reduced its surplus nuclear warheads and their carrying vehicles, the pace of upgrading of the quality of the nuclear forces has actually quickened. The US Air Force, for example, further reduced its Minuteman III missile force to 450 operational missiles in 2008. but is also equipping many of its Minuteman IIIs with more powerful W87/Mk/21 warheads, a part of an overhaul of the entire Minuteman III force that involves replacing the missiles’ engines, fuel, guidance sets, and software, thereby dramatically improving the effectiveness of the missiles despite its reduced size. In the same manner, the US Navy completed its upgrade of Pacific-based SSBNs in 2008. All US SSBNs now carry the longer-range and more accurate Trident II D5 SLBM although they have been reduced to an average of 4 warheads per missile. Both the US Air Force and Navy have robust research and development programs for the new missiles and warheads. Test launching in the recent years have been markedly increasing.^⑧

The second characteristic feature of the US new nuclear strategy is the shift of attention increasingly to the Asia-Pacific, and to North East Asia in particular. To that end, the US has been strengthening the military presence in North East Asia, including deploying more strategic arms, expanding its military base structure, and deepening military cooperation with its allies and security partners in the region. As a result of these efforts, the majority of the US SSBNs have been now deployed in the Pacific. The number of patrols has increased in the Pacific, and dropped in the Atlantic. And as the D5 upgrade is completed in the Pacific, this trend will be more striking. US nuclear posture has become more aggressive in terms of its striking capability in the Asia-Pacific.

Two reasons may account for the shift of attention. One is that the Asia-Pacific has, as said above, become increasingly significant to US strategic interests. Militarily, it provides increasingly valuable infrastructure as well as allies and partners for the US to exercise power projection, including the use of nuclear weapons as far as the Indian Ocean and Pershing Gulf in its global war planning. The second is that China has increasingly loomed larger as the

^⑦ ‘see “Doctrine for Joint Nuclear Operations”, Final Coordination, US chiefs of Staff, JP 3-12, December 16, 2004. http://www.nukestrat.com/us/jcs/jp3-12_05.html.

^⑧ For more detailed discussion of the topic, see Robert S. Norries and Hans M. Kristensen, “Nuclear Notebook: US Nuclear Forces, 2009”, Bulletin of the Atomic Scientists, March/April, 2009. <http://www.thebulletin.org>.

greatest potential threat to the US security interests in the Asia-Pacific. Most of the enhanced redeployment in North East Asia therefore is arguably motivated by a China factor.

Ever since the founding of the People's Republic of China in 1949 China has consistently been a target for the US nuclear strikes. On several occasions the US seriously contemplated the use of nuclear weapons against China - during the Korean War as well as in a series of military confrontations in the Taiwan Strait in 1954, 1955 and 1958. With the thawing of the rigid hostility between the two countries starting with the Nixon visit to Beijing in 1972, however, the concerns over China's burgeoning nuclear capability seemed to relax somewhat, and China was even removed from the US nuclear war planning (called Single Integrated Operational Plan or SIOP) in 1982, although Washington never dropped China from the targeting list completely. With the Cold War over, and with China's dramatic successes in economic development over two decades, US fears over China's increasing capability to reach targets in North America with long-range missiles and the uncertain role of its nuclear force in North East Asia seemed to rise again. In 1998, China returned to the US SIOP planning. The US military was instructed to broaden the list of facilities in China that might be struck in a nuclear war.⁹ In the meantime, the Pentagon, Congress, the intelligence community, right-wing media and conservative think-tanks in the United States all seemed to form a chorus to inflate the "China nuclear threat", although it was quite clear to most of these people that China had no crash program for modernizing its nuclear force and that there continued to be a huge, if not increasing, discrepancy in terms of nuclear capability between the two countries. In the frenzied atmosphere in the US of debates on how to deal with China as a rising threat, there is even a view emerging that since Washington today has such a nuclear primacy over China, the US should perhaps consider a nuclear first strike to completely disarm China in the future military conflict as "China would have no reasonable hope of launching its missiles before they were destroyed because China has never built such a capability".¹⁰

One may wonder, given the US' central focus remains overwhelmingly on the essential equivalence and strategic stability with Russia, why there has been so much fuss and over-reaction to China's nuclear capability. One explanation is that the US needs an enemy in North East Asia. "[W]ith the absence of a definitive enemy such as the Soviet Union – the United States has elevated China to fill the void to help justify modernizing its armed forces in general, and its nuclear forces in particular."¹¹ Whether this is true or not, it is most unfortunate that, while current developments require greater cooperation among nuclear weapon states to ensure strategic stability, nuclear disarmament and nuclear non-proliferation, the US moves have unnecessarily poisoned the political atmosphere, and eroded confidence and trust among states.

The third element of the US new nuclear strategy that adds to the complexity of the nuclear interaction in North East Asia is its unusual enthusiasm to reenergize the development of Ballistic Missile Defense systems (BMD). The U.S has a long history of interest in BMD, which can be traced back to the mid-1940s when the US Army unveiled a program entitled "Thumper", aimed at exploring the possibility of defending against German V-2 ballistic missiles during the Second World War. Since then efforts for BMD have been continuous, affected only by technological feasibility and political constraints. These efforts include

⁹ For more detailed discussion on China in US war planning, see Hans M. Kristensen, Robert S. Norris, and Matthew G. Mckinzie, "Chinese Nuclear Forces and US Nuclear War Planning", Chapter 3, The Federation of American Scientists and the Natural Resources Defense Council, November 2006.

¹⁰ Deir A. Lieber and Daryl G. Press, "US Nuclear Primacy and the Future of the Chinese Deterrent", China Security, Winter 2007, World Security Institute, Washington.

¹¹ Ibid. Chapter 1.

Strategic Defense Initiative (SDI) in the 1980s, and Global Protection Against Limited Strikes Systems (GPALS) in the early 1990s among others. All of them ended up with no substantial results. Pushed chiefly by continuous maturing of technology, new interest was rekindled in the later years of the Clinton administration in the development of what were labeled as the National Missile Defense (NMD) program and the Theater Missile Defense (TMD) program. The new systems are said to use an entirely different set of more mature technology, and are thought to be more secure in their technological feasibility. The eventual aim is to develop a layered, integrated capability of destroying a ballistic missile in each of three distinct phases of flight-boost, midcourse, and terminal, both globally and theater wide. President Clinton, however, seemed still skeptical about its technical feasibility and financial affordability. He was also concerned over the worldwide implications for strategic stability and nuclear disarmament. He was not very warmly disposed towards the systems.

