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Minimum Deterrence; Strategic Insights, v. 6,
issue 9 (2005)

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Strategic Insights, v.6, issue 9 (September 2005)

<https://hdl.handle.net/10945/11470>

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Chinese Nuclear Policy and the Future of Minimum Deterrence

Strategic Insights, Volume IV, Issue 9 (September 2005)

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Introduction

“Nuclear strategy” and “nuclear doctrine” are seldom used in Chinese literature of military and strategic studies. Instead “nuclear policy” frequently appears to cover both the strategic thinking and the basic principles in developing, managing, and employing nuclear weapons. This preference in terminology illustrates how the political utility of nuclear weapons occupies the core position in China’s nuclear calculus. The following paper will first analyze the current Chinese nuclear policy; then describe some of the major factors that may effect nuclear thinking in China after the Cold War; and finally speculate on the future of China’s nuclear deterrence in the 21st century.

I. Current Chinese Nuclear Policy

It can be safely said that of all the nuclear states, the nuclear policy of China has so far been the most consistent. From the day China first exploded an atomic bomb, its nuclear policy-related statements have remained unchanged. Five major components can be derived from these statements:

No First Use Policy

No first use (NFU) has been most frequently and consistently repeated in numerous Chinese government statements ever since China became a nuclear weapon state in 1964. By conceding the first use option, China has limited itself to retaliatory nuclear use only. China has also called all nuclear weapon states to commit themselves to a NFU policy at any time and in any circumstances.

Security Assurance to Non Nuclear Weapons States and Nuclear Free Zones

China has been very critical of the use of nuclear threats against non-nuclear weapon states and non-nuclear weapons zones. It has repeatedly called on all the nuclear weapon states to agree to a legally-binding, multilateral agreement under which they would pledge not to use or threaten to use nuclear weapons against non-nuclear weapon states and nuclear free zones. This policy component limits China’s potential nuclear adversaries to just the few nuclear weapon states.

Apart from the negative security assurance, which China gives unconditionally to all non-nuclear weapon states, China issued its first formal positive security assurance with the other four declared nuclear weapon states in April 1995, promising to come to the aid of any non-nuclear weapon state subject to nuclear attack and pursue appropriate punishment against the attacking state, under the auspices of the UN Security Council. This policy has become part of the UN Security Council Resolution 984.

Limited Development of Second Strike, Retaliatory Capability

China has repeated its intention to maintain a very small nuclear arsenal on many occasions. In its 2003 Defense White Paper, China states that it “has always exercised utmost restraint on the development of nuclear weapons, and its nuclear arsenal is kept at the lowest level necessary for self-defense only.”^[1] However, to make this small arsenal a credible deterrent, China has to make it survivable to a first nuclear strike, even that strike is overwhelming and devastating. In Chinese literature, “few but effective” (*jinggan youxiao*) are the words most frequently used to describe its necessary arsenal.

Opposition to Nuclear Deployment outside National Territories

China is opposed to the policy of extended nuclear deterrence, or the policy of providing "nuclear umbrellas" by nuclear weapon states to their allies. In consistence with China's long standing policy of not sending or stationing any troops outside China, it is also officially opposed to the deployment of nuclear weapons outside national territories, and has stated that China will never deployed nuclear weapons on any foreign soil.

Complete Prohibition of Nuclear Weapons and Thorough Nuclear Disarmament

China first called for the complete prohibition and thorough destruction of nuclear weapons in its proposal for a world summit in 1963, before its first nuclear explosion. On the same day of China's first nuclear explosion, it again stated that “the Chinese government hereby solemnly proposes to the governments of the world that a summit conference of all the countries of the world be convened to discuss the questions 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.”^[2] This has evolved into China's basic position on nuclear disarmament and it has never given up its efforts to promote an international convention to ban nuclear weapons.

