

## Issues in Sino-US Nuclear Relations: Survivability, Coercion and Escalation

Wu Riqiang

The implications of Chinese nuclear force modernisation for Sino-US security relations have recently received a great deal of attention in academic circles. The implications generally fall in to two categories: first, increasing the survivability of Chinese nuclear weapons is good for Sino-US strategic stability; second, the ongoing development of Chinese nuclear and conventional weapon systems will likely, given the nature of the Sino-US force structure and related strategies and tactics, increase the chance of a dangerous escalation in a crisis. Generally, Chinese scholars focus on the first category, whilst most Westerners are concerned with the second. Recently two articles have been published by Western academics that directly address the issue of Chinese nuclear force modernisation and the related dangers of escalation in a crisis. The first was John Wilson Lewis and Xue Litai's 'Making China's Nuclear War Plan'.<sup>1</sup> The second was Thomas J. Christensen's 'The Meaning of the Nuclear Evolution'.<sup>2</sup> These two articles accurately capture some of the prevailing concerns of Western China-watchers, but at the same time they are not without problems and this article will now address some of them.

The article by John Wilson Lewis and Xue Litai raises a six-level frame of reference to analyze China's nuclear weapons strategy. These six levels are:

- Basic military strategic guideline;
- Nuclear policy;
- Nuclear strategy;
- Nuclear deterrence theory;
- Applied strategic principles;
- Operational regulations;

The article also discusses China's conventional ballistic missiles, their incorporation into China's combat plan, and how this might lead to a dangerous escalation. The writers have described two scenarios that might lead to such an escalation occurring. In the first scenario, China launches a conventional ballistic missile, and this is mistaken for a nuclear missile, and the party under threat launches on warning a nuclear 'counter strike', which will in turn cause China to launch a nuclear strike in response. In the second scenario, China might exploit the risk inherent in the first scenario and base conventional missiles alongside nuclear missiles, thus deterring any action against them. This article, in keeping with the

---

<sup>1</sup> John W. Lewis, Xue Litai, "Making China's nuclear war plan," *Bulletin of the Atomic Scientists*, Vol. 68, No. 5, 2012, pp. 45-65.

<sup>2</sup> Thomas J. Christensen, "The Meaning of the Nuclear Evolution: China's Strategic Modernization and US-China Security Relations," *Journal of Strategic Studies*, Vol. 35, No. 4, August 2012, pp. 447-487.

two authors' previous works, reflects their familiarity with the Chinese literature on the subject and their deep understanding of Chinese nuclear capability and nuclear strategy.

In their discussion of the fourth in their six-level frame of reference, that of China's nuclear deterrence theory, the authors describe at length China's gradual acceptance of the concept of 'nuclear deterrence', and analyse the significance of this shift. In fact, China's hesitation in accepting the concept of 'deterrence' reflects China's different definition of it. The Chinese characters, *weishe* (威慑) used in China for 'deterrence', actually refer to the concept of 'winning without fighting', so the correct translation should really be 'coercion'. But, customarily, *weishe* (威慑) is used to describe 'deterrence', and for 'coercion', *heweiya* (核威压) is used. So, when China says that it is opposed to the idea of 'nuclear deterrence', the real meaning is that it is opposed to the idea of 'nuclear coercion'. This is the cause of much confusion in Western countries. At the same time, when China is seeking to describe its nuclear policy, China cannot avoid discussion of the idea of nuclear deterrence, but prefers to talk about the term of 'nuclear revenge' *hebaofu* (核报复), whilst trying to avoid use of the phrase 'nuclear deterrence' *heweishe* (核威慑). The confusion over the translation of this technical term has already proved to be a significant obstacle in Sino-US strategic dialogue: as Professor Li Bin has pointed out, as the Chinese and Western military forces use different technical terms, the United States must not push the Chinese and American military into a direct dialogue and instead should consolidate the current Track 2 and Track 1.5 dialogues, which will allow both sides to gradually familiarise themselves with each other's logic and terminology.<sup>1</sup> In order to eliminate this ambiguity, in Chinese 'deterrence' should be translated as *hezhu* (吓阻).