President George W. Bush took a completely different position, giving his full support to the NMD, later renamed as Global Missile Defense (GMD), and TMD systems. In December 2002, he announced the abrogation of the ABM treaty, one of the center pieces for international strategic stability, thus removing the most important legally-binding constraint to the fully-fledged development and deployment of these systems regardless of international opposition¹². Since then BMD programs have progressed with mixed success. The US started the deployment of 15 ground-based interceptors (GBI) with 10 in Alaska, and 5 in Vandenberg in 2006, allegedly with some preliminary capability to shoot down a few invading missiles aimed at targets at the US homeland or on its allies' territory. The number of interceptors was increased to 24 in 2007, 30 in 2008, and is expected to reach 44 in 2013. In the meantime, Washington has been making efforts to build a three-layer TMD system in the hope of achieving a fairly satisfactory kill probability, namely, a combination of a lower-tier layer, an upper-tier layer and a boost-phase layer both in Europe and North East Asia during the first decade of the present century. These regional efforts have notably involved the participation of US allies. In Europe, it involves the planned deployment of 10 interceptors in Poland, and an X-Band radar in the Czech Republic. In North East Asia, Japan has consistently and actively participated in the US programs. South Korea and even Taiwan may also be partners in the future. So far, four new theater-level systems, including the Pac-3 and Theater High Altitude Area Defense (THAAD) systems from the US Army, and the Theater Wide Defense (NAD) and the Theater Wide Defense (NTWD) from the US Navy have been initially deployed. But at the same time, the effectiveness of the development of the BMD systems has been continuously questioned. Many specialists argued that the BMD systems have no demonstrated defensive capability and will be ineffective against a real attack by long-rang ballistic missiles. Of 15 tests about half of them had failed, despite the fact that the testing was artificial and new malfunctions occurred. Furthermore, the BMD systems could also be easily defeated by countermeasures by the offensive side. If some simple decoys are used to interfere, GMD performance could be severely affected as none of the physical observables that could be used to distinguish decoys from warheads can be measured with IR and Radar Sensors. But still many others believe that all the weakness of the systems could be overcome with the further development of science and high technology in the future.

Obviously, the development and deployment of BMD systems has become one of the most destabilizing factors in the nuclear relations among the region's three nuclear weapon powers. The US has officially insisted that all these BMD systems are purely defensive aiming to cope

¹² The United Nations General Assembly, for example, adopted a resolution on preservation and compliance with the ABM Treaty in December 1999. The resolution was passed by a vote of 80 to 4 with 68 abstentions. Only the US, Israel, Albania and Micronesia voted against. <http://english.people.com.cn/english/199912/05/eng19991205W113.html>.

with the threat from countries like North Korea or Iran. They are not aimed at Russia or China. But that is a cheap shot. Even the US officials responsible for the development of the BMD acknowledged that there is a China factor in the US efforts at least in North East Asia.¹³ Technically, for all the restrictions that the US still faces, what is important is that the BMD systems are open-ended. What may not be achievable today may be so tomorrow. Thus BMD already constitutes a serious challenge to nuclear weapon states with fewer nuclear warheads, such as China. With the passing of time, Russia could also be threatened. The BMD systems could therefore be the finishing touch to the shift in existing nuclear architecture among the three nuclear weapon states in North East Asia.

The new US nuclear posture has, understandably, triggered corresponding reactions from other nuclear weapon states, Russia in particular. Given the dramatic weakening of its conventional capability vis-à-vis the US and NATO, together with the continuing eroding by the Western countries of its traditional established interests in those countries who used to be members of the former Soviet Union and Warsaw Pact Treaty, nuclear weapons seem now the only viable instrument with which Russia can claim world power status, and contend with the US in the souring relations between the two countries. Russia has conspicuously reemphasized the role of its nuclear force. It announced the abolition of its once promised NFU policy. It also expressed a strong opposition to the deployment of US BMD systems particularly in Eastern Europe. Moscow threatened to take dramatic measure to neutralize these systems with whatever means at its hands, including the use of nuclear weapons if these systems are in place. Moreover, Russia has been determined to upgrade its nuclear assets and expand its nuclear activities in the hope of maintaining the lead in the nuclear competition with the United States. According to media reports, in the new national security concept released in January 2000 Russia declared that its nuclear weapons would not only be used to deter a large-scale attack as a last resort, but also to win a smaller-scale wars that do not necessarily threaten Russia's existence and sovereignty. To that end, Russia stressed the necessity to maintain a large stockpile of non-strategic nuclear weapons in addition to its formidable strategic assets for possible contingencies in areas like North East Asia and its adjacent seas. In 2007, Russia resumed long-range strategic nuclear bomber flights for the first time in 15 years over US territory, an act described by the West as the sign that the Kremlin is not shy about flexing its nuclear military might to the US. On September 26, 2008, President Dmitri Medvedev announced that although the number of its nuclear warheads would continue to go downward, Russia would strive to upgrade its nuclear weapons systems by 2020, which would include new "warships, primarily nuclear-powered submarines carrying cruise missiles and multifunctional submarines as well as a system of aerospace defense." He emphasized that Russia "must guarantee nuclear deterrence under various political and military conditions by 2020."¹⁴

As a result of the changing nuclear relations in the region, China has also had to respond by modernizing, upgrading and improving its nuclear forces. This has mostly involved efforts to maintain the credibility and effectiveness of its small nuclear force for self-defense in the face of emerging nuclear threats. As its Defense White Paper, released in early 2009, indicated, the principle behind the upgrading is to develop

“a lean and effective force and going with the tide of the development of military

¹³ See, for example, New Report "US Missile Defense Being Expanded, General Says", Washington Post, July 22, 2005. P. 10. The report quotes Lieutenant General Henry A. Obering III, Director of Missile Defense Agency when he stated "What... we have to do is, in our development program, be able to address the Chinese capabilities, because that's prudent."

