China Security



Bringing Chinese Perspectives to Washington

Autumn 2005 Issue No 1

Opening the Debate on U.S.-China Nuclear Relations

China's Insistence on No-First-Use Pan Zhenqiang

5

"Gen. Zhu has raised the wrong theme at the wrong place and at the wrong time. Zhu's problem lies in a failure to see the value of No-First-Use in China's nuclear policy as well as the consequences should China dispense with it."

Nuclear Deterrence in the 21st Century Shen Dingli

10

"If China's conventional forces are devastated in a Taiwan conflict, it is inconceivable that China would not use nuclear weapons as a true means of deterrence. However, the political cost for a change in China's position on No-First-Use would be prohibitive."

Chinese Nuclear Preemption Bruce Blair

15

"Zhu reveals a predicament in China's current policy: Will China override its No-First-Use pledge when it is forced to abandon Taiwan? It is unwise if China relies on nuclear preemption, because it is suicidal and not credible. The solution is No-First-Use coupled to a dramatically improved Chinese conventional force."

China's Nuclear Strategy Sun Xiangli

23

"Despite today's continuing evolution of military technologies, the fundamentals of nuclear weapons have not changed. It is unlikely for the Chinese government to give up its current defensive nuclear deterrent policy in the foreseeable future."

China Security

The *China Security* policy brief is dedicated to bringing diverse Chinese perspectives to Washington on vital traditional and non-traditional security issues that impact China's Strategic Development and its relations with the United States. *China Security* seeks to improve the understanding of China amongst American policy practitioners and the public by providing Chinese experts' authoritative analyses on critical security issues. *China Security* is published by the World Security Institute China Program.

Subscription

For subscription of the electronic PDF version of *China Security* please email: info@wsichina.org

or contact:

World Security Institute China Program 1779 Massachusetts Ave NW Washington DC 20036

Fax: 202 462 4559 Tel: 202 332 0600

We temporarily provide hard copies for free. To subscribe to the hard copies, please state clearly "request hard copies" in your emails or letters.

This publication can be found at the WSI China Program Website:

www.wsichina.org

And at the following WSI related resources:

www.worldsecurityinstitute.org

www.cdi.org

www.washingtonobserver.org

Copyright

All *China Security* articles are the copyright of the World Security Institute and may only be copied, reproduced or electronically transmitted by citing the source of the article as "*China Security* of the World Security Institute China Program".

The articles in *China Security* do not represent any consensus of opinion. While readers may agree or disagree with the ideas set out in this policy brief, it is our purpose to present a diversity of views rather than identifying with a particular body of beliefs. The analyses, interpretations and conclusions expressed in *China Security* are solely those of the individual authors and should not be attributed to the World Security Institute China Program or any other individuals or organizations in China or the United States.

*We respect all authors' request to leave unaltered certain wording and phrasing.

Editor's Notes

China's nuclear strategy has been the subject of intense scrutiny in the United States since China tested and developed its first nuclear device in 1964. For most of that time, China has maintained the policies of No-First-Use and minimum deterrence to define its nuclear program. Yet, with a changing strategic dynamic in a post-Cold War era, a fresh debate over China's nuclear strategy and the U.S. policies affecting it is necessary and long overdue.

In a meeting with journalists in mid-July, Maj.-Gen. Zhu Chenghu, dean of China's National Defense University, caused a political firestorm in Washington by talking openly and bluntly of a nuclear exigency should conflict arise with the United States over the Taiwan Straits. While reaction in China has been relatively muted, his comments have drawn strong criticism in the United States.

The context in which Gen. Zhu's views were expressed has laid them open to considerable politicization in the United States. Yet, despite the harsh tone of his remarks, they could instead serve to catalyze a frank discourse on evolving U.S.-China nuclear relations. Transparency and open discussion about critical nuclear issues should be the pursuit of Chinese and U.S. leaders alike, for which Gen. Zhu's comments could provide a starting point, even if such views are caustic to American ears. Yet, in both capitals, but more so in Washington, constructive discourse on U.S.-China relations remains difficult due to the polarization of views among policy-makers; while the ability to initiate a debate is hampered by the lack of authentic Chinese perspectives.

It is this paucity of Chinese voices in Washington on this crucial subject that this brief seeks to redress. *China Security* has invited three authoritative experts in China

as well as one in the United States to critique Zhu's remarks, but, more broadly, to also address the implications for the future of China's nuclear policies and U.S.-China nuclear relations. While Zhu's controversial comments inevitably put the focus on China's nuclear strategy and ambitions, the authors also reflect on how U.S. policies and nuclear strategy are driving forces behind the Chinese concerns that Zhu's words likely represent.

In the first essay, retired Maj.-Gen. Pan **Zhenqiang** argues that the views represented by Zhu are misleading and he provides a number of reasons why China has no intention of altering its present nuclear policies. In the first place, he argues that China's philosophical disposition toward nuclear weapons — that they are inhumane instruments of mass destruction and serve no strategic military purpose — has decided its national nuclear policy of No-First-Use. Furthermore, any change in China's nuclear policy would lead to strategic instability and therefore is not in China's own interest. Rescinding NFU for whatever reason would be a blow to the international non-proliferation regime while severely damaging China's own international image in supporting those efforts. Pan also contends that any alteration of China's nuclear policies would threaten the delicate political and strategic balance in the Taiwan Straits and the region. In short, China has a profound rationale for its long-time nuclear stance, a position that will not change. Meanwhile, Pan asserts, the United States maintains its threatening nuclear posture, while exploring greater superiority in conventional power and space capabilities.

Professor **Shen Dingli** takes a different point of view in the second article. He explains that the revolution in military affairs narrows the difference between nuclear weapons and conventional weaponry, which, coupled with the shift in China's own priorities of national inter-

est, has put China's no-use and no-firstuse policies under unprecedented pressures. For decades, China's nuclear weapons have served core national interests. These interests, Shen argues, have shifted from China's independence and survival to national unification. It is logical to conclude that China shall use any means to defend its core interests – nuclear weaponry certainly being one such means. If China's conventional forces are devastated by the U.S. in a conflict over Taiwan. it is inconceivable that China would allow its nuclear weapons to be destroyed by a precision attack with conventional munitions, rather than use them as a means of deterrence. In a military contingency, no adversary would fail to prepare for a change in China's position on NFU, as this choice is always an option for China. However, Shen believes the political cost to the Chinese leadership due to such a change would be prohibitive, a fact which acts as a real restraint against China's altering its professed position.

Bruce Blair contends that China has maintained a distinctive nuclear program characterized by restraint, despite considerable challenges to its national security, not the least of which is the 1998 reinstatement of China as a nuclear target of the U.S. nuclear war plan. Blair argues that Zhu's comments reflect the predicament that due to the overwhelming U.S. conventional superiority over others, including China, the only effective military countermeasure against the United States is nuclear weapons. This establishes a dangerous and unstable situation by raising the possibility of Chinese nuclear preemption, and the author asks whether it is not reasonable for China to escape the dilemma through greater conventional military modernization. Blair also observes however that the focus on China's nuclear policy misses an important point, which is that a debate should open on the policies of all nuclear nations including the United

States. The U.S. position of nuclear ambiguity does not rule out the use of nuclear weapons against China in a war over Taiwan, for example. Rather than politicize the debate, Blair urges honest discussion to manage a looming crisis in the Taiwan Straits – a discussion that should recognize the logic behind Zhu's comments rather than seek to demonize him.

In the last essay, Sun Xiangli provides the historical context of how and why China's policies of No-First-Use and minimum deterrence were established in the 1960s and have been maintained consistently to the present. She analyzes the characteristics of China's nuclear strategy that began with Mao Zedong, which is based not on weapons with war-fighting potential, but rather upon the strategic deterrent mission. The nation's overall economic and geopolitical conditions also have determined the nature of China's nuclear strategies, which remain unique in comparison with all other nuclear states — and which have remained principally unchanged despite significant threats to the country's national security. She ends with an important observation that the conclusion drawn by Western experts of a shift in China's nuclear policies, based on scholarly discussions inside China, is incorrect — as such discussions do not represent the government's position.

From our reading of the Chinese military, Gen. Zhu's remarks unlikely represent a coded signal from the Chinese government, but instead reflect an ongoing internal debate among Chinese military strategists prompted by changing global security circumstances. Regardless, the fact that he did express such views publicly, despite coming from a political and military culture where such candor is rare, should give pause for thought. From previously published interviews with Zhu, it is apparent his comments were motivated by a frustration—widely felt by civilian and

military analysts—at American unilateralism demonstrated in the post-9/11 era.

The root cause of this frustration is the Chinese perception of Washington's lack of self-reflection. While Zhu may have been expressing solely his own opinions, it is unlikely they are as extreme as the Chinese government has declared them to be in the aftermath of the strongly negative reaction in the United States. In other words, it is probable Zhu's opinions would find echoes among some Chinese leaders and military planners. In fact, Chinese analysts and retired senior government officials have previously written publicly of how the modernization of China's nuclear forces would help improve China's national security by reducing the possibility of U.S. military interference in a potential conflict over Taiwan. Whereas these views are likely not representative of a pending revision of China's nuclear policy, increasingly there are indications among scholarly studies that an internal review of China's nuclear policy is underway. Therefore, if Zhu's views represent even a minority contingent in the PLA or military think tanks, surely it would be more prudent for the United States to reflect on and engage the issues he raises, not bury them in anti-China rhetoric.