The article makes reference to the 1969 Sino-Soviet conflict and claims that Chinese nuclear weapons deterred the Soviets from launching a nuclear attack, but this is inaccurate. In 1969 Chinese nuclear capability was very weak, and the Soviets did not believe that China had a nuclear retaliatory capability. What did deter the Soviet Union from launching a nuclear attack was not China's nuclear weapons, but China's strategy of 'people's war'. According to the memoirs of the Soviet diplomat and defector Arkady N. Shevchenko, the former UN Deputy Secretary General, at that time the Soviet leaders believed that if they launched a large scale attack on China it would inevitably lead to a full scale world war,

---

<sup>1</sup> Li Bin, "Promoting Effective China-U.S. Strategic Nuclear Dialogue," October 18, 2011, <http://carnegieendowment.org/2011/10/18/promoting-effective-china-u-s-strategic-nuclear-dialogue/5zm8>.

whilst even limited surgical strikes would provoke an endless guerilla war.<sup>1</sup> A subsequent interview with a former Soviet intelligence officer confirmed this.<sup>2</sup>

The authors also raised the issue of the Second Artillery's three 'Dual Principles' in relation to China's conventional and nuclear missiles: Dual Deterrence; Dual Combat; Dual Command. Regarding the latter, the authors believe that the Second Artillery's nuclear and conventional forces share command and control infrastructure, and that any attack on the conventional missile command and control systems would also be an attack on the nuclear missile command and control systems, which would risk a rapid escalation of the crisis. This judgment seems rather subjective. The authors provide no evidence to support their assertion that the nuclear and conventional missile units share the same command and control infrastructure. Up to now, we are also unable to provide any evidence either way, but we can find a possibility. On one side, the uses of nuclear and conventional missiles require different authorization: only the top political leaders could decide to use nuclear missiles, while theater commanders could decide to use conventional missiles, so there might be two sets of command and control infrastructure. On the other hand, literally, 'Dual Command' (*shuangchong zhihui* 双重指挥) could also carry another meaning, in which the nuclear missile units and conventional missile units have completely separate command and control infrastructure. There is very little publicly available information on the Second Artillery's command and control systems, and until more becomes available we are simply not able to answer this question.

The article by Christensen discusses the impact that China's nuclear second-strike capability has on the Sino-US conventional security relationship. He begins by reviewing two schools of thought from the Cold War: the first was Glen Snyder's 'Stability/Instability Paradox', which holds that stability between two parties in the nuclear area means that the parties need not fear escalation in the conventional area, and so nuclear stability leads to conventional instability. The second was publicised by Thomas Schelling with support from Robert Jervis and is based on his 'threat that leaves something to chance', this theory holds that when both parties have guaranteed second-strike capabilities then what matters in determining outcomes is the balance of resolution rather than the balance of power. Therefore, given the risk of a conventional conflict escalating to nuclear level, the conventionally weaker side with greater resolution could force the stronger opponent to concede. Christensen's article claims that, after twenty years of military modernisation, China now has a genuine nuclear second strike capability, and the influence that this has on Sino-US security relations depends upon which of the two theories above most closely describes China's nuclear strategy. Christensen believes that China's nuclear strategy is

---

<sup>1</sup> Arkady N. Shevchenko, *Breaking with Moscow* (New York: Knopf, 1985), pp. 164-166.

<sup>2</sup> Lyle J. Goldstein, "Do Nascent WMD Arsenals Deter? The Sino-Soviet Crisis of 1969," *Political Science Quarterly*, Vol. 118, No. 1, Spring 2003, pp. 53-80.

most accurately described by the theories of Schelling and Jervis and that, as a consequence, it is vulnerable to dangerous escalation. In this article, the author demonstrates a very high level of fluency in Western deterrence theory and is able to accurately summarise this body of work, and uses tools that were developed to analyse US-Soviet relations in the Cold War to address contemporary Sino-US relations, and believes that because of China's unique security environment the current Sino-US relationship is more vulnerable to dangerous escalation than that of the old US-Soviet relationship.

The crux of Christensen's article depends upon which of the two theories he presents most accurately describes China's nuclear strategy. Christensen's analysis is based upon one book: the 2004 *Science of Second Artillery Campaigns*.<sup>1</sup> Thus the basis for his argument is flawed, as this book cannot be taken to represent China's nuclear strategy. This is a common mistake by Western experts, who tend to believe that whatever is published by a PLA officer, whether books or articles, even what is said by PLA officers, can in any way be taken as authoritative, and representative of China's official policy or the direction of future policy. In reality, this book only represents the perspective of the Second Artillery. The Second Artillery is China's nuclear missile force, but it is not China's nuclear strategy or nuclear policy maker. China's top political leaders are responsible for setting China's nuclear strategy and policy: Second Artillery is solely responsible for implementing China's nuclear strategy and policy. From the following example we can glimpse the limits to the Second Artillery's policy-making role. In 1980s, the Second Artillery published and distributed a book of *Nuclear Strategy Guidelines* to its schools and training departments. In doing so, the Second Artillery was regarded as having overstepped their authority and the action was challenged. In 1989 the CMC issued a formal criticism of the leaders of the Second Artillery for this action.<sup>2</sup> Therefore it is inappropriate for the writer of the article to place such evidential weight on this book.