¹⁴ See "Russia to Upgrade Nuclear Weapons", the US Atlantic Council, September 26.
http://www.acus.org/atlantic_update/russia-upgrade-nuclear-weapons-systems

science and technology, ...strives to raise the informationization level of its weaponry and equipment, ensure their safety and reliability, and enhance its capabilities in protection, rapid reaction, penetration, damage and precision strike.”¹⁵

But on the other hand, China acted in a way quite different from both the US and Russia. Several important points, in this regard, need to be observed in the current and foreseeable process of China’s modernization drive:

1. For all the complexity of the new nuclear situation, China has not changed its nuclear strategy and doctrine. Beijing remains convinced that its security can be better protected by reducing rather increasing the role of nuclear weapons. Based on its vision of the role of nuclear weapons, China continues to adhere to all its previous commitments regarding nuclear weapons, including the no-first use of nuclear weapons against any nuclear weapon states, and non-use of such weapons against non-nuclear weapon states.
2. Also in line with this vision, Beijing has exercised the greatest restraint possible in its responding measures. All its moves are meant for self-defense, and taken in proportion with the challenges that China faces in both strategic and operational terms. In other words, what China has been doing is no more than a response to all the consequences to its security generated by the action of other nuclear weapon states, the US in particular. In so doing, China is careful not to be led into a nuclear arms race with any other big powers. Upgrading of nuclear weapons has never been the top priority in China’s defense modernization drive.
3. While keenly aware that the new US nuclear posture constitutes the major nuclear threat to its security today (for, after all, the US is the only nuclear weapon state who is seriously preparing for a nuclear strike against China), China does not believe that the two countries are destined to head towards a military confrontation. Despite the fact that they are so different in terms of their nuclear capabilities and so divergent in their perspectives with regard to the role of nuclear weapons, the two countries also find that cooperation rather than confrontation between them serves their best interests. Both hope to build up a new nuclear world order, for example, that can ensure sustained international security and stability. Both also hope to work together more closely to address many vital security issues like non-proliferation of nuclear weapons and fighting against international terrorism that no power can single-handedly cope with. It is precisely based on this belief that while upgrading its small nuclear force in a modest way, China endeavors to lead the US in turning the bilateral relationship into a constructive strategic partnership. China hopes that this is the most effective and enduring way to promote security.
4. To that end, China hopes all the countries concerned work together to foster greater political trust in each other. For without a more propitious political basis, nothing can be achieved for security in a sustained way. Given the deep-seated mistrust among the major powers in the region, China believes that greater communication and dialogue are the best way to diminish mistrust and miscalculation. Greater transparency is significant in facilitating the better understanding of each other. But transparency can only best be achieved in a positive political atmosphere.

It is hoped that China’s restraints may play a healthy role in moderating the already intensified

¹⁵ China’s National Defense in 2008, Information Office of the State Council of the PRC, Beijing, January 2009. http://www.gov.cn/english/offical/2009-01/20conent_1210227.html.

nuclear arms competition among the nuclear weapon states. But realistically, owing to its relative weak position, China's role in the nuclear architecture continues to be insignificant. Thus, for all its restraints, the region may well register an intensifying arms competition in which nuclear weapons would still be regarded as indispensable means in the security strategies of these states, if something is not to be done to arrest the worrying trend.

There is also good news though. More and more sober-minded people have come to realize that the Bush administration's approach has antagonized the major powers' nuclear relations, and provided ammunition for nuclear proliferation, thus leading to the weakening of the US security as well as the instability of the world. Serious politicians in the West began to explore ways out, by reducing the role of nuclear weapons, and reactivating the process of international nuclear arms control and disarmament. Against the backdrop, four US senior statesmen – George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn – wrote two op-eds in the Wall Street Journal in 2007 and 2008, calling on the United States to give up its nuclear deterrence policy and take a leading role in helping the world head toward the abolition of nuclear weapons. The world is inspired by this new courageous and insightful thinking. Many Western governments as well as nongovernmental organizations, including this prestigious Commission, are taking steps to echo their views. Various suggestions have been made in an attempt to translate the new vision into specific actions. What is more inspiring is that the new US president – Mr. Barack Obama – has openly and explicitly embraced this new idea. He promised significant changes in US nuclear policy and priorities compared with the George W. Bush administration. Obama's new position appeared to be also winning support from Russia and other nuclear weapon states. On April 1, the US and Russian Presidents issued a joint statement, where the two leaders pledged to work for the goal of a nuclear weapon-free world. They also enumerated a wide range of steps that would facilitate the elimination of nuclear weapons, including US-Russian negotiation of a new verifiable strategic arms treaty, support for efforts to conclude a verifiable fissile material cut-off treaty, US ratification of the Comprehensive Test Ban Treaty (CTBT), consultation and possible cooperation on missile defense, and many others.

If all these measures were to materialize, the international community would see a far greater prospect for a better world. But will they come true? Perhaps deep-cuts to their huge, redundant nuclear stockpiles are the easiest thing to achieve, as both the US and Russia need to reduce the number of the nuclear warheads even without a bilateral treaty. But aside from that, all we have seen until now are the profuse expressions of good intentions. Nothing in terms of their nuclear doctrines or the pace of upgrading their nuclear forces has changed. And from all indications, President Obama will have an extremely tough uphill struggle to get the required domestic (from conservative forces and the military) as well international (from its allies like Japan) support for his commitment to the scrapping of nuclear deterrence, and excluding nuclear weapons from the US security strategy.

Proliferation of nuclear weapons in North East Asia

The DPRK nuclear crisis

If evolving nuclear relations have set a new stage for the continuing role of nuclear weapons in North East Asia, nuclear proliferation is the most daunting challenge to the security in the region. In this regard, the DPRK nuclear crisis has become not only the heart of the proliferation issue, but also has far-reaching implications for the security of the whole region. The reasons are essentially two-fold. In the first place, if Pyongyang is allowed to possess nuclear weapon capability, a chain reaction would almost certainly occur, most probably

leading Japan and South Korea to follow suit. On the other hand, if the US and its allies cannot tolerate a nuclear DPRK, and no peaceful solution is in sight, they may resort to more coercive measures including military strikes, which may even involve the use of tactical nuclear weapons. Either of these scenarios would be a disaster to North East Asia. But more profoundly, the DPRK nuclear crisis goes beyond a nuclear issue per se, as it also involves all the real and potential contradictions and conflicts in the security relations among the major players in the peninsula. It is, in particular, the extension of the confrontation between North Korea and the United States. To put it another way, a peaceful solution of the issue, has become the prerequisite for the sustained security architecture in North East Asia in the future.

Seen in retrospect, it has become almost a consensus now that the Six-Party Talks offers the best venue for the solution of the nuclear crisis. Having so far been going through six rounds of negotiations for the past five years, the negotiations proved to be an extremely complex exercise, coming close to collapse several times. Particularly when the DPRK conducted an underground nuclear test on October 3, 2006, indicating North Korea had become a de-facto nuclear armed state, despite all its assurances of commitment to denuclearization, many believed that the Six-Party Talks would soon come to an unhappy end. But thanks to the patience, determination and political wisdom of the parties concerned, this multilateral negotiation body in North East Asia has so far proved to be of great vitality, surviving many previous setbacks and reversals. It has even achieved important breakthroughs towards the goal of denuclearization in the peninsula.

