

The 13th PIIC Beijing seminar on International Security, Oct 31-Nov 3, 2012
 Paper prepared for a session 'Nuclear disarmament and w world free of nuclear weapons'

The Paradox of Extended Nuclear Deterrence in the Era of Global Nuclear Disarmament

Masako Ikegami
 Professor of political science, Stockholm University

"Our scientific power has outrun our spiritual power. We have guided missiles and misguided men."
 Dr. Martin Luther King, Jr.

New Security Conundrum and Challenging Issues in East Asia

Today's Asia is, together with the Middle East, an epicenter of global insecurity in terms of risks of armed conflict, failing states possessing weapons of mass destruction (WMD), proliferation of WMD technology, clandestine arms transfers, and human/drug trafficking. Since the end of WWII, Asia has experienced many wars, massacres and large-scale human disasters. When Europe was stunned in the Cold War, Asia suffered from a series of severe hot wars such as the Korean War and the Vietnam War, as well as large-scale human disasters. The Korean Peninsula tension has reached a new height following North Korea's two nuclear tests which made North Korea a *de facto* new nuclear power. The North Korean nuclear crisis, if not properly addressed, might ruin the entire nuclear non-proliferation treaty (NPT) regime. The Taiwan Strait remains to be a potential risk zone, although the immediate threat from China has been mitigated under the current Kuomintang-led government in Taiwan. A rising China has increasingly become a challenge to the US hegemony. More immediate danger is the potential risk of accidental armed conflict in the East- and South China Seas, as China contemplates to change the status quo with its growing naval strength, thereby constructing a threat to the neighbouring states and the U.S. maritime hegemony in the Asia Pacific.

In this increasingly volatile situation, the People's Liberation Army (PLA) is willing to "fight and win local wars to accomplish its historical missions at the new stage in the new century" (National defence white paper 2010). Meanwhile the US forces in the region are relocated to the extent to be possibly regarded by China as "retreat" to Guam or even further to Darwin. More challenging for the US hegemony in the region is that China and North Korea firmly share the agenda and determined to deter the US intervention in their attempt to accomplish their long-term agenda to unify Taiwan and the Korean Peninsula, respectively.¹ For instance, the trajectory of North Korea's rocket launched in December 2012 (following the failed attempt in April 2012)² suggests its intention to intimidate the US forces widely deployed in the Asia Pacific, an agenda shared with China. China and North Korea together deploy over a thousand short-range/medium-range ballistic missiles (SRBM/MRBM) and cruise missiles targeting the US and its allies' military facilities and critical infrastructures. China has substantially large and steadily expanding nuclear forces with varied estimations.³ Against

¹ M. Ikegami, 'China-North Korea: Renewal of the 'Blood Alliance'', *Asia Pacific Bulletin*, No. 158, 5 April 2012, The East-West Center in Washington, D.C.

² David Wright, 'North Korea's Launch Trajectory in Google Earth', *All Things Nuclear: Insights on Science & Security*, 7 December 2012, Union of Concerned Scientists; D. Wright, 'North Korea: A Short-Lived Launch Moratorium?', 16 March 2012, *ibid*.

³ "China is quite deliberately the least transparent of the acknowledged nuclear powers": B. Roberts, et al. 'China: the forgotten nuclear power', *Foreign Affairs*, Vol. 79, No. 4 (Jul-Aug 2000), p. 54.

this background, Japan and South Korea are increasingly concerned about the validity of nuclear deterrence extended by the United States.

Mutual Assured Destruction (MAD) doctrine does not apply to East Asia

Unlike the Cold War Europe, there is no symmetry in the deployment of nuclear forces in East Asia. Taking advantage of the status of the “forgotten nuclear power in a lingering Cold War bipolar mindset” (Roberts, et.al. 2000), China has been steadily expanding its missiles and nuclear forces to “fill the vacuum created by the US-Soviet Intermediate-Range Nuclear Forces Treaty (INF)” (Stokes 2010)⁴. According to Stokes, China’s strategy relies on the centrality of ballistic and ground launch cruise missiles (including over 1300 SRBMs and as many as 100 new land attack cruise missiles), in order to compensate for shortcomings in its conventional air forces (ibid.). Although those missile are primarily for conventional use, China is taking a more aggressive posture of limited deterrence for theater (i.e. shorter-range) nuclear forces, and an offensively configured, war-fighting posture for its conventional missile force, in shifting its nuclear doctrine from “minimum deterrence” to “limited deterrence” which implies some nuclear war-fighting capabilities (Brad, et. al. 2000: 55-56).