In fact, this book's view is consistent with China's declaratory policy, and Christensen misread it.<sup>3</sup> The book clearly stated that Second Artillery deterrent campaigns [includes:] on one hand, the wielding of conventional missiles as conventional deterrence against enemies; on the other hand, the wielding of strategic nuclear weapons as anti-nuclear-deterrence against nuclear deterrence from other nuclear states. The term of 'anti-nuclear-deterrence' (*fan heweishe*) is passive and defensive, and Christensen's

---

<sup>1</sup> Yu, Jixun (ed.), *Dier Paobing Zhanyi Xue* [Science of Second Artillery Campaigns] (Beijing: Jiefangjun chubanshe 2004). This book is classified, but it is now available at several university libraries in the United States, for example, George Washington University, index No.: UA837. D53 2004.

<sup>2</sup> Xu, Jian, 'Li Xuge', in Dier paobing zhengzhibu (ed.), *Dier paobing gaoji jiangling zhuan* [Biographies of Senior Generals of The Second Artillery], June 2006, pp. 437–95.

<sup>3</sup> In fact, this book is so close to China's policy that one U.S. analyst said it must be China's strategic deception. Larry M. Wortzel, 'China's Nuclear "Leakage"', *The Diplomat*, (August 7, 2012), <http://thediplomat.com/china-power/chinas-nuclear-leakage/>.

translation (a threat of nuclear counterattack) is wrong. As for the most ‘disconcerting’ section, ‘lower the nuclear deterrence threshold’, Christensen ignores one important sentence stating that the lowest possible threshold is to publicly declare the target points. As Gregory Kulacki correctly pointed out, ‘[c]rossing the threshold is demonstrating they are preparing a retaliatory strike, not, as widely reported, threatening to strike first’.<sup>1</sup>

In Christensen’s article, there are also some misunderstandings caused by different culture background, terminology, and context. The terminology used by Chinese academia is close to that of US academia, but Chinese military’s is far different from that. Christensen tried to do text analysis on Chinese military’s works using American strategic analysis approaches, with the hope to summarise China’s nuclear strategy defined by American terminology. Its results are problematic. For example, these terms of ‘conventional war under nuclear deterrence’, ‘double deterrence’ and ‘nuclear forces as a shield for conventional forces’, the original meaning of which in Chinese is that the adversary might use nuclear threat against China in a conventional conflict, so China needs nuclear forces for anti-nuclear-deterrence purpose, are misunderstood by Christensen as that China would combine nuclear and conventional coercive means to achieve its diplomatic objectives.

There is an important question Christensen did not mention: given China’s unconditional no-first-use policy, how can China coerce other countries? The pre-condition of nuclear coercion is to signal your willingness of using nuclear weapons in order to force the other side to do something. So China’s no-first-use policy means that China has abandoned the right of nuclear coercion. The critics might say that China’s no-first-use policy is not believable, and China could abandon that policy at any time. But China’s long-time insisting on this policy builds up a high threshold, which makes it very difficult for China to abandon it. America’s refusal to accept a no-first-use policy means the United States wants to keep the option of nuclear coercion, but this is not to say that the United States could easily do nuclear coercion or that the probability of an American nuclear coercion is very high.

The two articles both raise the issues of conflict escalation and crisis management, and this is indeed a very important issue in the contemporary Sino-US relationship. Because of the Taiwan issue and the East and South China Seas problems the two countries could be drawn into a conflict. A conventional conflict between these two countries could, because of the two countries’ force structure and strategic and tactical proclivities, escalate to nuclear war. To be specific, there are three factors that could cause crisis escalation. First, by integrating superiority in nuclear, conventional and missile defense domain, the United States might achieve disarming capability against China, and translate this position into

---

<sup>1</sup> Gregory Kulacki, ‘Chickens Talking With Ducks: The US-Chinese Nuclear Dialogue’, *Arms Control Today*, Oct. 2011, [www.armscontrol.org/act/2011\\_10/US\\_Chinese\\_Nuclear\\_Dialogue](http://www.armscontrol.org/act/2011_10/US_Chinese_Nuclear_Dialogue).