The onus for constructive communication lies also with China. Zhu's comments came as a shock in part because of their severity but also in part because of their rarity. With few precedents of such outspokenness, there has been confusion about what his words mean and who they represent. Messages with such potential import and delivered in such an unexpected context leave themselves prey to political manipulation by those with their own domestic agendas, particularly in the highly polarized atmosphere of Washington. Astute political judgment is requisite for Zhu and other would-be spokespersons from China. That said, it does not change the

gravity of his remarks and the need for U.S. policy-makers and military leaders to closely consider them.

In light of U.S. President George W. Bush's 2001 Nuclear Posture Review, in which Taiwan is clearly listed as one contingency for a nuclear attack against China, should Chinese strategists not be worried? Is the planned U.S. development of smaller, tactical nuclear weapons (bunker busters) for battlefield deployment not a legitimate concern to China? Is China's reinstatement as a nuclear target by the United States not of great strategic significance to PLA military planners? Should the Pentagon's naval and space war-gaming that envision the PLA as the enemy force not affect China's national security considerations? And what of the conceptual threat posed by the development of the U.S. missile defense system to China? From China's perspective, its strategic environment is becoming more threatened rather than less. The military posture of the United States and its alliances, compounded by the lack of both political and military-to-military bilateral dialogue, helps drive China's sense of insecurity. Thus, it would behoove U.S. policy-makers and the Pentagon to also consider Washington's own policies and actions when attempting to ascertain why China might even consider revising its policies of NFU or minimum deterrence — policies that have been the two pillars of China's nuclear program for decades.

At the very least, Zhu's words have served to bring the debate over nuclear weapons into sharper focus. We should be reminded that China is committed, just as is the United States, to defending its interests in the Taiwan Straits. How do the nuclear strategies of each country factor in a conflict scenario over Taiwan? There is every reason to believe that both the United States and China are rational actors, but what might be the impact of the difference between each country's calculus

in terms of nuclear deterrence or in terms of gains and loss in a military conflict? Several historical examples are relevant here. The truce between the United States and China in the Korean War is regarded by Chinese as a victory. What is thought to be an embarrassing defeat for China in the border conflict between China and Vietnam in 1978, is considered by China's military circles as having 'taught the Vietnamese a lesson.'

Zhu's comments are further a reminder of the horrific reality of nuclear weapons. He is alleged to have said, "We Chinese will prepare ourselves for the destruction of all of the cities east of Xian. Of course the Americans will have to be prepared that hundreds...of cities will be destroyed by the Chinese." The horror of nuclear war has not changed. Yet, the strategic environment is changing both for the United States and for China, a situation that could alter the probability of their use.

And that is perhaps the most important message of all. China is a rising power, and the paramount task of both China and the United States is to adjust to that impending reality — in terms of economic and trade relations, but also in terms of Taiwan and the two nations' strategic policies. A heavy responsibility falls on China to assure the region and the world that its rise

won't constitute a threat to others; that it is a force for stability rather than a revisionist power. China must arbitrate amongst the increasingly complicated elements of its foreign policy-making, its domestic affairs, and its military to build its comprehensive national power benignly and without threatening Taiwan or the region.

On the other hand, the United States must deeply reflect on its own policies toward China, as the latter evolves as a regional and potential world power. How will the United States address the inevitable growth of Chinese naval ambition and power in the Pacific, and how will the U.S. system of bilateral alliances respond to the region's changing security environment? What are the implications of U.S. ambitions in space for China's own national security? These questions and many others need to be considered carefully in terms of America's growing interaction with China. In essence, the United States needs to directly face the larger question: what are the legitimate security requirements for a China that is growing economically and militarily? This goes to the heart of trade relations as well as nuclear relations between the two countries.

Eric Hagt and Chen Yali

China Insistence on No-First-Use of Nuclear Weapons *

Pan Zhenqiang

Recently, one of my former colleagues, General Zhu Chenghu of China's National Defense University, made some remarks that stirred an unusual uproar in the West, and in the United States in particular. According to reports in the Western media, Gen. Zhu, in responding to questions in a briefing session on China's foreign and security policy with a delegation of foreign journalists based in Hong Kong, seemed to indicate that in a possible military conflict with the United States over Taiwan, Beijing would be no match for the United States in terms of conventional capability. Zhu thus suggested that China should perhaps be the first to use nuclear weapons to deter a possible U.S. intervention.

If those reports are accurate, Zhu Chenghu's remarks are dead wrong although his intention may have been to avoid a future military conflict with the United States over Taiwan. Despite his repeated assertion that his statements were his personal views, considering his position as a high ranking, active-duty military officer in the PLA, such loose talk on the subject is very misleading and sure to do serious damage to the understanding of

Pan Zhenqiang is Professor of International Relations at the Institute for Strategic Studies, National Defence University of the People's Liberation Army of China, Beijing, where he earlier served as Director of the Institute. Mr Zhenqiang is a retired Major General of the People's Liberation Army.

Beijing's nuclear policy by the international community.

In my view, No-First Use (NFU) has been a theoretical pillar of China's nuclear policy. This rationale of NFU of nuclear weapons serves Beijing's foremost security interests. It also contributes to the maintenance of world strategic stability. There are at least five reasons to explain why China has consistently stuck to that principle, and will continue to do so in the future.

Underlying Principles

First, NFU highlights China's philosophical belief that nuclear weapons can only be used to serve one purpose, that of retaliation against a nuclear attack, pending complete nuclear disarmament. Indeed, their extremely large destructive capability renders nuclear weapons the only truly inhumane weapon of mass destruction and are of little other use to China. Faced with U.S. nuclear blackmail in the 1950s, China had no alternative to developing its own nuclear capability so as to address the real danger of being a target of a nuclear strike. But even so, Beijing vowed that having a nuclear capability would only serve this single purpose.

From the very beginning of acquiring a nuclear capability, Beijing announced that it would never be the first to use nuclear weapons under any conditions; it also pledged unconditionally not to use nuclear weapons against any non-nuclear weapon states. This claim is not merely rhetoric that cannot be verified, as some Western pundits accused. On the contrary, China's nuclear rationale has determined the defensive nature of its nuclear force, its posture, size and operational doctrine, which have been highly visible and have stood the test of time. It is in this sense that China is NOT a nuclear weapon state in the Western sense. Unlike all the other nuclear weapon states, for example, China has never intended to use its nuclear capability to make up for the in efficiency of conventional capabilities vis-à-vis other world powers nor has China an interest in joining a nuclear arms race with other nuclear states. And thanks to the insistence of this policy based on NFU, China succeeds in reducing the nuclear element to the minimum in its relations with other nuclear nations, avoiding a possible nuclear arms race, and contributing to the global strategic stability at large. If this policy serves well its core security interests, why should Beijing change it?

Maintaining Strategic Stability

Second, if the NFU rationale is to be changed or even vaguely modified as Zhu Chenghu suggests, then the first resultant victim will be the future strategic stability between China and the United States. Zhu's reasoning for first-use is understandable as he argued that China must build a credible nuclear deterrent in order to compensate for the imbalance of conventional force with the United States. In that way, he seemed to be saying, China will gain the effect of nuclear deterrence against the United States based on mutual assured destruction (MAD). But this theory is not new.The U.S.S.R.-U.S. type of mutual deterrence in the Cold War is exactly the incarnation of such a nuclear relationship. Zhu's suggestion, in essence, advocates that China should indeed follow the old course of the two former superpowers.

If this were to occur, the immediate implications would be: 1) bilateral relations between China and the U.S. would likely become confrontational; quickly ending the mutual political trust and confidence that they badly need in order to expand their cooperation; 2) an almost inevitable nuclear arms race between China and the United States; 3) crisis management would become highly difficult, if not impossible, should the two countries head toward a confrontation. In particular, before China and the United States are able to reach such

a mutual deterrence status, which may takemany decades, there will be a long period of dangerous uncertainty. In such a scenario, a nuclear exchange may truly be imaginable as either side would be under great pressure to preemptively strike either in a major military conflict or even in a minor military incident, thereby creating an extremely chaotic and ambiguous situation; 4) Chances of a nuclear war could also be triggered as a result of accidental, inadvertent or unauthorized launches on either side. Clearly, none of these are in the best interest of China.

International Arms Control

The third reason is that a change in China's NFU policy would deliver another crushing blow to the international efforts to maintain peace and stability through the arms control approach. The hostility by the administration of U.S. President George W. Bush towards any constraints involving international, legally binding documents, including arms control agreements, has mostly paralyzed these efforts. In contrast, China firmly supports the reactivation of arms control efforts, advocating that all nuclear weapon states should honestly undertake their obligations of nuclear disarmament as stipulated by the Non-Proliferation Treaty (NPT). China has consistently stressed that the first step should be the conclusion of a treaty by all nuclear weapon states not to be the first to use nuclear weapons. Such an agreement would be a significant confidencebuilding measure among these states to put their subsequent actions on the right track. But if China changes its position on NFU, it would be tantamount to reversing all of Beijing's attitudes. China would no longer take interest in any nuclear disarmament measures in its desperate efforts for a nuclear build-up. Nor would Beijing be interested in developing a new international arms control mechanism, aimed at constraining the behavior of nuclear weapon

states. In addition, nuclear proliferation could be further fuelled as non-nuclear weapon states would have one more exemplary argument that a nation can opt for nuclear weapons in the name of national interests.