The above major components of Chinese nuclear policy, if interpreted through the lens of Western deterrence terminology, can be characterized as:

Strategic Rather than Operational and Tactical Deterrence

Mao Zedong, in elaborating China's reason to develop nuclear weapons, said “we will not only have possession of more aircraft and artillery pieces, but also atom bombs. In today's world, we must have this thing if we don't want to be bullied by others.”^[3] The original purpose of nuclear development in China was to “break up the nuclear threat and smash the nuclear blackmail (*dabuo he weixie, fensui he ezha*).” As a political instrument, nuclear weapons are to be utilized mainly at the level of grand strategy, not as a winning tool in military operations. The military value of nuclear weapons lies only in its deterrent effect against nuclear attack. The officially declared missions of the Second Artillery Force are twofold:

1. To deter the use of nuclear weapons against China, and

2. To launch an effective nuclear counter-attack in the case of such an attack.[4]

No distinction has been made in categorizing nuclear operations. A nuclear strike against China—whether conducted at strategic, operational or tactical level, with high or low yield warheads, or deadly or tolerable lethality—is perceived as the utmost form of warfare in Chinese war categorization, which must be responded strategically. In Chinese strategic literature, we only see the discussion on how to deter a nuclear war from happening, on how to prevent a conventional conflict from escalating into a nuclear war, and how to retaliate after suffering a nuclear attack—but never how to win a nuclear war. The primary Chinese perception is that nuclear wars are not to be won, but to be prevented.

Retaliatory—Rather than Denial—Deterrence[5]

Many Chinese cite Deng Xiaoping when explaining China's nuclear thinking. He explained, in a meeting with foreigners in 1983:

"While you have some deterrence force, we also have some; but we don't want much. It will do just to possess it. Things like strategic weapons and deterrence forces are there to scare others. They must not be used first. But our possession will have some effect. The limited possession of nuclear weapons itself exert some pressure. It remains our position that we will develop a little (nuclear weapons). But the development will be limited. We have said repeatedly that our small amount (of nuclear weapons) is nothing. It is only to show that we also have what you have. If you want to destroy us, you yourself have to suffer some punishment at the same time."[6]

Deng's statement echoed Mao's nuclear thinking in several aspects:

1. Nuclear weapons are desirable only for its deterrent value, not for battlefield utility.
2. Nuclear weapons, if ever used, will be used to cause the enemy as much pain as possible, so as to enhance its deterrent value in the first place. Therefore, China has to adopt counter-value as opposed to counterforce targeting strategies, in order to strengthen its deterrence posture.
3. Only a small number of nuclear weapons will satisfy China's deterrent needs—to convince potential nuclear adversary of a possible nuclear retaliation. Both Mao and Deng are very explicit that the deterrent effectiveness does not increase in proportion with numbers of nuclear weapons. A survivable and invulnerable small arsenal can be equally effective in terms of deterrence. Deterrence effect depends on invulnerability to nuclear strikes, not on large amount of nuclear attack capabilities. Accordingly, what China has been seeking is a nuclear arsenal that is small in size but good in quality.
4. As confined by its adherence to NFU policy, China has to focus its nuclear development efforts on "second strike capabilities" which must be credible and survivable in order to have deterrent effect.

Central Rather than Extended Deterrence[7]

By declaring to counter-attack with nuclear weapons only after being attacked by nuclear weapons, China has preserved nuclear capabilities to protect its own most vital interests—that is, the existence of the nation. Even during the Cold War years, China has never provided nuclear umbrella to any other country in the world. For China, the concept of extended deterrence has simply not entered into its nuclear calculus—yet.

General Rather than Immediate Deterrence

The mutual deterrence exercised by the two nuclear superpowers during the Cold War had been directed at one another. They were both the ones to deter, and the ones to be deterred. They

formed a bilateral deterrent relationship, in which each side was very clear whom it wanted to deter, and what it wanted to deter them from. Their deterrence was more of an immediate nature. China had never comfortably fitted into the bipolar context. It had been in one of the poles for some time, then outside of both poles for some time, and then it tried to be closer to the other pole. In addition, China had not had the luxury of a nuclear umbrella for most of the Cold War years. Therefore, China's nuclear deterrence had been more of a general nature—in which China tried to form a multilateral deterrent relationship with all the nuclear powers, which only made clear what China wanted to deter.

Defensive Rather than Offensive Deterrence

One famous tenet laid down by Chairman Mao Zedong is the Sixteen Character Guideline for the use of force—"We will never attack unless we are attacked; and if we are attacked, we will certainly counterattack" (*ren bu fan wo, wo bu fan ren; ren ruo fan wo, wo bi fan ren*). Behind this guideline is a sober headed analysis of power balances. The PLA and its predecessors entered and won most wars as an inferior side against great odds. So a defensive posture had always been preferred to an offensive one.