coercive power. Kissinger said, in 1971, that ‘we have no disarming capability against the USSR but we do have some against China. ... As long as we have a disarming capability we can use it to regulate their actions in local situations’.<sup>1</sup> In 2006 two American authors wrote an article in which they suggested that the United States had a first strike advantage over China. This article is based on an unreasonable assumption that the United States has perfect intelligence capability, and so their conclusion is fatally flawed. China’s main objective in the modernisation of its nuclear weapons is to enhance their survivability, and, in recent years, the survivability of China’s nuclear weapons has indeed shown great improvement. We can be reasonably confident that in the current force structure between the United States and China, the United States cannot have confidence of destroying all China’s nuclear weapons in a first strike, but how the balance between the United States and China will develop in the future is unknown. This is especially so given the United States’ ongoing and rapid development of Ballistic Missile Defence (BMD), and their refusal to accept any restrictions on this process. When this process is complete and the United States is able to field large-scale and highly effective BMD systems, then the United States will have a genuine first strike capability against China, and then the United States will be able to use nuclear weapons to coerce China.

Second, inadvertent escalation caused by force structure issues. Because China has both conventional and nuclear ballistic missiles, and both attack and missile submarines, in the event of a conflict it may be difficult for the United States to discriminate and strike China’s nuclear weapons or the command and control system of China’s nuclear forces unintentionally, so escalating the conflict to very dangerous levels.

Third, both sides might use ‘threat that leaves something to chance’ to force the other side to back down. The United States worries that Chinese military might use the escalatory risk caused by combining nuclear and conventional weapons intentionally in order to coerce the United States or directly appeal to nuclear weapons to deter US intervention. China also worries that the United States might intentionally attack Chinese nuclear weapons with conventional weapons or use nuclear weapons to compensate local conventional imbalance. In reality, it is China that has more reason to fear nuclear coercion, rather than America. From the perspective of capability, regarding both conventional and nuclear capability, the US has a great advantage over China. Naturally, the threat from the stronger side is more credible. From the perspective of declaratory policy, from the very first day, China has had a firm no-first-use policy regarding nuclear weapons, but America has always refused to adopt the same policy. Finally, from a historical perspective, we can see that China has never threatened another country with the use of nuclear weapons, whereas America has made many such threats, and specifically to China. The original motive for the

---

<sup>1</sup> U.S. National Security Council, Memorandum of Conversation, “Minutes of NSC Meeting of Defense Strategy,” August 13, 1971.

development of China's own nuclear programme was America's nuclear 'blackmail' against China, and America's subsequent highly aggressive strategic actions have only served to remind China of this deeply unhappy memory.

But, we should not over exaggerate the danger of a crisis or conflict between China and the US escalating. First, the survivability of Chinese nuclear forces has been higher and higher because of China's modernizing efforts, so it is unlikely for America to get disarming capability against China in the near future. Second, we can have confidence in the US intelligence agencies understanding of Second Artillery's conventional and nuclear missile deployment mode, distinguishing between nuclear and conventional missile deployment areas, and discriminating different Chinese missiles. Third, although there are voices in both China and America arguing for nuclear coercion, nuclear taboo has been strengthened because of tens of years of non-use tradition of nuclear weapons, and it is very hard for each side's leaders to appeal to nuclear weapons to realize diplomatic objectives.

How to avoid the dangers of conflict escalation is a critical mission facing China and the United States. These two countries, China and America, face different dilemmas when tackling the issue of conflict and crisis management. For America, on one hand, they want to use nuclear weapons to signal their resolution and to demonstrate their capability in order to influence the policies of other countries; on the other hand, they hope that the crisis will not escalate to the level where they would actually be required to use nuclear weapons. Therefore, although the American 2010 *Nuclear Posture Review* states that the United States will gradually reduce the role of nuclear weapons in their national security strategy, the United States still refuses to adopt a no-first-use policy. For China, the main objective for the modernisation of its nuclear weapons is to increase survivability, but this process itself raises fresh problems for crisis management. For China, in order to increase the survivability of its nuclear weapons, everything related to nuclear weapons, their units, their deployment, operations, and command control, must be kept strictly secret. But, it is this very strict attitude towards secrecy that, in event of a conflict, increases the chances that other countries could misjudge the situation. One possible way of resolving this problem would be for the United States and China to adopt an overall understanding regarding strategic stability and crisis management. This might include: America adopting a no-first-use policy, or something similar; America promising not to weaken China's nuclear deterrence capability and to accept mutual vulnerability; America accepting limits on missile defence and Conventional Prompt Global Strike; China promising not to increase the quantity of its nuclear weapons stockpile; China accepting greater transparency of all aspect of nuclear weapons issue, for example, China announcing an upper level for nuclear weapons numbers, describing the identifying characteristics of conventional and nuclear ballistic missiles, confirming that China has no tactical nuclear weapons. If China and America can reach such an understanding on the issues described above, then the dangers of conflict escalation can be greatly reduced.