China's International Reputation

Fourth, a change of the NFU policy would also have negative political ramifications, which may tarnish China's international image under current circumstances and will not be conducive to its overall strategic goal of building an enduring peaceful and a stable international environment. Remarks like Zhu's have already played into the hands of Neocons in Washington, who are only too glad to use them to justify the so-called "China threat". Over the years, China's NFU policy has been very welcome among nonnuclear weapon states. Consequently, China's nuclear weapons have never become a problem in their threat perceptions.

Resorting to first-use, on the other hand, would arguably generate misgivings and anxiety in China's neighborhood. For if protecting sovereignty and territorial integrity is the ultimate justification with which Beijing is willing to have a nuclear exchange with the United States, the question would become, "would China not use nuclear weapons in a conflict with a neighboring country for the same purpose, particularly if that country is backed by the United States?"

Regional and Cross-Strait Relations

Last but not the least, a change of the NFU approach would further threaten and complicate rather than stabilize the situation across the Taiwan Straits. To a certain extent, Zhu's suggestions have demonstrated a sentiment of indignation over the U.S. intrusion into China's internal affairs. He seemed also to wish to convey China's determination to achieve national unification whatever the cost. These feel-

ings are legitimate and widely shared by the Chinese people. But things are just not that simple. True, U.S. intervention could be anticipated should a military conflict develop between the two sides across the Taiwan Straits. But the extent of any U.S. intervention may well be conditional on the cause, nature and scope of that conflict. It may also depend on the objective and tactics of the Chinese mainland in the war.

In accordance with China's Anti-Secession Law, Beijing's objective is peaceful unification. If that end is not to be achieved for the foreseeable future, the mainland seems likely to wait rather than take hasty actions. During this process, Beijing seems more willing to take active measures to stabilize the status quo, in the hope of creating more propitious conditions for the eventual coming together of the two sides peacefully in the future. Thus as far as maintaining status quo is concerned, Beijing's position offers some overlapping of interests with Washington over the Taiwan question. There is no imminent threat of a war in sight between the two countries. Even if Beijing has to use nonpeaceful means as a last resort, it must be with a most legitimate cause, which will help Beijing act on a moral high ground and hopefully gain international understanding and sympathy for its actions.Under that circumstance, it could be argued that it is Washington who will find itself greatly constrained in making the decision to take military action and the extent to which it is carried out. So, while China must be prepared to fight such a war in the Taiwan Straits with the direct involvement of the United States, it is not necessarily a foregone conclusion that the two countries are destined to fight a protracted and full-fledged war over Taiwan in the end. It can also be argued that even if the situation in the Straits deteriorates, it is still in the best interest of both countries to try to limit U.S. intrusion instead of threat

ening to expand the war—let alone to fight a nuclear war.

In short, Gen. Zhu has raised the wrong theme at the wrong place and at the wrong time. Zhu's problem lies in a failure to see the value of NFU in China's nuclear policy as well as the consequences should China dispense with it. Further, of particular concern is the frivolous manner in which he talked about a nuclear exchange between China and the United States as if elimination of "hundreds of cities" on both sides were just part of a computer game. The cost of millions of lives from any side would make the argument for maintaining world leadership or protecting sovereignty and territorial integrity pale and meaningless. There is no winner in a nuclear war. This is truly the dilemma for all the nuclear weapons states now and in the future. They continue to modernize and improve their nuclear arsenals, but the only viable way to ensure their security seems to be to avoid their use and eventually eliminate of all these deadly weapons. China has so often criticized the U.S. nuclear deterrence policy, maintaining it as a relic of Cold War mentality. Is it now a wise policy to counter this Cold War mentality in kind?

American Media Overreaction

It is perhaps also appropriate here to say a few words about the overreactions of the U.S. media. Everybody is clear that Zhu's statements are only his personal views, and the fact is that Zhu's suggestions would have no effect on China's policy-makers on the subject. Moreover there is no way for China to change its nuclear policy. Then why so much fuss about this small event? The answer may be that there are people in the United States who are only too willing to see the dark side of China. What they forget is that, to date, China so far has been the only acknowledged nuclear weapon state that solemnly maintains a commitment to NFU. Why do so

few criticize the first-use policy of other nuclear weapon states in the Western media? In the United States, the official position, as well as views from many thinktanks, has almost taken it for granted that first-use against China will be an indispensable option in future U.S. nuclear policy. Evidence of this is in the Pentagon's Nuclear Posture Review in 2002. In that report, China is included among seven potential targets of a nuclear strike. Another recent example is an Arms Control Association report on the future of U.S. nuclear policy written by two of my long time American friends. They also touch on China as a potential adversary in the article, writing:

"If deterrence of a Chinese attack on Taiwan were to fail, the U.S. response would very likely be a move to defend Taiwan. U.S. use of nuclear weapons would almost certainly not be the first step in an attempt to convince China to stop military action, but one cannot totally rule out any circumstances where a limited nuclear response might be considered."

From previous writings, it is apparent that these authors, who are much respected in the American academic community, are certainly no friends of the Bush administration. But even they consider that in a conflict over Taiwan, the use of nuclear weapons cannot be totally excluded. Why the lack of criticism of this view? So why has even the suggestion of change of China's NFU policy become a big headline issue, and refuted as "highly irresponsible? Is there a double standard regarding nuclear weapons policy for different countries, particularly for China?

Responsible and Irresponsible Nuclear States

In conclusion, it can be argued that China is the most responsible nuclear weapon state while the United States is

WSI

perhaps the least responsible. Note the following facts:

—China has consistently been self-committed to NFU, while the United States has consistently rejected it even in the post-Cold War era when it enjoys unprecedented conventional capability.

—China has offered negative security assurances to all the non-nuclear weapon states, while the United States threatens to use nuclear weapons against states if it feels threatened by their use or even has possession of so-called weapons of mass destruction.

—China has never deployed its nuclear weapons abroad while the United States still deploys tactical nuclear weapons on the soil of European allies and other places abroad.

—China has called for effective measures to prevent the weaponization of outer space, while the United States has refused even to discuss the matter lest it hinder its efforts to develop missile defense and a new space capability for military purposes. —China has urged the international community to strengthen the international non-proliferation regime through a multilateral,

cooperative and comprehensive approach, including the fulfillment of the balanced obligations by all mem ber states as stipulated in the NPT, while U.S. non-proliferation policy is characterized by unilateralism, a disdain of international organizations and double standards.

The list could run much longer, but it arguably suffices to show which country is more responsible regarding its nuclear policy. Thus, what the international community should be truly concerned about is not a far-fetched personal view of one Chinese individual, but the policy of the Bush administration, which has impacted so negatively on world security.

^{*}The author wishes to stress that views expressed in the paper are entirely of his own. They do not necessarily represent those of any other individuals or any organizations in China.

¹Sidney D. Drell and James E. Goodby, "What Are Nuclear Weapons For"-Recommendations for Restructuring US Strategic Nuclear Forces", An Arms Control Association Report, April 2005. p. 15

Nuclear Deterrence in the 21st Century

Shen Dingli

Among all the acknowledged nuclear weapons states, China employs a unique nuclear doctrine. China is the sole nuclear weapons state among the Permanent five states in the Security Council of the United Nations (P5) that has declared a no-use (NU) and no-first-use (NFU) position.

No-Use and No-First-Use

The text of the statement: On October 16, 1964, China conducted its first nuclear weapon test explosion. On that very day, China issued a statement that proclaimed its NU/NFU policy. It was later refined with the following:

"At no time or under no circumstances would China first use nuclear weapons, and at no time and under no circumstances would China use or threaten to use nuclear weapons against non-nuclear weapons states or nuclear weapons free zones."

Negative and Positive Security Assurances: The above statement of negative security assurances was expanded on April 5, 1995, when the Chinese government issued a national statement on security assurances, just prior to the Non-Proliferation Treaty (NPT) Review and Extension Conference. China pledged to "take action within the UN Security Council to ensure that the Council takes appropriate measures to provide, in accordance with the UN Charter, necessary assistance to any non-nuclear-weapon state that comes under attack from nuclear weapons, and to impose strict and effective sanctions on the attacking State." Obviously, China took this action to add to the incentives for the indefinite extension of the NPT Treaty.

Applicability to Taiwan: The Mainland Chinese government has made several state ments to the effect that it will not use nuclear weapons against Taiwan – a renegade province in the mainland's view. In its latest specific clarification on this question in the mid-1990s, a Chinese Foreign Ministry spokesperson explained that since China has a NU policy toward any non-nuclear weapons country, and since Taiwan doesn't qualify for statehood, China's NU position would be even more applicable to Taiwan.