However, Chinese forces have managed to turn from being the weaker into the stronger party in the course—usually a protracted course—of previous conventional wars. When applied to nuclear policy, this Guideline simply means a rejection of preemptive thinking. The renunciation of the first-use option, the willingness to accept vulnerability, the confinement to retaliatory nuclear use, the principle of attacking only after being attacked (*hou fa zi ren*), the focus on second strike capabilities, and the reservation of nuclear means as the last resort to protect only the most vital national interests, all point to the defensiveness of China's nuclear policy. Although nuclear weapons are inherently offensive weapons, when deterrence strategies are applied in the way China does, they acquire a pure defensive posture.

Minimum Rather than Limited or Maximum Deterrence

If I am to choose from Western deterrence classifications to describe Chinese nuclear deterrence posture in general, I would have to use the handy concept of "minimum deterrence" as compared to maximum or limited deterrence. Personally, I think the word "minimum" has too strong a quantitative connotation that is misleading. It sometimes suggests a quantitative standard instead of a qualitative standard. The word "minimum" has for some time been officially used in Chinese government documents.^[8]

But what I want to emphasize is that Chinese strategists take the concept as a relative one, defined not only by pure numbers, but more importantly by such key criteria as invulnerability of nuclear forces, assurance of retaliation, and credibility of counter-attack. When a Chinese document says that China intends to possess nuclear weapons only at the minimum (or lowest) level for the needs of self-defense, that means to have the minimum but assured capabilities for a retaliatory second strike. Some studies have suggested a shift of Chinese nuclear posture toward limited deterrence, where China could employ nuclear weapons to deter both conventional and nuclear wars, and even to exercise escalation control in the event of a conventional confrontation.^[9] However, the basic logic of China's nuclear thinking dictates nuclear weapons as deterring—not as a means of winning against nuclear weapons.

II. Factors Shaping China's Nuclear Thinking after the Cold War

Many factors have exerted an impact on China's nuclear calculus since the end of the Cold War. Listed below are three major ones.

Factor One: The Changing Nuclear Environment

The end of the Cold War and the collapse of the bipolar international system led to the fall of nuclear weapons as a predominant strategic consideration. A major nuclear exchange has become just a remote possibility. Local limited wars, national and ethnic armed conflicts, territorial disputes, nuclear and military technology proliferation, international terrorism, and transnational organized crime have risen in significance as major threats to international and regional peace and stability.

China's nuclear environment has been more complex:

1. First, the Strategic Partnership formed between China and Russia removed the prospect of a Russian nuclear first strike.
2. Second, the possibility for military conflict between China and the United States (both nuclear powers) over Taiwan has increased.
3. Third, there have emerged on China's periphery two new nuclear weapon states—India and Pakistan, with the former explicitly taking China to be a nuclear adversary.
4. Fourth, the DPRK is seeking nuclear weapons against the common wish that the Korean peninsula be nuclear free. Such move may result in cascading effects such as more robust BMD systems in the Northeast Asia region, which in certain cases would reduce the deterrent effect of China's small nuclear arsenal; and potential incentives for Japan and even the ROK to go nuclear.

Paradoxically, China evaluates its overall nuclear security to be improving instead of worsening—although surrounded by more nuclear weapon states than any other in the world. Reasons for this evaluation are manifold:

1. First, it would be too far fetched to envision a military conflict between China and Russia, let alone one involving nuclear confrontation.
2. Second, China formed with India a very credible mutual deterrent relationship the moment it went nuclear. Pakistan, a long time friend of China, has been locked into a mutual deterrent relationship with India as well. The pair of deterrent relationships brought about a more earnest effort from both India and China for settling territorial disputes by political means, and reduced the danger of large scale conventional conflicts between India and Pakistan.
3. Third, China was less concerned about its two new nuclear neighbors, for the general nature of China's nuclear deterrence can readily accommodate the changing nuclear deterrence needs.
4. Fourth, China is actively engaged in the Six Party talks, and was confident that a nuclear free Peninsula can be achieved—which is in China's best interests. So far and in the foreseeable future, changes in the nuclear environment pose no challenges so great that China has to reconsider its nuclear policy.

Factor Two: Taiwan

Taiwan hadn't been a predominant issue until the mid 1990s, when the pro-independence forces gained momentum on the island. Cross-strait conflicts were a continuation of the 1945-49 civil war, and nuclear weapons had no role to play in civil war scenarios.

