Policy Perspectives
Vol. 3/1, January 2015

CSS
ETH Zurich

The Nuclear Weapons Comeback

Nuclear weapons matter and cannot be wished away. Many in the West hold the obsolescence of nuclear deterrence as self-evident. However, worldwide, nuclear doctrines are evolving, and the West has to keep step.

by Oliver Thränert

Stability in the international system is, once again, being threatened by the growth of nuclear arsenals. Since the end of the Cold War, the US and NATO have come to take for granted that their conventional military strength will remain unsurpassed. In the process, they have neglected to study other countries' doctrinal discourses on nuclear warfare, which are growing more nuanced and intricate over time. There is an urgent need to remedy this shortcoming, through a renewed policy debate on how the West can manage nuclear risks.

At present, intellectual and political inclinations are to avoid the issue and pretend as though there is no problem. Security experts take comfort from the fact that the Cold War balance of strength has been fundamentally reversed: today, it is Russia instead of the West that is militarily weak in conventional terms, and thus needs nuclear weapons to mask this weakness. Unfortunately, Russia sees it the same way: It continues to modernize its forces while the West does not. This unilateral upgrading programme has given Moscow a false sense of confidence that it can be belligerent without suffering any consequences. In the course of the Ukraine crisis, President Putin, referring to Moscow's nuclear arsenal, emphasized that other countries should not mess with Russia.

Moreover, China is debating whether its nuclear no-first use doctrine is still appropriate; Pakistan is introducing tactical nuclear weapons as a counterweight to India's conventional superiority; and India is building up a complete nuclear triad. One should also consider North Korea, although its ballistic missile capabilities are limited and it is unclear whether the country possesses operational nuclear warheads that can be delivered by missiles. To some extent, this is a moot point: Pyongyang is already perceived as a nuclear threat by its neighbors, who plan and behave accordingly. In case Iran were to continue on its current course as a virtual nuclear power, the further nuclearization of the Middle East shall become almost certain.

That said, the demand for credible extended nuclear deterrence by US allies is increasing. Because the US has not introduced new nuclear systems for some decades, the Obama Administration needs to adjust its nuclear capaci-

Key Points

- The role of nuclear weapons in the politico-military planning of major states worldwide is growing, not receding
- Russia finds itself in a conventionally inferior position and, consequently, counts on nuclear weapons as a remedy
- In Asia, China's commitment to its nuclear 'no first use' doctrine seems to be weakening, while India and Pakistan are actually expanding both the doctrine and scope of their nuclear arsenals
- In the West, there is an urgent need for a debate that will have to focus on nuclear stability in the 21st century and future realistic goals of arms control negotiations

An Agni-V missile is launched on September 15, 2013. India successfully test-fired this nuclear-capable missile for a second time. *REUTERS/DRDO*

ties 'on the fly'. Furthermore, NATO, which stresses that it remains a nuclear alliance as long as nuclear weapons exist, has yet to define exactly what the role of nuclear weapons in its strategy should be.

In any event, the Atlantic Alliance needs to discuss its nuclear strategy requirements against the backdrop of Western discourses that – inspired by US President Obama's 'Global Zero' speech of April 2009 – often talk about nuclear disarmament in isolation from strategic needs. While the total elimination of nuclear weapons should indeed be the long-term goal, the US and NATO can hardly afford to delink nuclear disarmament and strategy. Rather, what is needed is a serious debate that combines arms control and disarmament with current nuclear strategy needs. A possible first step might be to examine what Paul I. Bernstein has called the 'evolving' nuclear landscape.

Russia: Expanded Role for Nuclear Weapons

Russia remains the only country with a nuclear arsenal that is capable of destroying the United States. The Russian ruling elite clearly perceives this capacity as a great power attribute that it does not wish to negotiate away. At the same time, President Putin sees nuclear weapons as guarantors and symbols of Russian influence in the immediate neighborhood and beyond. To underscore its nuclear great power status, Russian submarines operate off the US east coast, probably equipped with nuclear-tipped cruise missiles, while nuclear capable bombers fly close to NATO territory in Europe.