Justification of the NU/NFU Position

China may have many reasons to justify its NU/NFU policy. Some possibilities, as seen by this author, include:

Morality: possession vs. use: Nuclear weapons are widely viewed as weapons of mass destruction (WMDs). For many, the use of nuclear weapons constitutes a crime, as either a first use or a retaliatory use would incur unacceptable amount of collateral destruction. In fact, an International Court of Justice ruling in July 1996 indicated in its Advisory Opinion that use, or threat of use, of use of nuclear weapons:

"would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law."

For some, even the possession of nuclear weapons is of questionable legi-

Shen Dingli is the Executive Director and Professor of the Institute of International Studies at Fudan University in Shanghai. He is also the co-founder and director of China's first non-government-based Program on Arms Control and Regional Security, at Fudan University's Center for American Studies, where he is a Deputy Director.

WSI

timacy. The Chinese government has long championed the "total elimination and thorough destruction" of all forms of nuclear weapons, indicating its recognition of the destructive nature of nuclear weapons and efforts to delegitimize them.

China developed nuclear weapons as a response to what it saw as U.S. nuclear blackmail in 1950s. Until all nuclear weapons are eliminated from the earth, including China's own, China must also live with the consequences of possessing nuclear weapons. While possession of nuclear weapons may have empowered China in its international standing, they may have also distanced China from non-nuclear weapons states, especially those states that oppose the possessing and use of nuclear weapons for whatever reasons.

With these considerations, it is natural to postulate a NU/NFU nuclear doctrine, as it provides China with a less immoral image among all nuclear weapons states.

Political correctness: Along the line of nuclear morality, the NU/NFU policy also distinguishes China from other nuclear weapons states that do not take the same stance.

The NFU divides the 'nuclear haves' into two classes: a more moral group with no-first-use policies and a less moral group with first-use or conditional no-first-use. Among the P5, the former Soviet Union and China were two states that belonged to the NFU category, while the other three fall into a different group.

The United States has long proclaimed a conditional first-use position; i.e., the United States would resort to the use of nuclear weapons, were American territory, the U.S. overseas military presence or allies to be attacked by a non-nuclear weapons state allied with a nuclear weapons state. The United States does not seem to completely believe the NFU declaratory policy of China and the former Soviet Union. In fact, Russia, as the sole legitimate successor of nuclear weapons from

the former Soviet Union, ended its NFU position in 1993 to compensate for its weakened conventional military strength.

Thus far, China is the only acknowledged nuclear weapons state that adheres to NFU. China still feels itself to be politically correct to maintain this position, and to be a responsible nuclear weapons state in terms of the use of nuclear weapons.

Avoiding preemption: China developed nuclear weapons under U.S. threat, and China understood that it was difficult for the American government to accept China's possession of nuclear weapons. It seemed that the United States has considered surgical preemption against China's nuclear weapons program. Indeed, we have witnessed and are witnessing both rhetoric and the preparation of military action by the U.S. against North Korea and Iran for their development of nuclear programs, which, as claimed by the U.S., are either military programs or can quickly be diverted for military purposes. The "preemption" in Spring 2003 against the regime of Iraq's Saddam Hussein is such an episode of preemption taken against at least the pretext of WMD proliferation.

Current clandestine nuclear weapons development may not require a nuclear weapons explosion to vindicate the workability of the weapons. The success of all Indian and Pakistani test explosions of their fission bombs has proven this to be true. However, this doesn't apply to the first Chinese nuclear weapon explosion in 1964. At that time, China would not risk its security by trusting its nuclear design solely based on blueprints. Of course, one could argue that China needed a nuclear blast to elevate its international standing and domestic public support for the government.

In the meantime, China also would not risk its security by establishing a confrontational nuclear doctrine, though it indeed had a right to go nuclear. On the contrary,

China carefully crafted its NFU nuclear position, in order not to trigger American or Soviet conventional preemption.

Minimum deterrence and NFU: China is one of the first nations to have conceived a deterrence strategy. However, given the U.S. nuclear deterrence strategy since the mid-1940s, China has been reluctant in using the same nomenclature of the nuclear age. Nevertheless, this does not change the nature of China's nuclear posture. According to both China's open declarations and observable evidence, China's nuclear doctrine is a type of minimum deterrence.

China's decade-long minimum nuclear deterrence is commensurate with its NFU doctrine. As China only prepares for nuclear retaliation in-kind, thus it needs far fewer nuclear weapons and less precision strike capability – which is necessary for executing a nuclear first attack that leaves the enemy no chance to strike back. For minimum deterrence, one only needs to assure a credible nuclear retaliation so as to deter a first nuclear attack

NFU under Pressure

Though China's declaration of NFU is given little credit by other nuclear weapons states, such a policy still provides certain assurances. Frankly speaking, in a military contingency, no adversary would fail to prepare for a change in China's position on NFU, as this choice is always an option for China. However, the political cost to the Chinese leadership due to such a change would be prohibitive, which acts as a real restraint against China's altering its professed position.

Presently, given the advancement of military technology, and given the shift of China's own priority of national interests, China's NFU policy has been under unprecedented pressure which has stirred up a debate on the validity of NFU.

Precision conventional strike: Nuclear weapons can bring about mass destruction; but can also be destroyed by nuclear weapons. A nuclear detonation near another nuclear weapon could disable the latter due to a shock wave or other form of released energy. This has led to the dangerous "hair trigger" nuclear doctrine of America during the Cold War period.

Now, however, the same effects can be reached with precision-guided conventional munitions. From the first Gulf War of 1991 to the second Gulf War in 2003, the U.S. military has significantly enhanced the use of precision-guided weaponry, in terms of both quality and quantity. This fact begins to blur the boundary between traditional conventional weapons and mini-nuclear weapons.

Before one would be truly concerned about a U.S. earth-penetration nuclear weapon, it is more likely that a digitally guided conventional weapon may form a more realistic threat to a lesser nuclear weapons state. While China must increase the mobility of its nuclear weapons by road, railway or ocean, it is important to address the scenario of conventional attack against nuclear weapons and corresponding responses.

Under this assumption, it is not unreasonable that the Chinese military establishment needs to assess the level of such a threat, either from nuclear weapons states or non-nuclear weapons states, and China's policy options in the event of such a threat. One would certainly challenge China's wisdom to adhere to NFU under such a threat scenario, and allow its nuclear weapons to be destroyed by adversary conventional weapons.

Threat from other unconventional weapons: Given the virtual impossibility of banning nuclear weapons from the Earth in the near term, and given the increasingly higher barrier for would-be nuclear proliferators around the world especially after the "9/11" terrorist attacks against the United States, attempting to acquire chemical and biological weapons

is still the main method of some states to counter the threats they perceive.

Iraq employed the use of chemical weapons in its war with Iran in 1980s, and also against Kurds in its own territory. The then-U.S. Secretary of Defense Dick Cheney threatened to retaliate with U.S. nuclear weapons if Saddam's government ventured to use chemical weapons in the first Gulf War. Furthermore, Cheney's threat violated the long-time U.S. pledge of "conditional no-first-use."

Compared with the previous scenario of an attack using precision-guided conventional munitions against nuclear weapons, this assumption of first-use of other unconventional weapons may be more theoretical. However, it is not unlikely and the chance of first-use of chemical or biological weapons by a terrorist group is on the rise. This requires China's strategists to analyze the new threat situation and reassess the logic of sitting idle after absorbing a first attack by non-nuclear unconventional attack, either by a state actor or a non-state actor.

Threats to core national interests: For decades, China's nuclear weapons have served core national interests: the nation's independence and survival. Over time, however, the core national interests have changed.

China no longer has a survival problem. At the official exchange rate, China is the sixth biggest economy in the world today. China's paramount priority today is economic development. Securing energy and other primary resources help advance China's core national interests.

Presently, China's parallel core national interest is national unification. For over 40 years, this was not an issue among Chinese living across Taiwan Straits. Both mainlanders and the Taiwan leadership claimed, respectively, a "one China" policy. The only question was who represented China, a China where no side effectively controlled the other side.

In the 1990s, a pro-independence lobby increasingly emerged in Taiwan. The long-time held Taiwanese position of "one China" has been seriously challenged. Coupled with Taiwan's political change, the United States has taken a position that stresses the defense of Taiwan. From 1979 to 2000, total arms sales of U.S. weapons to Taiwan amounted to \$40 billion. Currently, the U.S. is pushing for a one-time sale as high as \$18 billion.

Mainland China has noted the standing U.S. position in support of "one China," but also is finding it weakened by American action: the push for arms sales that strengthen the pro-independence Taiwan leadership. The Chinese public also has been very dubious about the long-term U.S. strategic intention over Taiwan.

With the Chinese leadership repeatedly stressing the Taiwan question as China's current core interest, it is natural to ask what is at China's disposal to defend this core interest. It is also logical to conclude that China will use any means to defend its core interests – nuclear weaponry certainly being one such means.