However, the Taiwan issue has been complicated by possible U.S. military intervention in case of a military crisis. This constitutes the only conceivable scenario in which two nuclear weapon states might fight face-to-face. China has always complained, with good reason in my view, that the United States is the largest external factor impeding China's reunification, peacefully or by force.

With the *Taiwan Relations Act*, the United States has somewhat committed itself to the defense of Taiwan. The 2002 *Nuclear Posture Review* (NPR) released (or leaked) by the U.S. Department of Defense even implies the use of nuclear weapons in “military confrontation over the status of Taiwan.” Such confrontation is categorized as “immediate contingencies” for which the United States has to set “requirements for nuclear strike capabilities.”^[10] So far, China has never—in any government statements or official documents—threatened nuclear use in the cross-strait conflict.^[11]

Taiwan is China's top security concern,^[12] and the only scenario for which China seriously considers the use of force. Do nuclear weapons really play a role in such a scenario? My judgment is “no.” If what we are talking about is a “local war under the conditions of internationalization,” it would be useless for China to try to deter U.S. conventional intervention with nuclear weapons. It is the United States, not China that has the nuclear capabilities to control or even dominate conflict escalation. To win a nuclear war over the United States is quite different from deterring a nuclear war with the United States. China is definitely the much weaker side, so far as the nuclear balance is concerned.

Faced with a similar situation, Mao Zedong and Deng Xiaoping had decided the option for China decades ago—that is to use nuclear weapons only as a deterrent against all nuclear uses, be it strategic or operational. To prevent the opponent's nuclear use is the only way to neutralize his nuclear superiority. China's long standing nuclear policy still serves China's national interests even today.

Factor Three: U.S. Development and Deployment of BMD System

China's strong opposition to U.S. BMD development and deployment has been adequately conveyed and extensively studied in the United States, for this issue has been a decade-long topic for hot debates. Unlike other issues, Chinese concerns over BMD has had the most vocal and vehement expression by government officials, scholars, military officers, and even ordinary people who post their views in Internet chat rooms.

On December 13, 2001, President Bush officially announced that the United States would withdraw from the ABM Treaty—a cornerstone arms control regime set up in the 1970s. Six months later, the United States was free of any legal bindings against its development and deployment of BMD systems. The later deployment decision by President Bush came as no surprise. China had succeeded in stopping the United States from setting up a missile defense system, which threatens to break the delicate deterrent balance between China and the United States. A national missile defense system, no matter how limited it would be, would no doubt cause a rededuction in China's deterrent effects against U.S. nuclear use.

American scholars always have difficulties understanding why the Chinese should worry about a shield to protect their own homeland. However, this very defensive shield—when used against the only flying dagger the opponent throws at it before taking the deadly blow—would be very offensive in nature. We all know the famous paradoxical logic in deterrence relations: nuclear force to be used as a last resort against enemy cities is defensive in nature and stabilizing in function, while a leak-proof umbrella against nuclear attack is offensive in nature and destabilizing.

China is also reasonably sensitive to any BMD systems covering Taiwan. Only a limited missile shield would relieve Americans of possible Chinese nuclear retaliation, permitting them to intervene more readily and threaten nuclear use at it did in the 1958 Taiwan crisis. It could encourage Taiwan to take more provocative moves towards independence by reducing the deterrent effect of the PLA's missile force. It would signify semi-alliance relationship between the United States and Taiwan. And it will reduce the effectiveness of China's military operations against the island.

China has a further reason to worry about BMD—that is BMD development cooperation, and future joint deployment, between the United States and Japan. This would indicate a closer alliance relationship and a more coordinated course of action during future Taiwan conflict between the two Cold War allies. An upper-tier BMD system jointly deployed by the two countries in the name of protecting allies and overseas troops would be readily turned into BMD systems to offset mainland missile attack against Taiwan. It would also be a complicating development when Sino-Japanese relations are getting sour, and the concern over Japan's rearming is genuine.

Therefore, BMD development and deployment is by far the most significant factor impacting China's nuclear calculus. China has to think how to maintain a guaranteed retaliatory second strike capability in the face of a U.S. BMD system. It's also necessary to review sufficiency and survivability of the arsenal. At the core of the Chinese concern is the credibility of the mutual deterrent relationship that China needs to deter American nuclear threats or nuclear use in cross-trait conflict.