These breakthroughs first find their expression in the legally binding agreements by all the party states, which have not only provided guiding principles for the solution of the issue, but have also drawn a practical road-map for the implementation of the denuclearization process. Among these documents, the joint statement reached during the fourth round of talks on September 19, 2005 carried particular significance, as it endorsed an operational formula for the solution based on the principles of mutual respect, equality, and mutual compromise. These principles include:

1. Reaffirmation of the goal of the verifiable denuclearization of the Korean Peninsula in a peaceful manner. To that end, the DPRK committed to abandoning all nuclear weapons and existing nuclear programs and to returning, at an early date, to the Treaty on the Non-Proliferation of Nuclear Weapons and to IAEA safeguards. The United States affirmed that it had no nuclear weapons on the Korean Peninsula and had no intention to attack or invade the DPRK with nuclear or conventional weapons. The DPRK also insisted that it had the right to peaceful uses of nuclear energy, meaning light-water reactors. The other parties expressed their respect and agreed to discuss, at an appropriate time, the subject of the provision of light water reactor to the DPRK.
2. Abiding by the purposes and principles of the Charter of the United Nations and recognized norms of international relations.
3. Promotion of economic cooperation in the fields of energy, trade and investment, bilaterally and/or multilaterally. The other five parties stated their willingness to provide energy assistance to the DPRK.
4. Commitment to joint efforts for lasting peace and stability in North East Asia. The directly related parties will negotiate a permanent peace regime on the Korean Peninsula at an appropriate separate forum.
5. Taking coordinated steps to implement the aforementioned consensus in a phased manner in line with the principle of "commitment for commitment, action for action".

6. Commitment to future talks.

In this spirit of benign multilateralism, measureable progress has been achieved towards denuclearization in the past six years. Of the most importance was the long-awaited nuclear declaration by North Korea on June 26, 2008. The next day, Pyongyang demolished the cooling tower at the Yongbyon nuclear reactor. The United States accordingly announced on June 26 that it may remove North Korea from its list of state sponsors of terrorism within 45 days if the country met all its obligations under the Six-Party Talks. This meant Washington would lift its economic sanctions against Pyongyang that have been in force since 1950.

Obviously, the impressive progress in the Six-Party Talks has not been easily won. It was due to the concerted efforts of all the six nations. But credit should also be particularly given to the United States and the DPRK for their contribution to the eventual breakthroughs in the Six-Party Talks. The two states have both come to relax the rigidity of their positions during the course of the negotiations. Rationality, pragmatism and flexibility gradually took the upper hand from both the capitals. In fact, it was the Bush administration in its second term that first made dramatic changes in its policy towards Pyongyang and started the ball moving. From labeling North Korea as part of the axis of evil, drafting a preemptive strategy, and refusing to have any direct contacts with Pyongyang, the Bush administration shifted to accepting bilateral negotiation, agreeing to a solution based on mutual compromise, and offering rewards including normalization of relations with North Korea and providing security assurance and economic assistance to Pyongyang if and when denuclearization materialized. On the part of North Korea, it seemed also ready to respond positively to any signs of relaxation in the US policy. Despite the fact that the DPRK would often resort to a strategy of brinkmanship when it felt threatened in security, it is quite clear, as recent developments are demonstrating, that the strategy of North Korea was to defend by launching offensives. What Pyongyang really wanted was a deal with Washington. In other words, North Korea seemed willing to abandon its nuclear capability only if its security concerns were met. Under the circumstances, it has almost become Pyongyang's pattern of behavior that whenever the Six-Party Talks meets with seemingly insurmountable difficulties, it would threaten to take drastic measures to respond to whatever provocations it thought had come from the US side. At the same time, Pyongyang also sent signals to show it was willing, sometimes even urging, to hold bilateral talks with the US to seek a way out. The results of these consultations or agreements would then invariably become the major catalyst to boost the progress in the full sessions of the Six-Party Talks. Indeed, the bilateral quiet diplomacy between the US and the DPRK has already become a most important component of the whole multilateral efforts.

Serious obstacles still exist. These are basically political rather technical in nature. As the Bush administration entered its last months, Pyongyang did not seem interested in going down the road of dismantling its nuclear program, and striking a further deal with the lame duck president. Rather, it wanted to wait until the Obama administration came to power. But the open question is whether President Obama would continue to demonstrate as much enthusiasm as his predecessor in his last days of tenure? Signs so far are mixed. Obama seemed by and large to have come back to the old line of Clinton's time, attaching importance to clinching a deal through direct contact with the DPRK. He even appointed a special envoy to deal with the North Korean nuclear issue. But evidently Obama has also been confronted with many constraints. 1) North Korea is far from a top priority on his immediate agenda. 2) His allies in the region - Japan and South Korea - have strong reservation over any possible deal with Pyongyang under current circumstances. Obama has to take their opposition into consideration, particularly when the US is facing a financial crisis at home, and would need the

allies' financial backing even if he reaches agreement with the DPRK. 3) A rift in opinion with regard to the DPRK in Washington seems to persist. Under pressure from the conservatives, Obama may need more time to work out an agreed and consistent policy on the nuclear crisis in North Korea. Thus his demonstration of kindness towards Pyongyang seems largely to remain rhetorical. On the other hand, the fact that Washington decided to resume the large scale joint military exercise with Seoul in March to show solidarity with its allies may serve just to bitterly disappoint Pyongyang. Under the circumstances, it does not take much imagination to anticipate that the DPRK would resort to its old tactics of deliberately aggravating tension on the peninsula to draw the attention of the US and the world. That is exactly what is happening today.

Pyongyang's efforts have been continuously escalating. On April 5, it stated it had carried out a satellite test. Although the test may have been a failure Pyongyang has once again succeeded in reminding the world that it has a long-range missile capability. After the UN Security Council (UNSC) adopted a presidential statement condemning the satellite launch, the DPRK angrily declared an end to its participation in the Six-Party Talks, threatening to restart its nuclear reactor and strengthen its nuclear deterrent. Does it mean the end of the Six-Party Talks? And does it also indicate that Pyongyang would for ever keep its already disabled nuclear programs? That seems extremely unlikely. But then what are its real motives in displaying an increasingly harsh attitude? There is a lot of speculation in Western countries. Many even link it with the DPRK's need to strengthening its national cohesion, aiming to have a better control over society when the nation is faced with a domestic succession problem. But that seems a far-fetched and overstated assumption, judging from the relative social stability and the effective governance capacity of the regime in North Korea.