This author predicts that there will be no major wars between major powers in 21st century. And this author would hate to see a China-U.S. military conflict, for whatever reason, as that inevitably would harm the fundamental interests of both countries. However, to avoid war requires the wisdom of both nations. It is not viable for China to ignore its core national interests indefinitely. If China's conventional forces are devastated, and if Taiwan takes the opportunity to declare de jure independence, it is inconceivable that China would allow its nuclear weapons to be destroyed by a precision attack with conventional munitions, rather than use them as a true means of deterrence.

Conclusion

Given the advancement of the revolution in military affairs, modern military

technology has experienced remarkable change. This narrows the difference between nuclear weapons and conventional weaponry, and exerts pressure on China's NU and NFU policies. Also, given the shift in Taiwan toward independence, and given the U.S. commitment to defending Taiwan, China's NU/NFU has been caught in a dilemma as to the essence of deterrence.

These pressures may not lead to a policy change any time soon; though some are cynical enough to suggest that China could adjust its policy later, at the time when there is such a need. However, this author considers it healthy to allow space for serious discussion of this important matter. Only through serious debate within China and between China and the United States, may a consensus be built as to how to avoid

triggering the aforementioned scenarios and to assure the credibility of China's NU/NFU declarations.

It is foreseeable that the Chinese government will use diplomatic means to avoid physical confrontation with the United States, as the bilateral economic/trade relationship has been continually expanding. This also serves China's core interests.

Nonetheless, this analysis still raises these critical questions for future consideration: What should an updated nuclear deterrence actually deter in order to defend China's core interests? How can China communicate its deterrence policy unambiguously? And how should China respond if its deterrence were to fail?

General Zhu and Chinese Nuclear Preemption

Bruce G. Blair

A leading military strategist in China recently jolted an audience of foreign journalists with a radical vision of China's conduct during a future war with the United States over Taiwan. Maj.-Gen. Zhu Chenghu, dean of China's National Defense University, espoused the view that China would have no choice but to respond with nuclear weapons if the United States attacked Chinese territory with conventional (non-nuclear) forces during such a conflict, a view that contradicts the longstanding nuclear doctrine of China. Zhu outlined a scenario in which China, facing defeat in the conventional phase of combat, would cross the nuclear threshold to launch a massive preemptive strike that would destroy hundreds of American cities.

As discussed later, his view does not constitute a threat but rather a logical conclusion of a thought process. Zhu possesses analytical, though not political, acumen. His remarks were honest, astute, and intellectually stimulating in ways that should contribute to a healthy debate over national security in China and the United States. But the immediate reaction has been almost uniformly negative.

Bruce Blair is the President of the World Security Institute in Washington D.C. From 1987-2000, he was a senior fellow in the Foreign Policy Studies Program at the Brookings Institution. He has served as a Minuteman ICBM launch control officer (1970-1974).

A Defensive Nuclear Posture

Zhu's remarks stirred behind-the-scenes criticism at home and noisy controversy abroad. Within China, nuclear specialists could not fail to notice that both the magnitude and preemptory character of Zhu's imaginary Chinese nuclear onslaught deviated sharply from deeply rooted tenets of the country's nuclear policy. These almost sacrosanct tenets trace their lineage back half a century to the iconic leader Mao Zedong. Mao's grasp of the apocalyptic nature of nuclear weapons led him to regard even small arsenals as representing "overkill" and endangering humanity. Mao also understood that embarking on a nuclear build-up would trigger a nuclear arms race with one or both of the nuclear superpowers, and thereby incur high economic costs and strategic risks. The logical choice for China, Mao thus concluded, was to build a small arsenal designed to project a threat of retaliation that would inflict intolerable pain on any nuclear attacker. Mao evidently determined that no more than a handful of nuclear bombs reliably delivered against the United States or the Soviet Union were required to achieve an adequate level of deterrence. This determination kept tight reins on China's nuclear program even in the face of a massive build-up in nuclear arms by the Soviets and Americans over several decades of Cold War tension.

The corollary of Mao's pursuit of a minimal second-strike deterrent force meant to project threat was his embrace of a No-First-Use policy meant to project reassurance and foster stability by calming the nerves of potential foes, nuclear and non-nuclear alike. Along with small arsenals, restraint in their use formed the second pillar of China's nuclear policy.

This concise formulation of the extremely limited role of nuclear weapons in China's defense strategy gelled under Mao in the early days of China's nuclear program and remained virtually etched in

stone for many decades. It endured in spite of the turbulence of the Cold War when the nuclear superpowers, the Soviet Union and the United States, not only vastly expanded their nuclear arsenals but also placed them on hair-trigger alert in order to be constantly prepared to fight a largescale nuclear war with each other, or with China. China never followed suit, choosing instead to maintain a low level of missile launch readiness and to keep the warheads for the missiles in a separate location in peacetime. China clearly eschewed any nuclear posture that would sow doubt in an adversary's mind about China's intention never to launch a sudden, surprise attack. China sought to convey a clear commitment to a defensive second-strike role for its nuclear forces, believing this posture would bolster both crisis and arms race stability.

China's nuclear program practically ignored the multitude of pressures and threats directed toward China by the Soviet Union and the United States. Both nuclear superpowers developed nuclear war plans against China that assigned thousands of high-yield nuclear bombs to strike facilities in China (and its ally North Korea). Nuclear sabers were rattled especially noisily in China's direction in the late 1960s. The specter of nuclear war between China and the Soviet Union loomed large as their border crisis escalated and the Soviets prepared for a possible preemptive nuclear strike at China's fledgling nuclear force. China's nuclear doctrine held steady through this and other threatening episodes, including recent episodes when the Pentagon reinstated (in January 1998) China as a strategic nuclear target of the U.S. nuclear war plan after a hiatus of almost 20 years. (China had been removed from the nuclear war plan in 1981 after the normalization of China-U.S. diplomatic relations) Several limited nuclear options were created then to enable the United States to suddenly attack China's

nuclear forces, war-supporting industry, and leadership. (These so-called LNOs assign somewhere between 2 and 120 U.S. nuclear weapons per option) A few years later (2001), President Bush's Nuclear Posture Review identified China for the first time in two decades as an "immediate nuclear contingency", an assessment reflecting the Pentagon's estimate of the possibility of rapid nuclear escalation in the event of a Taiwan contingency that pitted Chinese and U.S. combat forces against each other. Yet China never "took the bait" over many decades of turbulent relations with the nuclear superpowers. While the Soviets and Americans amassed nuclear arms and constantly revised their nuclear offensive and defense doctrines with a view to improving their nuclear war-fighting capabilities, China humbly plodded along a well-worn path of low-key modernization of its small arsenal, and adhered to a strict doctrine of No-First-Use. It set an example of moderation and prudence on the moral high ground, and seemingly proved its theory that small defensively oriented arsenals at once provided deterrence, reassurance and stability. For China, its modest program fostered both crisis and arms race stability.

If China's nuclear policy, hand-crafted by Mao and endorsed by every one of his successors, has proved its durability through the stormy decades of the Cold and post-Cold War period, then why would it be suddenly called into question by a senior military officer in charge of China's military think tank? Zhu's unorthodox view toppled both pillars of Chinese policy in advancing the notion that China would have to mount a large-scale preemptive nuclear offensive in the event of conflict over Taiwan. Such a challenge to the quintessence of Chinese nuclear doctrine was bound to irk China's security establishment even if Zhu had mounted it quietly behind the scenes. Which he did not. The general wrestled the conventional wisdom to the ground in front of foreigners, foreign journalists no less.

The journalistic audience for his controversial view ensured that it was instantly and widely publicized in the West, where commentators and politicians strained to interpret its significance. Some quickly labeled him a hawk whose extremist views did not reflect official Chinese policy. Zhu himself was adamant from the very beginning that he was not speaking for the government or military, and that his view was strictly personal. Other commentators interpreted his hawkish position as reflective of an increasingly hard-line strand in Chinese security policy, while others read it as an ominous sign of a growing threat posed by an ascendant Asian powerhouse that is beginning to flex its newfound muscles.

China-U.S. Relations at a Strategic Crossroads

Because the general's comments lend themselves to political exploitation at a pivotal moment in Sino-American relations, they could very well have seriously adverse consequences for the relationship. The United States stands at a crossroads in its policy toward China. It lacks a strategic vision of the long-term relationship, and the debate over our future relations is presently generating more heat than illumination, more emotion than wisdom. Zhu's seemingly inflammatory comments only throw gasoline onto the fire. They provide grist for a sizable hawkish cadre in the United States; may tip the balance for some undecided moderates to move into the hawkish camp; and will reinforce the trend toward portraying, and treating, China as America's next designated enemy, and toward summoning India to act as a countervailing force to contain China.

Neither the atrophying Russia nor the fading global terrorist threat (notwithstanding the tragic July 7 attacks

on London's transportation network and the Iraq insurgency) compares to an ascending China as a threat. Only the emerging Chinese juggernaut can be made to look menacing enough to justify the onehalf trillion dollars of annual U.S. defense spending. Pentagon hawks will be quick to seize upon Zhu's comments to reinforce their growing skepticism toward China rising peacefully, a skepticism bordering on fear-mongering revealed most recently in the U.S. Defense Secretary's latest annual report to Congress, "The Military Power of the People's Republic of China 2005." They will also cite the general's remarks to advance their arguments for shifting the focus of U.S. nuclear war planning away from Russia (not an immediate nuclear contingency according to the 2001 Bush Nuclear Posture Review) to China. Zhu has given new impetus to this growing obsession with China and to assigning more U.S. nuclear forces to China contingencies. The general envisioned China preempting the United States in wartime, but now it will more likely be U.S. nuclear planners who re-double their efforts to devise a new array of preemptive options for potential use against China's opposing forces. Zhu's words will boomerang.