In addition to the increasing political role of Russian nuclear weapons, against the backdrop of its conventional weakness, Moscow has also put more military emphasis on nuclear systems. Its current military doctrine states that Russia will retaliate with nuclear forces against a nuclear, chemical or biological attack on itself or its allies and go nuclear if an existential threat is posed by a conventional attack. Because Russian analysts perceive such conventional threats as increasingly likely, Russia's nuclear strategy encompasses a concept for deterring and terminating conventional war based on the threat of limited nuclear strikes.

In its new military doctrine of December 2014, Russia did not threaten preventive nuclear strikes as had been expected by some commentators. However, some experts believe that in recent years Russian military analysts have thought much more about nuclear warfighting than their US counterparts. In doing so, they reflect a view that nuclear weapons might play a role in local or regional conflicts. Russian strategists particularly envision the first use of nonstrategic nuclear weapons under relatively low levels of provocation. Unsurprisingly, Russia's current numerical advantage over NATO in nonstrategic nuclear forces is seen in Moscow as an important military asset. Some even expect Russia to develop nuclear capabilities tailored to limited war scenarios, putting emphasis on nuclear capable cruise missiles on both land and sea.

China: 'No First Use' No More?

Like Russia, China's leading elites appear to attribute a significant political role to nuclear weapons. President Xi Jinping stated in December 2012 that nuclear arms offer significant strategic support to China's great-power status.

Ever since China introduced nuclear weapons in 1964, it has followed a nuclear no-first-use doctrine. For a long time, no explicit strategy or deployment plans were developed that went beyond this fundamental principle. China built up a comparatively small nuclear force largely aimed at deterrence based on the ability to retaliate, and explicitly declined to become involved in arms races with other nuclear powers. Over a long period, the number of strategic nuclear arms that it possessed, i.e., those that could reach the US, remained stable at about 20 warheads.

While China today officially still sticks to its no-first-use commitment, an internal debate has emerged about whether no-first-use remains appropriate for China. Triggered by US missile defense and conventional prompt global strike plans, this discussion has concentrated on the issue of whether nuclear weapons should deter, and if need be, defeat non-nuclear attacks that pose a threat to vital Chinese interests. Needless to say, the survivability of China's strategic nuclear forces belongs into this category of 'vital interests'. At the same time, some Chinese pundits

have argued that China should threaten nuclear strikes in the event of US military support for a Taiwanese declaration of independence.

Today, it is unclear whether limited nuclear counterstrikes in response to non-nuclear attacks will become part of China's doctrine. What is however evident is that China's nuclear strategy debate is much more sophisticated than it was before. For instance, China now plans to carry out nuclear retaliation strikes to shock a potential adversary and restore deterrence. This may include nuclear strikes below the strategic level to de-escalate a conflict.

Pakistan and India: Nuclear Tension

As is the case with China, India follows a nuclear no-first-use strategy. Its nuclear arsenal is oriented at a minimum credible deterrent. If a nuclear attack would occur, India would retaliate with a massive counterstrike designed to inflict unacceptable damage.

Delhi is in the process of establishing a nuclear triad consisting of nuclear forces on land, sea and in the air. This ambitious program – although so far not encompassing more than 100 nuclear warheads – is about to depart from the original minimum deterrence posture. Rather, India seeks a usable and survivable nuclear force that can exercise a range of military options. This can be explained by the Indian perception of a growing nuclear threat from China as well as the aim of using nuclear weapons as political leverage.

In addition, Indian policymakers are re-assessing the no-first-use doctrine. Already, the no-first-use commitment is only valid against non-nuclear weapon states. Moreover, Delhi is retaining the option of using nuclear weapons first in the event of a chemical or biological attack on its territory or forces. Finally, India aims to attack Chinese or Pakistani nuclear targets with conventional forces if war occurs, increasing the likelihood of nuclear escalation.

The most worrying development however is that India's arch rival Pakistan perceives Delhi's existing conventional superiority, and potential future nuclear superiority, as a growing threat that might result in escalation dominance over Pakistan. As a result, Islamabad is relying more upon the early first use of nuclear weapons in its own strategy and is emphasizing the deployment of tactical nuclear forces. In a crisis situation, the early employment of nuclear weapons cannot be ruled out.

Given that India and Pakistan have already come close to nuclear war during the Kargil crisis of 1999, the situation in South Asia is the most worrisome when it comes to the likelihood of the next use of nuclear weapons.