No one of course could give a definite answer. But many Chinese analysts still tend to believe that the truth is that Pyongyang is playing the game with which it is most familiar. Its bottom line still seems to be a deal with the US to trade its nuclear assets for a more favorable international environment and the economic assistance from outside, so that it can concentrate on its domestic development. And the Six-Party Talks still seems to them a valid venue for its purpose. Thus, all the provocations in the eyes of the West are but Pyongyang's efforts to prepare for the future negotiation from a more favorable position of strength. If this analysis makes sense, then the key to the nuclear issue really lies in the policy in Washington in the future. Obama has to make a decision to prepare the way for the reactivation of multilateral negotiation through direct contact with the DPRK if he really wants to pick up the momentum generated in the last months of the Bush administration. That also means that he would have to overcome the differences within his own policy making circle at home, and with his allies abroad, to work out a more or less consistent DPRK policy. Both are difficult jobs, but not entirely unattainable.

Other Candidates for Nuclear Proliferation in North East Asia

But the DPRK nuclear program is not the only proliferation issue in North East Asia. There are other candidates in the region that may also seek a nuclear option, particularly if the DPRK nuclear crisis is not resolved and its nuclear weapon capability is allowed to be further developed.

Japan

Japan's nuclear option has never closed. The Japanese government policy on nuclear matters has always incorporated some degree of ambiguity. Being the only victim of a nuclear

attack, the Japanese society understandably has a strong aversion to nuclear weapons. Japan's peace constitution is also a big obstacle to changing course towards the nuclear option. The Japanese government has all along emphasized that Japan has a strong interest in nuclear disarmament. Tokyo has in fact proposed a resolution for the total elimination of nuclear weapons to the United Nations General Assembly every year for the past 15 years. As early as in 1967, Japan had also announced the so-called three non-nuclear principles, namely, no manufacturing, deploying or allowing passage through its territory of nuclear weapons.

But Japan has another face to the nuclear issue. While vehemently condemning the use of atom bombs on Japan's soil as immoral and unacceptable viewed from any angle, the Japanese government strongly supports the US nuclear deterrence policy, which means that it does not oppose the use of nuclear weapons on the soil of other countries under certain circumstances. While stressing that it has always adhered to the three principles of non-nuclear policy, Japan had reportedly tacitly consented to the stationing of American nuclear weapons on its territory, and had even been involved in the US nuclear war planning activities in the Cold War according to recently declassified US official documents.¹⁶ Moreover, it was almost an open secret that the government seemed never reconciled to a permanent non-nuclear status itself. During the Second World War, Japan's Imperial military had reportedly had its own project for the development of atom bombs. After its defeat, despite the most secure nuclear umbrella of the United States, Tokyo had quietly kept conducting studies of the feasibility of going nuclear itself. The conclusion of these studies at that time was evidently that choosing an overt nuclear weapons program was not in Japan's interests, but that Japan should keep the nuclear weapon option open and "keep the economic and technical potential for the production of nuclear weapons."¹⁷ In its first national defense white paper, published in 1970, the Japanese government stressed that possession of defensive, small-size tactical nuclear weapons was not in conflict with the constitution, although it forswore them as matter of policy.

The end of the Cold War has given rise to rising nationalism and the rampage of right-wing forces in Japan. Against this backdrop, talks about the possibility of Japan becoming a nuclear weapons power are no longer a taboo. More and more dignitaries from the Japanese ruling circle have claimed that Japan should strengthen its military power, and even consider developing nuclear weapons. Most of these people are invariably conservative die-hards, who also shamelessly to refuse to acknowledge Japan's responsibility for its atrocities and whitewash its aggressions against other countries in the Second World War. So, the strange logic of many élites in Japan is that possession of nuclear weapons by the DPRK is absolutely unacceptable while they themselves seem entitled to the nuclear option if needed to be.¹⁸

What has made the international community more alert is not only Japanese rhetoric, but also Japan's very impressive plutonium-recycling program. As a country with scarce energy resources, one perhaps should give some credit to Japan's rationale of seeking greater self-reliance for its energy needs through the development of nuclear power. Today, Japan receives 28 per cent of its electricity supply from nuclear power, compared to 20 percent in the

¹⁶ Hans Kristensen, "Japan Under the US Nuclear Umbrella", April 24, 2009.

<http://www.nautilus.org/archives/library/security/papers/nuclear-Umbrella-1.html>.

¹⁷ Selig S. Harrison, "Japan's Nuclear Future: the Plutonium Debate and East Asian Security", Carnegie Endowment, 1996. p. 3-13.

¹⁸ One of the most recent typical examples of this view is the report of a talk by a Japanese scholar by the name of Tsuneo Akaha, who sits now at the Monterey Institute of Non-Proliferation as a visiting professor. He thought that more and more politicians in Japan argued that if the DPRK continues its nuclear weapon program, or if the US nuclear umbrella is so weakened that it is no longer to protect Japan, Japan then should or be forced to have its own nuclear weapons. See Li Yuan, "Aso Visited China with a Hint of Going Nuclear", Washington Observer, No. 16, 2009, April 29, 2009. http://www.washingtonobserver.org/international_perspective_show.aspx?id=3091.

United States. It is estimated that the whole of North East Asia intends to rely even more heavily on nuclear power in the future; the bulk of the increase will come from Japan. More importantly, Japan is shifting from currently conventional light-water reactors to the technically more efficient fast-breeder reactors (FBR), which will inevitably lead to the accumulation of large amounts of plutonium, an indispensable substance for a nuclear bomb. Around the year 2010, according to current plans, Japan will have three breeder reactors in operation. They will have generated 50-60 tons of plutonium domestically. Together with the roughly 30 tons that Japan expects to import from abroad before its own breeder reactors and reprocessing plants are fully in operation, it will have amassed in all close to 100 tons of plutonium. This is more than the amount currently contained in all the nuclear warheads of both the United States and the former Soviet Union. Civilian nuclear power appears quite innocuous in military terms. But when a country develops a civilian nuclear capability, it proceeds much of the way toward possessing a nuclear device. Likewise, while the nuclear material will not technically be weapons-grade plutonium, the separation process required to convert it into the raw material for bombs would be a relatively simple one. That's why the IAEA spends more than half of its resources monitoring Japan's nuclear power development.