That may well be the unfortunate consequence of Zhu's comments, but it does not mean that Zhu was actually issuing a threat or warning for Western consumption. On the contrary, as noted at the outset of this essay, his view represents the logical conclusion of a thought process. Zhu knows full well that the revolution in military technology has conferred overwhelming superiority on U.S. conventional forces. In a conflict centered on the Taiwan contingency, China's conventional forces would likely be rapidly defeated by a combination of timely, accurate U.S. tactical intelligence and precision-guided munitions. As a result, China would have no choice but to resort to nuclear weapons or abandon the principle of using all

necessary military means to prevent the loss of Taiwan.

Zhu is an astute student of military strategy and a very knowledgeable expert on the Revolution in Military Affairs (RMA), and could not escape the conclusion that the military balance is so lop-sided today (despite the 13 percent rise in annual Chinese military spending for the past decade) that the only countervailing military instruments for an adversary of the United States today, and for the foreseeable future, are nuclear weapons.

Conventional Power Imbalance and the **Nuclear Option**

The analogous point has not been lost on the rest of the world where growing numbers of nations seek nuclear weapons to compensate for their relative conventional weaknesses vis-à-vis the United States or other regional adversaries. America's technological revolution in warfare continues to widen the gap of military capabilities in favor of the United States throughout the world. The U.S. cumulative investment in advanced weapons, command and control, intelligence, logistics, transport, and training has translated into overpowering strength vis-à-vis the opposing conventional forces of China or any other particular country. The temptation, and pressure, is to fall back on nuclear weapons to offset the decisive U.S. advantage, as even Russia illustrates. Russia abandoned its No-First-Use policy in 1993, having recognized the weakness of its conventional forces. It codified its reliance on nuclear weapons to protect Russia from threats to its national survival.

Zhu's position is almost identical to Russia's logic in abandoning No-First-Use. One critical difference is that Russia and the United States are roughly equal in nuclear capabilities. If Russia used nuclear weapons preemptively against the United States, the latter could inflict severe punitive damage in retaliation but could not

achieve any meaningful level of escalation dominance. By contrast, the United States could quickly establish nuclear dominance in the event of a Chinese preemptive nuclear attack against the United States. Zhu knows full well that such a Chinese strike would invite the complete destruction of China by U.S. nuclear forces, whose numbers capable of reaching Chinese cities and military facilities total many thousands, as compared to the dozen or so Chinese missiles capable of reaching the continental U.S. Under any imaginable circumstances of a nuclear exchange between them, the United States could destroy China utterly and still retain thousands of nuclear weapons after China expends or loses to attrition its entire small arsenal. This inequality known in the arcane field of nuclear theory as nuclear escalation dominance would deter the disadvantaged rational actor from launching a preemptive attack against the dominant nuclear power.

The general may have discounted this inequality on the grounds that China's nuclear modernization would close the gap and deny the United States any significant theoretical advantage in this balance of power. In fact, the media coverage of Zhu's comments quotes him as saying that hundreds of U.S. cities could be destroyed by Chinese nuclear forces, implying a future large-scale build-up of China's strategic nuclear arsenal. But that number certainly stretches credulity for the present time frame, and even for the next 10-year phase of modernization in which the number of deliverable long-range nuclear weapons is not expected to exceed about 100. A more ambitious modernization plan is technically feasible, but not very plausible. It would entail a fairly crash program that would entail a major change in the relative priority of military modernization versus economic development, which would be highly significant indeed. It would also probably necessitate the restarting of China's fissile materials production facili-

ties (plutonium or highly enriched uranium) because China ceased such production in 1990 and in all likelihood lacks sufficient surplus fissile materials in storage to produce a large new batch of nuclear bombs. China would probably also need to re-design some of its nuclear warheads (especially if multiple-reentry vehicles were developed to enable several bombs to fit inside the nosecone of each missile) and thus would likely have to resume underground nuclear testing. Such a move would repeal China's commitments to the Comprehensive Test Ban Treaty and to a future multilateral treaty to end the production of nuclear bomb-making materials. In sum, China could embark on a crash strategic nuclear program on a scale comparable to the U.S. crash program in the 1960s in which 1,000 Minuteman missiles were fielded in less than eight years. But it would entail an implausibly radical departure from China's current course, and from the canonical principles laid out by Mao Zedong himself.

Regardless of China's future modernization, Zhu's envisioning of a Chinese preemptive nuclear attack implicitly assumes that China would resort to the maximum force if necessary to avoid losing Taiwan. Zhu implicitly takes the position that keeping Taiwan in the one-China fold is an inviolable principle that overrides everything including China's No-First-Use Declaration. That China would resort to all military means necessary, including nuclear weapons, in order to preserve China's territorial integrity (of which Taiwan is a part) seems non-controversial from a Chinese perspective, at least less controversial than saying that China would be prepared to give up Taiwan if China lost a conventional fight with the United States. Zhu's view is consistent with China's policy in saying that China would risk everything under the circumstances.

Zhu's pointing out that this could logically require China to override its No-FirstUse pledge reveals a contradiction in China's current policy, a logical trap that renders China's policy rather untenable, and extremely dangerous. Facing conventional defeat, the temptation to turn to nuclear weapons would expose China to another severe risk. As soon as the initial preparations to prepare Chinese nuclear forces for launch were undertaken, the United States would likely act to beat China to the punch. Given constant U.S. surveillance of Chinese nuclear launch sites, any major Chinese preparations to fire preemptorily would be detected and countered by a rapid U.S. preemptive strike against the sites by U.S. conventional or nuclear forces which maintain much higher launch readiness even in peacetime than do Chinese forces. The United States could easily detect and react inside of the lengthy launch cycle time of Chinese forces, especially the mainstay of the Chinese arsenal — missiles that normally sit in silos without warheads attached to them. The dangerous folly that Chinese nuclear preemption represents is far worse than Zhu's scenario suggested.

Modernized Conventional Forces or Preemption?

To fix the policy and escape a dilemma that could endanger China's very survival, China needs to correct the conventional imbalance with conventional modernization, not with a larger nuclear force placed on higher levels of launch readiness. It would not be surprising if Zhu argues inside China's security establishment for accelerating the modernization of China's conventional forces – lobbying for vastly greater Chinese investment in revolutionary military technology to strengthen China's conventional strength — precisely for the reason that the nuclear scenario Zhu presented to the foreign journalists is so fraught with instability and danger to China. His case would revolve around the convincing point that relying on nuclear

preemption is unwise, to say the least, because it is liable to fail, it is suicidal, and it is not credible policy. And the solution to the predicament is not No-First-Use alone, but rather No-First-Use coupled to a dramatically improved Chinese conventional Army, Navy, and Air Force capable of at least fighting the Americans to a draw over Taiwan. In Chinese military circles, it is difficult to imagine that a Chinese general of Zhu's stature and intelligence would recommend nuclear preemption as a solution to China's predicament, unless he was playing 'devils advocate' in an exercise intended to move his audience in exactly the opposite direction. It is far more believable that he fears that decision-makers would grasp at the straw of nuclear preemption out of desperation after suffering a conventional defeat, and that he believes the key to avoiding a nuclear debacle is to close the gap in conventional capabilities for Taiwan contingencies.

But in any case, Zhu did not make this case to the foreign journalists, and certainly presented a primitive view of China's reliance on nuclear preemption that belied his sophistication in matters of strategy. His logical analytical framework, described earlier, completely escaped his audience and the episode degenerated into a sensational story that ignited a political minifirestorm abroad. His reputation as an extreme hawk cut both ways depending on whether the general's words were interpreted as representative of insider thinking and planning, or not.

One highly regarded expert, the former Commander of Pacific Command, Adm. (ret.) Dennis Blair, characterized the general as a mad dog in an interview given to the *Washington Post*. But Blair made the ingenious observation that the general's nuclear madness served China's interest insofar as it suggested to potential adversaries that China just might do something crazy such as use nuclear weapons first in combat over Taiwan. Irrational behavior

in the midst of crisis could not be ruled out, or so China's strategists would like the United States to believe because it would bolster China's ability to deter the United States from entering the fray. An irrational impulse to resort to nuclear weapons, however suicidal, is among the many factors that may induce an opponent to back away from a fight. You may not wish to fight with a foe that appears to be willing to commit suicide. Other factors that induce caution and restraint include the risks of unauthorized or inadvertent nuclear escalation. Along with decision-maker irrationality, they comprise a venerable concept in the theory of nuclear deterrence - the "threat that leaves something to chance." This concept, conceived by the famed academic theoretician Thomas Schelling, who almost certainly has been read thoroughly by military scholars at China's National Defense University, has been frequently invoked to rescue rational deterrence from its own contradictions and paradoxes.