In a stark contrast to China’s expanding theatre nuclear forces, the US strategy has shifted to reduce the role of its forward-deployed tactical nuclear forces in the Asia Pacific since the Cold War ended. First, in concert with Soviet President Mikhail Gorbachev, U.S. President George H. W. Bush announced in September 1991 that the United States would withdraw all land-based tactical nuclear weapons from overseas bases and all sea-based tactical nuclear weapons from U.S. surface ships, submarines, and naval aircraft.⁵ Accordingly, non-strategic nuclear weapons were removed from bases in Korea by the end of 1991 and Europe by mid-1992; and the Navy had withdrawn nuclear weapons from its surface ships, submarines, and forward bases by the mid-1992 (Ibid.). In a similar construct, the Obama Administration, in the 2010 Nuclear Posture Review, indicated that the United States would reduce the role of nuclear weapons in U.S. regional deterrence strategies by increasing its reliance on missile defences and precision conventional weapons; accordingly, the Administration announced that it planned to retire the Navy’s nuclear-armed, sea-launched cruise missiles, which had been part of the U.S. extended deterrent to allies in Asia (op.cit.: 25).

In sum, the post-Cold War East Asian theatre is featured with asymmetric nuclear- and missile forces in favour of China and North Korea. As Stokes points out, China appears to be benefitted from the vacuum created by the INF treaty, thereby expanding its nuclear-capable missile arsenals. It is noteworthy that both China and North Korea enhanced their efforts to expand non-strategic nuclear- and missiles forces after the US unilateral retreat of tactical nuclear weapons. Arguably, the US unilateral withdrawal of forward-deployed tactical nuclear weapons allowed China and North Korea to expand their tactical nuclear- and missile forces, without the fear of confronting the US tactical nuclear weapons in proximity. This aggravated the asymmetric tactical nuclear constellation in Asia by rendering the mutual assured destruction (MAD) doctrine impotent in terms of extended deterrence. As is evident from the extended nuclear deterrence doctrine during the Cold War Europe, the US non-strategic nuclear weapons deployed in the soil of Europe were “meant to provide “coupling” between the fates of the European and North American members of the North Atlantic Treaty

⁴ Statement of Mark Stokes before the US-China Economic & Security Review Commission Hearing on China’s Emergent Aerospace & Commercial Aviation capabilities, 20 May 2010.

⁵ Amy F. Woolf, *Nonstrategic Nuclear Weapons*, CRS Report for Congress, RL32572, 29 May 2012, Washington, D.C.: Congressional Research Service, p. 10.

Organization (NATO) by threatening to escalate a conventional war to the nuclear level”, thereby the United States intimidating the Soviet Union with this prospect while simultaneously reassuring its NATO allies that it was fully committed to their defence.⁶ Namely, the United States kept its forward-deployed tactical nuclear weapons to ensure coupling and a seamless web of deterrence based on an escalatory ladder, from conventional forces to tactical nuclear weapons to U.S. strategic forces. In other words, the US forward deployed tactical nuclear weapons were the basis of the credibility of the US extended nuclear deterrence. Such coupling mechanism does not exist in East Asia, especially since the United States withdrew its forward-deployed tactical nuclear weapons from the region after the end of the Cold War.