South Korea

South Korea began a nuclear weapons program in 1970, in response to the dramatic changes in the strategic situation in and around the Korean Peninsula at the time, which included the US-China sudden reconciliation, the US decision to withdraw 26,000 American troops from the Korean Peninsula, and the announcement of the Nixon Doctrine, emphasizing self-defense for Asian allies. Seoul decided to establish a Weapons Exploitation Committee to pursue nuclear weapons. The move caused great concerns in the US. By 1975, under heavy pressure from Washington, South Korea ratified the NPT, and announced that it would end all nuclear weapons programs. But it was not until 1980s that the clandestine program was believed to be finally dropped, although unconfirmed rumors continue that Seoul may still be engaged in some illegal activities.

The international community is concerned over South Korea's nuclear activities partly because South Korea may see enough incentives to go nuclear facing the uncertain situation in North East Asia, and on the Korean Peninsula in particular. Another reason is that the country, like Japan, has a very robust nuclear power industry, which supplies 45 per cent of its total electrical consumption. And there are plans for further expansion to keep pace with the increasing demand for electricity. Eight more plants are planned to come on stream in the period 2010 - 2016. In order to reduce the suspicion of the outside world over the peaceful use of its nuclear energy, the South Korean government has introduced a national inspection system to put all nuclear material and facilities under strict control. It has also maintained cooperation with the IAEA to respond to all international obligations and to ensure international transparency and credibility of its nuclear activities. So far, all facilities are now under IAEA safeguards.

But still, after the termination of its nuclear weapon program, South Korea continues to retain interest in reprocessing spent fuel from its civilian nuclear power program, claiming that plutonium recycling would reduce dependence on imported uranium. The United States consistently opposed South Korean reprocessing initiatives, citing weapons proliferation concerns. In addition, incidents occasionally also occurred that again drew world's attention to South Korea's motivation. In September, 2004, for instance, the South Korean government admitted to the IAEA that a group of the country's scientists secretly produced a small amount

of near-weapons grade uranium in 2000.¹⁹ The IAEA confirmed later that these experiments were done for research purposes on a laboratory scale. However, it stressed that although such experiments themselves are not illegal under the NPT, they were in violation of safeguards obligations since no declaration was made to the appropriate international agency. The South Korean government insisted that the illegal activities were carried out without its knowledge or authorization, but international public opinion was not entirely convinced that such is the case. The incident again raised suspicions that South Korea may have attempted a secret program to counter North Korea's nuclear arsenal.

Taiwan

In 1949, the civil war in China witnessed the flight of the Kuomintang (KMT) regime to Taiwan and the founding of the PRC in the mainland. When the new republic started its campaign to liberate the island, the Korean War erupted in 1950. Washington sent its Seventh Fleet immediately to the Taiwan Strait, making it impossible for the PLA then to achieve the final unification of the nation. The separation has been maintained till today thanks to the interference of the US. The Taiwan issue is, therefore, in essence the continuation of China's civil war, but it has also been the central issue in the bilateral relationship between the PRC and the US.

Owing to continuous military confrontation across the Strait, the US once deployed nuclear weapons in Taiwan, and considered using them against the mainland during several crises in the Cold War. For its part, Taiwan was also believed to begin a nuclear weapons program after the first nuclear test by the mainland in October 1964. Taiwan was able to acquire nuclear technology from abroad, including a research reactor from Canada and low-grade plutonium from the United States, allegedly for a civilian energy system, but in actuality to develop fuel for nuclear weapons.

During the 1970s, Taiwan had an active program to produce plutonium using heavy water reactors. However, after the IAEA found evidence of Taiwan's efforts to produce weapons-grade plutonium, Taipei agreed in September 1976 under US pressure to dismantle its nuclear weapons program. US Intelligence believed Taiwan also had designed devices suitable for nuclear testing. Since then, Taiwan authorities have denied having any weapons of mass destruction. Nor is there currently any evidence of its possession of nuclear weapons. But according to a senior person who had been deeply involved in the nuclear activities in the island, and later defected to the US in 1987, Taiwan seemed to continue to maintain a secret nuclear weapons program. When tension increased across the Strait after pro-succession forces took power in the mid-1990s, the then "President" Lee Denghui threatened to reactivate the program, but was forced to back down a few days later after drawing intense criticism.²⁰

With the momentum built on reconciliatory policies from both the island and the mainland after the KMT candidate Ma Yingjiu became the "president" in 'Taiwan in 2008, tension across the Taiwan Strait has been substantially reduced. Relative peace and stability has become the main trend in the relations between the two sides. That may greatly reduce the incentives for Taiwan to seek the nuclear option. Moreover, although the United States continues to maintain large scale arms sales to Taiwan, Washington would not like to see the island acquire nuclear weapon capability, an important constraint on Taiwan's efforts to go

¹⁹ David E. Sanger and William J. Broad, "South Korea Says Secret Program refined Uranium", New York Times, September 3, 2004. <http://query.nytimes.com/gst/fullpage.html>.

²⁰ For detailed discussion, see "Weapons of Mass Destruction Around the World", Federation of Atomic Scientists. April 4, 2000. <http://www.fas.org/nuke/guide/taiwan/nuke>.

nuclear. But again, all these do not itself create a guarantee that the window of Taiwan's proliferation issue is forever closed.

Particularly in the case of Japan and South Korea, both seem deliberately to have left the door open for their future options owing to the uncertainty in the situation in North East Asia. Both have all the necessary material elements to manufacture a nuclear bomb in a short period of time: nuclear fissile material, critical technology and know-how, a team of skilled nuclear specialists, and adequate nuclear facilities and infrastructure. In addition both have strong ongoing missile and satellite launching capabilities. A political decision is all that is needed for either county to choose the nuclear option. Thus, nuclear proliferation in North East Asia is essentially mostly a political problem. Much depends on the evolution of the strategic situation in North East Asia, including the way the DPRK nuclear crisis is solved (or not solved), their political relations with major powers in the region, particularly the evolution of their security alliance with the United States, the progress of nuclear arms control and disarmament worldwide, and changes in the domestic public view on the role of nuclear weapons in the future.

China's position on nuclear disarmament

China has consistently supported the efforts to enhance international cooperation to build up a world order which is conducive to world peace, security, and stability, as well as to China's own interests. These measures will mostly include efforts to maintain nuclear stability among nuclear weapon states, to strengthen the international nuclear nonproliferation regime, and to create necessary conditions to reactivate progress in multilateral negotiations for nuclear arms control and disarmament.