It seems doubtful to this writer that Zhu's comments were intended by him or by the Chinese government to plant uncertainty in the minds of potential adversaries about China's willingness to use nuclear force to defend its national integrity. This outspoken general was almost certainly not speaking for the Chinese government or military, as he contends. Unfortunately, however, his senior position in the premier think tank of the Chinese military would inevitably mean that his comments could be interpreted as reflecting insider thinking and planning. Despite his disclaimer, the general and China became lightning rods for criticism, much of it politically motivated. Fairly or not, his words were construed widely as reflecting official policy or at least contingency planning in military circles.

U.S. Nuclear Ambiguity

By casting a dollop of doubt on China's

WSI

commitment to No-First-Use, the general invited a fresh round of political exploitation by China critics, many of whom are quick to condemn other countries for their alleged nuclear sins without looking into the mirror of American nuclear policy. U.S. policy has never endorsed No-First-Use, and in fact during the past decade the United States has expanded the roles and missions of U.S. nuclear weapons to deal with non-nuclear threats around the world. The United States has gone farther than any other nuclear weapons state to broaden the circumstances under which nuclear weapons might be employed, and to expand the list of targets and countries they would be used against. The United States traditionally has tried to keep potential foes guessing about its nuclear intentions. It has raised this game to an art form during the past decade, and certainly applies it to China and Taiwan contingencies.

In pursuing a policy of nuclear ambiguity about the circumstances in which U.S. nuclear weapons might be used, Washington has not ruled out their use against China during a conventional war over Taiwan. It is fair to say that Zhu's view in which China would depart in a de facto sense from its No-First-Use policy is comparable to current U.S. policy toward Taiwan contingencies. If Zhu's comments create somewhat more ambiguity about China's nuclear policy for a Taiwan conflict, regardless of whether or not the Chinese government seeks to create more ambiguity, then Zhu puts China in the same league with the United States and all the other nuclear powers whose policy is similarly flexible.

Zhu's notion that a U.S. attack on Chinese military warships or other dispersed assets of the People's Liberation Army would be regarded as an attack on Chinese territory is also no more provocative than American views on the thresholds of aggression. Critics who have been taken aback by this notion and who portray it as

provocative should understand that homeland territory per se is not the only critical threshold. In U.S. planning, attacks on U.S. Armed Forces abroad including ships and airplanes as well as foreign-based troops, and attacks on allies or on critical U.S. interests anywhere all cross the line into acts of aggression that could trigger U.S. military responses including nuclear responses in some cases. Thus, during the Cold War a Soviet attack on a German unit in NATO would have represented an act of belligerence that would have been met with U.S. military action. This is one of the reasons why the U.S. quarantine of Cuba during the 1962 Cuban missile crisis was so dangerous. American leaders feared that a hostile encounter between U.S. ships enforcing the quarantine, and Russian ships trying to breach it, would quickly engulf the two countries in war.

Managing the Taiwan Issue

This writer very much appreciated Zhu's candor and found the diversity of opinion that his comments revealed to be refreshing and encouraging of greater openness in China's deliberations on security issues. Zhu's failure to anticipate the impact of his comments which practically invited sensational journalism and political bombthrowing unfortunately will have adverse repercussions. That is largely due to the extreme politicization of military policy discourse and debate that now exists in the United States. Cheap shots, double standards, dishonesty, ignorance, lack of scientific integrity and disrespect are all too commonplace. Zhu should have been circumspect in the situation. But if offered the choice between a circumspect and a free-wheeling discussion of nuclear policy with an intellectual Chinese general, the free-wheeling option is unquestionably preferable.

The principals in this episode got burned by the exaggerated reaction abroad, and an interesting and vital discussion has been side-tracked if not terminated. If it can be re-started, the agenda for discussion should emphasize the risks of escalation of a Taiwan crisis and ways to reduce those risks. The Taiwan situation is an accident waiting to happen that could rapidly escalate to large-scale conflict. China is fully committed to defend its vital interest in Taiwan remaining part of one China, and the United States is committed by law to defend Taiwan in the event of conflict. Even low-level tactical hostilities, perhaps initiated inadvertently, could begin to spiral out of control under the circumstances of unflinching commitments on both sides to counter each other. Neither China nor the United States should be confident in its ability to manage a full-fledged crisis involving large-scale military operations between two militaries operating in close proximity. Recall how poorly the small-scale EP-3 crisis was managed. The command and control of the far-flung forces in the region leave much to be desired on both sides. Overlaying this inherently volatile confrontation with a new nuclear uncertainty – preemptive Chinese nuclear attack (Zhu's vision) would seem to add another inflammatory ingredient to the boiling cauldron. It arguably would increase the danger of full-scale nuclear war erupting in the event of a conflict over Taiwan.

It would be very worthwhile to take up this issue of crisis instability in the strait, and to consider how best to prepare to manage a crisis to prevent escalation. Zhu and his colleagues must have a briefcase full of ideas that this writer and many others are eager to hear, and debate.

Analysis of China's Nuclear Strategy*

Sun Xiangli

In recent years, a number of Western scholars have conducted research regarding China's nuclear strategy, concluding for instance that before the 1980s China did not have a strategic guideline for its nuclear weapons program and the evolution of its nuclear weapons was mainly driven by technological factors. It could be perceived that, to a certain degree, China's limited technical and economic resources determined its minimum deterrence policy. Other scholars have noted that some articles of the Chinese Army from the 1980s showed that China's military strategy scientists advocated China's development from a "minimum nuclear deterrence" to a "limited nuclear deterrence," which would give China the limited capability of attacking military targets, thus concluding that China could change the nature of its nuclear strategy when economic and political conditions permitted. This writer believes such judgments are one-sided and, to a great extent, misperceived. This writer also hopes that scholars will continue with their research and exchange of views in order to change their one-sided view so that they can correctly understand China's nuclear

Sun Xiangli is the Deputy Director of the Arms Control Research Division, Beijing Institute of Applied Physics and Computational Mathematics. Her work focuses on the studies of verification for nuclear disarmament, China's nuclear strategy, the U.S. nuclear policies, non-proliferation regime.

strategy and promote mutual trust in the strategic field among the nuclear powers.

This article discusses the basis on which Chinese leaders make political and strategic decisions about China's nuclear strategy, presents an analysis of the main characteristics and nature of China's nuclear strategy, and finally provides the writer's opinions on issues such as the development of China's nuclear strategy.

China's Nuclear Strategic Decision-Making

The top decision-making group, headed by Mao Zedong and Zhou Enlai, framed China's nuclear policy. The Chinese leaders who worked out the nation's nuclear strategy had a very clear and realistic understanding of the nature and role of nuclear weapons. China's own strategic thinking was formed on the basis of such an understanding, which has served as a guideline for the whole development process of China's strategic nuclear force.

Chairman Mao Zedong once said that nuclear weapons were "paper tigers". As he later explained, this statement was meant to inspire the Chinese people's morale and he did not mean that nuclear weapons were really merely paper tigers. His statement was mainly to emphasize the fact that wars could not be won only with one or two advanced weapons. Mao Zedong had a clear understanding of nuclear weapons' effects. He said in 1970 that "though there still exists the possibility for major powers to fight world wars, the atomic bombs have prevented them from doing so." This shows that Mao understood the principle of nuclear deterrence. Meanwhile, he also noticed political and moral problems in using nuclear weapons. "Our country may produce a small number of atom bombs in the future. But we are not going to use them.... We keep them only as defensive weapons," he said. "How can atom bombs be used without limit? We wouldn't use them without limit

even if we had them, for to do so would be a crime" Again this illustrates that Mao Zedong clearly understood both nuclear weapons' effects and limitations.

The Chinese decision-making group had clear-cut principles for nuclear force development in terms of quantity. Several leaders remarked time after time, "we need atom bombs and hydrogen bombs. But we only need a limited amount." It is no use to have many of them." Of course, these weapons must have a deterrent effect, and a certain number and survival of the nuclear weapons must be guaranteed. Premier Zhou Enlai once said regarding nuclear weapons that "the key does not lie with their quantity, rather, we need to have a minimum amount, quality and variety". In short, the key to having a credible nuclear deterrence is to guarantee an effective nuclear retaliatory capability. Just as Gen. Nie Rongzhen said, we "must have minimal retaliatory strike capability."

The scientists who directly participated in the development of nuclear weapons have confirmed these basic principles above. This writer has often heard from senior scientists and leaders who have taken part in nuclear weapon development who agree that China's nuclear weapons are mainly political and strategic deterrent weapons.

Thus, decision-making leaders' and scientists' understanding of nuclear weapons is that they should only have a strategic deterrent effect rather than being used in battlefields as conventional weapons. The effectiveness of nuclear deterrence is determined not by the comparative quantity and war-fighting capability of the weapons, but rather by their capability for retaliation.