To be blunt, without a coupling mechanism, the mutually assured destruction (MAD) doctrine does not apply in East Asia, in spite of the asymmetric and growing deployment of nuclear forces and massive conventional forces in favour of China. In addition, unlike the case of the Cold War Europe, the *2010 Nuclear Posture Review* virtually implies negative security assurance not to respond to conventional assaults by tactical nuclear weapons, while China is willing to “fight and win local wars” by its rapidly modernizing conventional forces. In the post-Cold War East Asia, the US extended nuclear deterrence is marginalized to a matter of the pros and cons of US intervention, whether and to what extent the US forces intervene to regional contingency in supporting its allies and friendly nations. Against this background, Japan and South Korea’s grave concern over the validity of the US extended deterrence is a legitimate inquiry, given that China’s rapidly modernizing conventional forces such as the Yuan-class submarine, the anti-satellite (ASAT) missile system, the anti-ship ballistic missile (ASBM), and the J-20 fighter,⁷ could effectively deter the US intervention in case of contingency over the Taiwan Strait, the East China Sea, the Yellow Sea (in liaison to the Korean Peninsula crisis), or else.

Post-Cold War Alternatives to Extended Deterrence?

After the 9.11, the United States is shifting its policy to reduce the role of forward-deployed non-strategic nuclear weapons out of the fear that they may fall in the wrong hands of terrorists. As the United States contemplates a policy to reduce and/or eventually withdraw its non-strategic nuclear weapons from Europe, NATO Europe is reviewing its nuclear posture and policy with the central question, how to ensure credibility of deterrence if/when the United States withdraws its non-strategic nuclear weapons from Europe? (Larsen 2006). According to Larsen (2006), there are several alternatives under consideration to address extended deterrence question in case the US non-strategic nuclear weapons are withdrawn: 1) The United States withdraws its non-strategic nuclear weapons, but keeps the infrastructure in place in order to reintroduce weapons in a crisis; 2) The US continues to supply nuclear warheads for European Allies’ dual-capable aircraft; 3) To Create a NATO Nuclear Naval Force, i.e. nuclear-powered, ballistic missile-carrying submarine (SSBM)/submarine equipped to launch ballistic missiles (SLBMs); 4) To rely on a European Nuclear Force (UK, France); 5) To rely on the U.S. SSBN force; 6) To rely on U.S. strategic forces based in North America which requires a new level of reassurance to allies (Larsen 2006: 95-98). Larsen argues that many of the current coupling functions such as NATO’s Nuclear Planning Group (NPG) could be retained should the Alliance survive such a change, while the most extreme

⁶ Jeffrey A. Larsen (2006), *The Future of U.S. Non-Strategic Nuclear Weapons and Implications for NATO: Drifting Toward the Foreseeable Future*, NATO Public Diplomacy Division, p. 13.

⁷ Amy Chang, J. Dotson, et.al. (2012), *Indigenous Weapons development in China’s Military Modernization*, US-China Economic & Security Review Commission Staff Research Report.

alternative is the US withdrawal and NATO abrogation of its reliance on a nuclear deterrent, which could cause NATO's demise (ibid.).

Out of the concern of the credibility of the US extended nuclear deterrence as mentioned in the first section, both Japan and South Korea requested for more information sharing on U.S. nuclear plans and postures; for instance, in late 2010, Washington and Seoul agreed on a U.S.-South Korean Nuclear Deterrence Policy Committee, after the model of NATO's NPG.⁸ The Japanese experts' working group proposed measures virtually for nuclear-sharing similar to European NATO, such as the creating a NPG mechanism, modification of Japan's Three Nuclear Principles to permit the United States to introduce nuclear weapons into the territory of Japan, or establishment of a system in which Japan would field delivery vehicles for US nuclear weapons controlled by the US, "if China keeps on expanding its nuclear capabilities while the USA and Russia proceed with strategic reductions, and the ability of the US to deter Chinese encroachments on Japan will decline".⁹ At this stage, it is unlikely that the US policy resumes forward-deployment of tactical nuclear weapons. On the other hand, it is an open question if such nuclear-sharing without forward-deployed nuclear weapons is effective for the case of volatile and asymmetric nuclear confrontation in East Asia, particularly given China's strategy to fight local wars with the emphasis on the centrality of massive tactical missiles. It should be noted that China's "limited deterrence" assumes that a limited nuclear war is feasible, very because it is "limited". In this oddly optimistic assumption, there is fatal lack of notion or fear that any local wars, even if starting as a conventional battle, could escalate to involve tactical nuclear weapons, which could be eventually out of control. How could China assume that such 'local wars' can remain conventional, in spite of its massive tactical missiles and ever expanding nuclear forces without clear doctrine?