It is in this context that the initiative launched by the Western political elites for a nuclear-free world well fits Beijing's long-sought objective of the complete prohibition and thorough destruction of nuclear weapons. One might recall that on October 16, 1964, the very day that China exploded its first atomic bomb, the Chinese government proposed:

“...to the governments of the world that a summit conference of all the countries of the world be convened to discuss the question of the complete prohibition and thorough destruction of nuclear weapons, and that as the first step, the summit conference conclude an agreement to the effect that the nuclear powers and those countries which may soon become nuclear powers undertake not to use nuclear weapons either against non-nuclear countries and nuclear-free zones or against each other.”²¹

This was indeed the first-ever proposal from a nuclear weapon state calling for not only a nuclear-free world, but also a practical and effective approach to that end. China has put forward on numerous occasions similar views and proposals on the issue, and has never given up the objective of a nuclear-free world. In light of this consistent position, it can be envisaged that Beijing would welcome the proposal by the four eminent politicians from the United States to renounce the reliance on nuclear deterrence and make concerted efforts for global zero. China would most probably be proactive in joining international efforts to explore what steps should be taken that might lead to the lofty goal. The devils, however, are in the details, particularly when people are trying to define a realistic roadmap towards the goal

²¹ Statement of the Government of the People's Republic of China, October, 16, 1964, People's Daily, October 17, 1964.

of nuclear disarmament.

The primary challenge for China is that it has to make a decision as to when and how it would be ready to join in the process of nuclear disarmament in the future.

China is a weak nuclear power. As such, facing realistic nuclear threats, China would have to make sure that its core interests would not be jeopardized in the process of nuclear disarmament. In the current situation, China is evidently not in a position to join the US and Russia right now in the process of disarmament. But would there be a point of time in the future when the two major nuclear powers reduce their nuclear stockpiles to a certain level, such that China should have the obligation to participate in the further disarmament process, as many Western specialists argued? Some Western specialists have suggested that deep-cuts by the two states to a level like 1,000 or 800 warheads in each of their nuclear arsenals may be an indicative point that would require China's involvement in further disarmament. But to China, the question is whether the whole nuclear disarmament process is a simple game of bean counting. In the view of many Chinese specialists (including the present author), although numerical reductions are certainly one essential part of nuclear disarmament, they alone cannot reduce the nuclear threat that China is faced with today or in the future. What matters more to China, as an essential condition for its participation, is the reduction of threat, rather than the reduction in number of nuclear weapons.

In this connection, it might be in order to recall a proposal entitled, "Proposal on Essential Measures for an Immediate Halt to the Arms Race and for Disarmament," put forward by the Chinese Delegation at the Second Special Session of the UN General Assembly on Disarmament (SSOD II) in 1982, which highlighted a set of basic guidelines for truly meaningful nuclear disarmament, from China's perspective. The basic principles for nuclear disarmament essentially consisted of six points:

1. Efforts for disarmament cannot be separated from those for the maintenance of international security. They must be combined with those for the maintenance of world peace and security. In order to create a favorable climate and conditions for disarmament and to achieve real progress in this field, it is essential to uphold the Charter of the United Nations and the norms of international relations. No country is permitted to seek any form of hegemony anywhere in the world. The use or threat of force against the sovereignty and territorial integrity of any state should be strictly prohibited.

2. The two superpowers should take the lead in reducing their armaments. Because they possess the greatest nuclear and conventional arsenals and their rivalry and arms race are menacing international peace and security, hence they bear the primary responsibility for disarmament and should be the first to reduce their armaments. After they have substantially cut back their armaments, the other nuclear states and militarily significant states should join them and reduce their armaments according to a reasonable proportion and procedure.

3. Nuclear disarmament should be carried out in conjunction with conventional disarmament. It is certainly important to take effective measures to achieve the objective of nuclear disarmament in view of the grave threat to mankind posed by nuclear war, but one should not overlook the fact that conventional arms are used in committing aggression against or otherwise threatening other countries. Only a combination of measures for both nuclear and conventional disarmament can help reduce the danger of war. Simultaneously with nuclear and conventional disarmament, all other types of weapons of mass destruction should be

banned.

4. Small and medium-sized countries are all entitled to take what measures they deem necessary to maintain their defense capabilities for resisting aggression and safeguarding their independence. The measures and steps decided at different stages of disarmament must not prejudice or endanger the independence, sovereignty and security of any state.

5. Disarmament agreements should provide for strict and effective international verification.

6. All states may participate in the settlement of disarmament issues on an equal footing. As disarmament has a bearing upon the security and interests of all states, big or small, nuclear or non-nuclear, militarily strong or weak, every state is entitled to participate on an equal footing in the deliberations and negotiations on this matter and in supervising the implementation of the agreements reached.”

In the spirit of the above said principles, the proposal also suggested the following four essential measures for an immediate halt to the arms race and for disarmament:

- An agreement should be reached by all the nuclear states not to use nuclear weapons. Pending such an agreement, each nuclear state should, without attaching any condition, undertake not to use nuclear weapons against non-nuclear states and nuclear-weapon-free zones, and not to be the first to use such weapons against each other at any time and under any circumstances.
- The Soviet Union and the United States should stop testing, improving or manufacturing nuclear weapons and should reduce by 50 percent all types of their nuclear weapons and means of delivery.
- After that, all other nuclear states should also stop testing, improving or manufacturing nuclear weapons and should reduce their respective nuclear arsenals according to an agreed proportion and procedure.
- Conventional disarmament should be effected simultaneously with nuclear disarmament. As a first step, all states should undertake not to use conventional armaments for intervention or aggression against and military occupation of any country.”²²

A careful look at these basic principles and specific measures suggests they constitute a comprehensive as well as practical roadmap for the task of nuclear disarmament. Obviously, what China hoped the two major nuclear powers should do to pave the way for the truly meaningful nuclear disarmament included, at least, (i) a dramatic change of their nuclear doctrines pending complete nuclear disarmament; that is, adoption of a commitment to NFU; (ii) drastic quantitative reductions in their nuclear arsenals; (iii) stopping qualitative improvements of nuclear weapons (like testing, improving or manufacturing new nuclear weapons); and (iv) other vital measures that would greatly facilitate nuclear disarmament like conventional disarmament should also be adopted.