III. Prospects for China's Nuclear Deterrence in the 21st Century

The fact that China belonged to neither of the Cold War blocs has some implication in observing and anticipating the future of China's nuclear deterrence. The general rather than immediate nature makes it easier for China's nuclear policy to adjust to the 21st century world. Never before had China fixed upon any nuclear adversaries, nor will it pick a specific nuclear enemy today. Even the newly emerging nuclear threat from India can be readily dealt with by existing policy.

The issue of Taiwan has forced the Chinese to face up to the possibility of military conflict with the United States over Taiwan. However, such conflict should have been assumed nuclear-irrelevant but for the issuance of the NPR by the U.S. Department of Defense.

Through the NPR, the Chinese know for sure that in the United States' perception, China is a nuclear target, and Taiwan is a scenario in which nuclear weapons are to be used. Even if nothing could be worse for China than a nuclear confrontation with the United States, China has to brave itself to this, for the most vital of all vital national interests is involved here. However, it would be totally wrong to assume China is going to deter U.S. conventional military intervention by threatening nuclear use, for China can hardly make such threats credible.

So far, the most significant factor that will influence China's nuclear calculus will be U.S. deployments of national and advanced theater missile defenses. For China has to reevaluate the sufficiency of its nuclear arsenal to counter U.S. missile defense systems and retain a guaranteed ability to retaliate. However, such reevaluation results only in the variation of the size of nuclear arsenals, not in the change of the policy's basic nature. The concern in China is over the credibility of its retaliatory deterrence against American nuclear use.

Both Taiwan and BMD are important factors that will have impacts on Chinese nuclear calculus:

- The former highlights the necessity and urgency of ensuring a mutual deterrent relationship with the United States to prevent nuclear use in the Taiwan conflict, which might have not been so important or urgent before. Only in this way, has Taiwan become relevant to China's nuclear policy.
- The latter emphasizes the concern over the credibility of Chinese deterrence against the United States. Concerns over Taiwan and BMD combine to form the focus of China's nuclear modernization—the maintenance of sufficient nuclear capabilities that can survive a first strike to inflict unacceptable damage on the enemy in a retaliatory strike.

Put in more accurate words, China's nuclear modernization is to keep valid its long-standing nuclear policy. China's nuclear policy in the 21st century will retain all the characteristics that I

have specified above, and suggest no deviation from the current one. So far, the three factors do not provide enough reasons for China to move up to the limited deterrence posture.

Another thing that may interest us is how China would translate its nuclear deterrence requirement into concrete numbers (two-digit or three digit warheads and delivery vehicles). While this subject is beyond my capacity to discuss, I think the most important thing is to understand the underlying logic, not to guess at the numbers. That is, China has to keep a credible retaliatory nuclear force which can survive a massive first strike and launch a counter-strike at the enemy.

If the nuclear logic does not change fundamentally, the nature of the policy would not change. Slight increases or decreases in the numbers only reflect changes in calculating the sufficiency of the second strike capability. All three generations of Chinese leaders have expressed their intent to keep the arsenal small, only "at the minimum level for self-defense." Any excess in numbers would be an unnecessary drain on the nation's limited budgetary resources. On the other hand, even if the size of the arsenal doesn't vary, a change in the underlying logic would trigger a major shift of the policy—such as a shift from a minimum to a limited deterrence posture, where nuclear weapons could be designed and planned for winning wars instead of deterring wars.

The last point concerns the nuclear relationship between China and the United States. It is in China's vital interests to have a certain degree of deterrent effect over other nuclear weapon states, be it Russia, the United States, and potentially India. At the same time, China is willing to accept vulnerability as its NFU policy indicates. China has been having such a deterrent relationship during the Cold War period with the Soviet Union from the 1970s, and later with the United States from mid 1980s, though the significance of such deterrent relationship lessened because China and the United States enjoyed an ever-improving and stable relation until 1989.

Since the mid-1990s, both Taiwan and BMD have threatened to break such a relationship—the former by gaining U.S. defense commitment, the latter by offsetting China's ability to retaliate. These two factors are actually American factors. If China, the United States, and all the other nuclear weapon states want to share regional and global security, peace and stability, they have to share a certain degree of insecurity first. And that means accepting some vulnerability by pledging to a NFU policy, so as to form a multilateral deterrent relationship among the "Haves," and offering more security assurance to the "Have-nots."

In today's world, security, like many other things, is relative. If one party seeks absolute and overwhelming superiority, it can only do so at the expense of others—which results in the loss of both trust and security.

About the Author

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