Strengthening reassurance of the US extended nuclear deterrence with NATO Europe-type of nuclear sharing or redeployment of US tactical nuclear weapons are measures deriving from the Cold War where the MAD doctrine applied in the symmetric nuclear confrontation. The post-Cold War East Asian landscape does not necessarily meet such conditions. **One alternative option, albeit extreme, is Kenneth Waltzian type of "all go nuclear" option, as "history has shown that where nuclear capabilities emerge, so too does stability... When it comes to nuclear weapons, now as ever, more may be better".**¹⁰ Waltz asserts that, just as the India-Pakistan relationship has been kept in peace even in the face of high tensions and risky provocations, once Iran crosses the nuclear threshold, deterrence will apply even if the Iranian arsenal is small, because "there has never been a full-scale war between two nuclear-armed states" (ibid.). According to this logic, the "all-go-nuclear" option might be regarded as alternative measures for ensuring power balance under asymmetric nuclear confrontation where MAD doctrine does not work. Another extreme option, which is more idealistic and yet feasible, is to eliminate nuclear weapons in the form of an Asian version of the INF treaty to abolish eliminate destabilizing tactical nuclear weapons, or Northeast Asia Nuclear Weapon Free Zone. If the grave risk of the 'fog of nuclear war' mentioned below is seriously considered, the option of nuclear abolition cannot not be ignored.

⁸ Kamp & Remekes (2011) 'Options for NATO Nuclear Sharing Arrangements', the Nuclear Threat Initiatives (NTI) <<http://www.nti.org/analysis/articles/options-nato-nuclear-sharing-arrangements/>>, p. 90. The report promotes the Asian model of nuclear-sharing without US forward based nuclear weapons as an alternative option for the post-Cold War NATO.

⁹ *A New Phase in the Japan-US Alliance "The Japan US Alliance toward 2020"*, 2009 Project Report, Research Group on the Japan-US Alliance, Tokyo: Institute for International Policy Studies (IIPS), p. 10.

¹⁰ Kenneth N. Waltz (2012), 'Why Iran should Get the Bomb', *Foreign Affairs*, Vol. 91, Issue 4 (Jul/Aug 2012), pp. 2-5.

The Risk of the 'Fog of Nuclear War' in East Asia

In East Asia, given the increasing tension over the territorial issues in the context of hegemonic shift, the risk of local wars with conventional weapons is very high. In addition, China builds-up massive tactical missiles and increasingly large nuclear forces without any clear doctrine if and how these tactical nuclear weapons are to be employed. This combination triggers the risk of unintended or accidental escalation of local wars to involve nuclear forces. The PLA is actively developing tactical nuclear weapons, and obtaining options to threaten to use or actually employ nuclear weapons below the strategic level.¹¹ Roberts (2001) points out that, if China perceives that US ballistic missile defence (BMD) deployment would deprive it of useful leverage, Beijing might choose to attempt its nuclear option before its perceived window-of-leverage begins to close by abandoning its no-first-use (NFU) pledge.¹² Yoshihara (2011) cautions against the PLA's excessive confidence in its missile tactics that intimidation warfare's escalatory pressures are far stronger, and misapplication of missile tactics could dramatically reshape the dynamics of the war, while accidents or miscalculations that cross the bounds of intimidation could transform the nature of the conflict to China's detriment.¹³