²² “Proposal on Essential Measures for an Immediate Halt to the Arms Race and for Disarmament”, Working Paper submitted by the Chinese Delegation at the Second Special Session of the UN General Assembly on Disarmament, June 21, 1982. <http://www.nti.org/db/china/engdocs/ch0682.html>.

In the meantime, this proposal did not put China on the sidelines as an indifferent onlooker. In the speech by the then-Foreign Minister Huang Hua to introduce this proposal at the session, he pledged that China would be a constructive participant and be ready to undertake its due share of responsibility in the process of nuclear disarmament. He solemnly announced that:

“If the two superpowers take the lead in halting the testing, improving or manufacturing of nuclear weapons and in reducing their nuclear weapons by 50 per cent, the Chinese Government is ready to join all other nuclear states in undertaking to stop the development and production of nuclear weapons and to further reduce and ultimately destroy them altogether.”²³

Over 27 years have passed since China’s proposal, yet the two major nuclear powers are yet to meet completely the demands contained in the proposal. Of course, much has changed in the strategic situation since then, and China’s proposal may become obsolete somewhat in terms of its content. But the guiding principles for nuclear disarmament in the proposal remain valid, and would still provide inspiration for the condition in which China would be ready to participate in the process of nuclear disarmament and the realization of a nuclear-free world.

This does not suggest that China is indifferent to the efforts in Western countries to achieve a nuclear weapon-free world until all of its security concerns are met. After all, complete prohibition and thorough destruction of all nuclear weapons has been China’s consistent position. At the current stage, what is most essential is better communication, as repeatedly stressed in the present paper. To that end, while urging the United States and Russia to take their share of responsibility, China should welcome various explorations of an effective approach at different levels and channels. Beijing should also support enhanced communication and contact among nuclear-weapon states, including suggestions to set up a panel of specialists for further consultation and to strengthen the bilateral and even trilateral strategic dialogues among China, the United States and Russia on appropriate procedures and a timeframe to achieve nuclear disarmament.

Conclusions and recommendations

1. Nuclear issues are issues essentially of a political nature. In North East Asia, the perils of incipient nuclear arms competition and the spread of nuclear weapons are both bedded in deep-rooted suspicion, mistrust and even hostility among the major players. Thus, addressing nuclear challenges would most probably be futile if countries only focus on the technical aspect of nuclear matters. To put it another way, what is more essential is that all countries in the region should first strive to work together to provide a more favorable political basis to pave the way for the solution of the nuclear issues. In this regard, a new concept of security is badly needed, free from the Cold War mindset. A new security concept that nations in the region must live peacefully side by side in the spirit of equality, mutual respect and mutual benefit would form the most propitious stage for the nuclear disarmament.
2. A momentum seems to be gathering in North East Asia as a result of the initiative launched by President Obama for a nuclear free world. Discussions abound with regard to the drastic reduction of the existing nuclear stockpiles of the two major nuclear powers -

²³ Huang Hua, Speech at the Second Special Session of the US General Assembly Devoted to Disarmament, New York, June 11, 1982. <http://www.nti.org/db/china/engdocs/ch0682.html>.

the US and Russia first, and then of other nuclear weapon states. This is a positive development. However, if attention is solely centering on numbers, nuclear disarmament may go astray. What is worrying in the process is that while getting ready to reduce their nuclear warheads, both the US and Russia are continuing to upgrade their nuclear arsenals with a continuing aggressive nuclear doctrine for preventive strikes against other nuclear weapon states, and non-nuclear weapon states in particular. Nuclear disarmament is running the risk of being a disguised form of modernization of their nuclear forces - to build leaner but more effective nuclear forces. In order to put international nuclear disarmament on the right track, therefore, it is essential to adopt a comprehensive approach, whereby all measures for nuclear disarmament should be involved to address the quantitative, qualitative and other related aspects of the issue.

3. Nuclear disarmament thus will be a long and complicated process. To facilitate this process, all nuclear weapon states need a new vision of the role of nuclear weapons. For only by agreeing that the reduction and eventual elimination of the role of nuclear weapons from their security strategies are in all states' best interests, can nuclear disarmament be built on a firm conceptual basis. Thus, pending all nuclear disarmament measures, it is essential and most significant that all nuclear weapon states should truly renounce nuclear deterrence, and undertake a commitment not to be the first to use or threaten to use nuclear weapons against each other. They should also undertake the commitment not to use or threaten to use nuclear weapons against any non-nuclear weapon states. The commitment should serve as the first practical step towards nuclear disarmament. It should also become a litmus test to the sincerity of nuclear weapon states in nuclear disarmament.
4. Seeking a peaceful solution of the DPRK nuclear crisis, acceptable to all parties continues to be the top priority on the security agenda in North East Asia. To that end, there is no alternative to the Six-Party Talks as the venue for the multilateral negotiation. Despite the current difficulties in the process, one should not lose sight of the fact that there is a strong political, as well as security, basis for the resumption of talks. The window of opportunity for a solution has not been closed. The key to the solution is that all sides should faithfully adhere to their respective commitments as stipulated in the joint agreements reached in the previous rounds of the talks, and refrain from acting to add greater difficulty and complexity of the situation,. They should also strive to avoid interference by domestic politics of their own countries.
5. Even if the DPRK nuclear crisis reaches a satisfactory solution, the perils of nuclear proliferation will continue to linger in North East Asia. To promote a more enduring means to strengthen international nonproliferation mechanism in the region, turning North East Asia into a nuclear free zone is perhaps the best solution. There has been valuable exploration on the subject chiefly in second track interactions, and several formulae were suggested as to the form, scope and nature of the zone. However, all of them seem either too narrowly defined or too complicated for implementation. To make the complex issue simpler, it is perhaps easiest just to follow the norms of other existing nuclear free zones, particularly when the questions of scope and obligations are involved. A most ideal nuclear free zone in North East Asia therefore should include the Korean Peninsular and Japan with their territorial seas and other adjacent international maritime areas as far as the geographical scope is concerned. All the nuclear weapon states would undertake due responsibility to respect the arrangement just as they do towards other nuclear free zones. The key to the success, however, may lie in two major elements: one, the progress of nuclear disarmament by the nuclear weapon states so that incentives for the acquisition of

nuclear weapons would continuously be reduced; two, the change of the position of the US and its allies towards the US extended deterrence. So far, these countries still seem to believe in the role of the nuclear umbrella doctrine. Again, the change of their policy would involve the change of their security concept, which looks unlikely to happen in the near future, but may gradually emerge with the continuing development of the international and regional situation.