Based on these principles, and according to its economic, technical and geographic conditions, China has developed a limited nuclear force. The main requirement for the nuclear force is to ensure the effectiveness of deterrence under any circumstances: that is, to survive the en-

emy's first strike by maintaining a basic retaliatory capability. Therefore, throughout the development of China's nuclear force, great emphasis has been placed on survivability and reliability. Since the 1970s and 1980s, other countries have rapidly improved their precision strike capabilities and have made great progress with their missile defense systems. Correspondingly, China's nuclear force has also gradually modernized from the first generation using liquid fuel and fixed silos to the second generation using solid fuel and mobile launching pads with better penetrability. But its purpose remains to insure an effective nuclear deterrence in the new strategic environment.

For national security reasons, official documents elaborating on China's nuclear strategic theory have not been released to the public in the past decades. But the fact remains that China has maintained a consistent framework of nuclear policy that is based on a clear understanding of the nature of nuclear weapons. Since the 1980s, China's economic and technical conditions have been greatly improved and, as a result, have allowed China to expand its nuclear arsenal. Yet, even with these improved conditions, China still holds to its policy of a limited nuclear arsenal, which underscores the fact that nuclear strategic principles have guided China's nuclear force development.

Characteristics Of China's Nuclear Strategy

1. Strategies of Major Nuclear Weapons States

According to some Western analyses, the strategies of the five nuclear weapon states can be roughly divided into two categories. The first includes the United States and Russia (Soviet) and entails a nuclear strategy with both first-strike and war-fighting capabilities. The other category includes China, Britain and France, which is essen tially one of "minimum deterrence". States

with this kind of strategy maintain only second-strike (nuclear retaliation) capabilities and do not pursue war-fighting capabilities.

Yet, China's nuclear strategy is still quite different from those of Britain and France, especially in terms of the deterred targets and the number of weapons needed for retaliation after suffering a first strike. China has a No-First-Use (NFU) policy, which means that its nuclear weapons are used only for deterring nuclear attacks (while British and French nuclear weapons may also be used for deterring conventional offensives). As for the number of weapons needed to retain second-strike capability, China maintains a very limited nuclear arsenal, for China's understanding of "unacceptable damage from a nuclear attack" is different from that of the Western countries. It seems inappropriate to define China's nuclear strategy with the term "minimum deterrence" consistently used by Western countries because it would then be impossible to differentiate between China's nuclear strategy and those of the British and French. Thus, China's nuclear strategy is, more precisely, a "defensive nuclear deterrence characterized by the policy of NFU".

- 2. Characteristics of China's Nuclear Strategy
 There are essentially three unique aspects of China's nuclear strategy:
- i. The policy of NFU. Generally speaking, there are two instances in which a state is the first to use nuclear weapons: one is a first-strike or preemptive nuclear strike, aimed at eliminating the enemy's potential strategic nuclear force; the other is using nuclear weapons (as the last resort) in times of crisis during conventional conflicts.

China's policy of NFU - made public in 1964 - is unconditional. That is to say, China will not be the first one to use nuclear weapons in either of the above circumstances. Considering China's foreign

policy and security environment at that time, such a position had credibility and was a positive influence internationally.

First, this policy was based on the Chinese leaders' understanding of nuclear weapons and nuclear war. In the 1960s, the United States and the Soviet Union engaged in a feverish nuclear arms race alongside an international movement against nuclear arms of almost equal intensity. At such a time, China's declaration of NFU clearly revealed the nature of its nuclear strategy as defensive and reflected the Chinese government's political stand against nuclear wars. These policies also had resonance with the international will against nuclear wars and thus had real political significance.

Secondly, the policy of NFU shows China's confidence in conventional battles and in obtaining strategic deterrence through its nuclear retaliation capability. In the 1950s and 1960s, China had countermeasures against conventional threats. With strategic depth and experience in extended combat, China was not afraid of waging conventional battles against intruders, even those with superior conventional power. Therefore, the main purpose of China's nuclear weapons at that time was to counter nuclear attack and nuclear blackmail. It was unnecessary for China to be the first to use nuclear weapons to deter an enemy's conventional offensive. Moreover, China did not need war-fighting and first-strike capabilities to deter a nuclear attack. A minimum nuclear deterrent was sufficient.

So, we may say that China's policy of NFU was made in those years on the basis of credible political and strategic decision-making.

In recent years, some scholars have suggested that China should give up its NFU policy as China's capacity to protect, for instance, highly developed coastal economic zones from conventional offensives is growing increasingly difficult. However,

currently, there is no indication the Chinese government has any intention of changing this policy. There are two reasons for this: 1) the possibility of a large scale conventional offensive against China by any country is almost zero; and 2) China's capability in resisting conventional offensives has been greatly improved in recent years with the introduction of advanced and new technologies for its conventional forces.

There is also the issue of deterring biological and chemical weapons (BCW) with nuclear weapons. As BCW cannot be compared with nuclear weapons in terms of the level of threat and destructive effects, it remains unlikely nuclear weapons will be used to deter the use of BCW. Furthermore, using nuclear weapons to fight against BCW of a non-nuclear weapons state violates the negative security assurances made by the nuclear weapons states under the Non-Proliferation Treaty, to which China has adhered for many years. Accordingly, this author believes that the Chinese government will not give up its commitment to NFU even under threat from BCW.

ii. Retaining a limited nuclear force. Since the 1960s, China has maintained a very small nuclear force and a restrained posture.

There are different theories about the amount of nuclear weapons required for a second strike capability. In the 1960s, U. S. Defense Secretary Robert McNamara set a criterion for assured destruction. He thought that "unacceptable damage" for the Soviet Union would be to wipe out 20-25 percent of its population and destroy 50-75 percent of its industries; requiring approximately 400 nuclear warheads.

China has always believed that the threshold of "unacceptable damage" can be accomplished using only a very small amount of nuclear weapons, and whose criterion in this regard seems to be lower than in the West. The Chinese call it a

"minimum retaliating strike".

Of course, this does not mean the number of weapons that make up a limited nuclear force is immutably fixed. In fact, the required size for such a capability is a dynamic quantity relating to the nuclear arsenal's survivability. For instance, one guide to the size required of China's nuclear force is to be able to mount a nuclear strike that can penetrate an enemy's missile defense system after surviving a first strike.

iii. China has always supported full-scale and complete nuclear disarmament. The Chinese government's stand is clear: China will disarm its nuclear force so long as the other nuclear weapons states completely give up nuclear arms. But before a comprehensive nuclear disarmament, China will continue to maintain a very limited but effective nuclear deterrence while continuing its effort to maintain stable strategic relations among nuclear weapon states.

China's Nuclear Strategic Trends

Today, some people at home and abroad are studying and surmising China's strategic nuclear trends. Some predict that with an evolving strategic environment, China's nuclear weapon modernization will lead to a significant expansion of its nuclear force as well as substantive changes to its nuclear strategy.

A thesis published in the journal *International Security* in 1995 stated that since 1987, a large number of articles have appeared in China supporting the development of a "limited nuclear deterrence" with limited war-fighting capability. In fact, the sources cited in this thesis represent only the opinions of individuals in China rather than that of the Chinese government.

This author holds that it is unlikely for the Chinese government to give up its current defensive nuclear deterrent policy in the foreseeable future for the following reasons. First of all, there will be no material changes in the nuclear strategic

WSI

principles, which are based on a consistent understanding of the nature and role of nuclear weapons. Despite today's continuing evolution of new and advanced military technologies, the fundamentals of nuclear weapons have not changed. And so, China's guidelines for its nuclear strategy have not changed. In fact, the nuclear arms race during the Cold War proved that the nuclear war-fighting strategy does not substantially increase the effectiveness of nuclear deterrence. Rather, it leads to strategic instability and to the danger of nuclear wars among nuclear weapon states. In addition, such a strategy will theoretically require a large quantity and variety of nuclear weapons, which will consume substantial economic and technological resources. Obviously, this is not in conformity with China's long-term general strategy of economic development. Also, China's current security environment is much better than that of the 1950s and 1960s. Relations between China and major nuclear weapon states have markedly improved and, accordingly, it is unnecessary for China to modify its nuclear strategy. In addition, the international mechanism of non-proliferation of nuclear weapons requires nuclear weapon states to constantly minimize the significance of nuclear weapons. As the Chinese government is actively supporting such non-proliferation mechanisms it should not alter its defensive nuclear posture.

The current policy and position of the

Chinese government has also not shown that there will be material changes in China's nuclear strategy in the near future. For instance, "China's National Defense" white papers released in 2002 and 2004 expressly reiterate China's persistent adherence to a defensive nuclear posture and its opposition to an arms race.

In summary, this author holds that China's nuclear strategy is guided by the following three principles: 1) NFU; 2) maintaining a limited nuclear force and 3) supporting complete global nuclear disarmament. These basic tenets are based on the sober understanding of nuclear weapons' unique characteristics and roles, which remain unchanged. Despite substantial threat to its national security, including nuclear threats and blackmail, China has maintained these guiding principles, thus proving its resolve to keep its nuclear policy unchanged. Of course, China will also continue with its nuclear weapons modernization, but its main purpose will continue to be to improve the general survivability of its nuclear weapon force so as to ensure the effectiveness of nuclear deterrence into the future.

^{*} With permission of the author, this article was adapted from an earlier Chinese publication of it in "2005 Reports of International Arms Control and Disarmament", ed. by China Arms Control And Disarmament Association, World Knowledge Press, Beijing, 2005.