On the other hand, US extended nuclear deterrence does not address conventional local wars, while its doctrine of the use of non-strategic nuclear weapon is not clarified. Both the United States and China focus only on bilateral strategic balance, leaving the issue of tactical nuclear weapons in black box. According to Thomas Shelling, the very essence of nuclear weapon is 'diplomacy of violence'.¹⁴ This means nuclear weapons are to be most effective in its use for deterrence when it is demonstrated clearly as such. However, China maintains its tactical nuclear weapons largely in secret for actual use of limited nuclear warfare, while neither China nor the United States clarify their respective doctrine concerning the use of tactical nuclear weapons. MAD doctrine or nuclear deterrence may not function in such a situation. Current US extended nuclear deterrence without coupling mechanism may not be effective for preventing China's adventurism to change the status quo in the theatre. In the post-Cold War Asia, the US nuclear strategy focuses on strategic balance with China, while eagerly withdrawing its forward-deployed tactical nuclear weapons out of the fear of nuclear proliferation risk, at the cost of credibility of extended nuclear deterrence for its allies. Missile defence is too limited for protecting the US allies hosting the US forces, but rather make them more vulnerable to become targets in case of war. China is strengthening its non-strategic forces for fighting local wars in real, based on its excessively optimistic assumption that its nuclear forces sufficiently counter the US intervention and the local wars will remain conventional. Perception gap out of deep-rooted distrust from the war legacy causes misperception, miscalculation, and misjudgement, only aggravates the situation.

In a word, while the United States and China only pay attention to their bilateral strategic balance, their tactical nuclear forces are remained or deployed virtually ready for actual war-fighting without conveying any clear doctrine to their respective adversary. Without the coupling mechanism, the strategic nuclear balance does not necessarily deter an outbreak of a theatre nuclear war. All these factors put together could trigger unexpected and unintended outbreak of a local war involving tactical nuclear weapons. This risk can be called 'the fog of

¹¹ Michael Chase, Andrew S. Erickson, & Christopher Yeaw, "The Future of Chinese Deterrence Strategy," *Jamestown China Brief*, Vol. 9, No. 5 (4 March 2009), pp. 6-9.

¹² Brad Roberts (2001), *China-U.S. Nuclear Relations: What Relationship Best Serves U.S. Interests?*, IDA paper, Institute for Defence Analyses, Defence Threat Reduction Agency, August 2001.

¹³ Toshi Yoshihara (2010), Chinese Missile Strategy and the U.S. Naval Presence in Japan, *Naval War College Review*, Summer 2010, Vol. 63, No. 3.

¹⁴ Thomas Shelling (1966) *Arms and Influence*, Yale University Press.

nuclear war'; the fog of war denotes the uncertainty regarding one's own capability, adversary's capability, and adversary's intent during an engagement, operation, or campaign.¹⁵ The fear of the fog of theatre nuclear war compels Japan and South Korea to seek reassurance of US extended nuclear deterrence by the orthodox Cold War measures such as nuclear-sharing and redeployment of US tactical nuclear weapons in their soil. It reminds one of the Cuban missile crisis; Castro's Cuba urged the Soviet to deploy tactical nuclear weapons when it repeatedly suffered from the US offence with conventional forces, even by risking nuclear annihilation.¹⁶ This is the paradox of extended nuclear deterrence in the era of global nuclear disarmament. Ironically, the US unilateral withdrawal of forward-deployed tactical nuclear weapons in the asymmetric nuclear confrontation prompts fear and anxiety among its allies, notably Japan and South Korea who in turn seek measures for strengthening nuclear deterrence. The paradox could be only solved in a fundamentally different dimension aloof from the Cold War/post-Cold War nuclear doctrines. The complex and contradictory nuclear deterrence problematique in East Asia is challenging. Nonetheless, if we address this conundrum sincerely, this paradox might turn to become an opportunity for the abolishment of nuclear weapons, should the above-mentioned paradox can be successfully addressed.

¹⁵ "War is an area of uncertainty; three quarters of the things on which all action in War is based are lying in a fog of uncertainty to a greater or lesser extent. The first thing (needed) here is a fine, piercing mind, to feel out the truth with the measure of its judgment" (Carl von Clausewitz, *On War*, chapter 3).

¹⁶ In the Oscar-award documentary film, 'The Fog of War', former U.S. Secretary of Defense Robert S. McNamara drew lessons from his experience of the Cuban missile crisis: "I want to say, and this is very important: at the end we lucked out. It was luck that prevented nuclear war. We came that close to nuclear war at the end. Rational individuals: Kennedy was rational; Khrushchev was rational; Castro was rational. Rational individuals came that close to total destruction of their societies. And that danger exists today."
<http://www.imdb.com/title/tt0317910/quotes>.

带格式的: 字体: Times
New Roman, 10 磅, 倾斜