US and NATO: Nuclear Weapons Neglect

As opposed to Russia, China, India, and Pakistan, since 1990, the US and NATO have not put much emphasis on nuclear weapons. Ronald Reagan was the last US President to introduce new nuclear systems. Since then, every US President has left the White House with fewer nuclear weapons than when he entered it.

Moreover, all post-Cold War administrations have reduced the salience of nuclear weapons for US strategy. Qualifying the role of nuclear weapons, George W. Bush introduced a 'New Triad' consisting *first* of non-nuclear and nuclear strike capabilities; *second,* of defenses encompassing active defenses, passive defenses, and defensive information operations; and *third,* an improved infrastructure defined as the aggregate of the laboratories, plants, and workforce that develop, build, maintain, and modernize the other elements of the 'New Triad'.

Bush's successor Barack Obama updated the US nuclear declaratory policy to the extent that the US will not use or threaten to use nuclear weapons against non-nuclear weapon states that are party to the Nuclear Non-Proliferation Treaty (NPT) and in compliance with their nuclear nonproliferation obligations; would only consider the use of nuclear weapons in extreme circumstances to defend US vital interests or those of its allies and partners; would continue to strengthen conventional capabilities and reduce the role of nuclear weapons in deterring non-nuclear attacks, with the objective of making the deterrence of nuclear attacks on the United States and its allies the sole purpose of U.S. nuclear weapons. Furthermore, Obama renounced the development of any new nuclear weapon system.

Likewise, NATO has also scaled down the role of nuclear forces for its strategy. US nuclear warheads in Europe have been reduced from more than 7000 in the 1960s

Further Reading

On Limited Nuclear War in the 21th Century
Jeffrey A. Larsen / Kerry M. Kartchner (Eds.), Stanford University Press 2014
Excellent overview of past and present debates on nuclear challenges, nuclear deterrence, and future nuclear scenarios.

The Broader Context of NATO's Nuclear Policy and Posture *Michael Rühle, NATO Defense College Rome, Research Paper N 89, January 2013*
Analyses NATO's current nuclear debate against the backdrop of the challenges of the second nuclear age.

Strategy and Arms Control *Thomas C. Schelling / Mortan H. Halperin, 20th Century Fund 1961*
Classical publication dealing with many still valid aspects of nuclear strategy and arms control challenges

to about 180-200 today. France and the United Kingdom have also reduced their nuclear forces while at the same time modernizing them. Moreover, alert levels and readiness criteria have been adjusted. In the course of the NATO-Russia founding act of 1996, NATO declared that it had no intention, no plan, and no reason to deploy nuclear weapons on the territory of new members. It was not until the 2012 NATO summit in Chicago that the Alliance focused once again on nuclear matters. Triggered by the demand of a group of members led by Germany to under certain circumstances remove US nuclear weapons from European territories, members agreed on compromise language stating that as long as there are nuclear weapons in the world, NATO will remain a nuclear alliance. At the Wales Summit of September 2014, NATO members repeated that phrase. They moved on to mention that the circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote.

The need for a new nuclear debate

The evolving nuclear landscape shows countries such as Russia, China, India and Pakistan as increasingly delving into nuclear matters, whereas in the US and within NATO nuclear affairs still are low on the agenda. Indeed, Western countries in the post-Cold-War era had good reasons to concentrate on different challenges such as out-of-area operations in the Balkans or in Afghanistan. Moreover, the US and NATO could afford to more or less turn a blind eye on nuclear questions given their overwhelming conventional superiority.

However, this era has ended. With the significance of nuclear weapons likely to increase in the international arena, Western countries need to adjust. This is by no means to argue in favor of nuclear rearmament. Less in terms of nuclear weapons may indeed be more in terms of strategic stability. What is however needed is a public debate that combines nuclear strategy requirements with nuclear arms control opportunities. Some of the questions that should be at the center of such a debate are:

- What does nuclear stability (ie., efforts to minimize the likelihood of nuclear war) mean in the 21th century?
- What extended nuclear deterrence posture is appropriate?
- How many and what nuclear forces are needed?
- What should be the goals of future nuclear arms control negotiations? How could more nuclear countries in addition to Russia be involved in such efforts?

In short, the West needs to intellectually invest in handling the existence of nuclear capacities in a way that, in a best case scenario, allows for the substantial reduction of the salience of nuclear weapons – not only for the West, but for all nuclear powers.

Dr. Oliver Thränert is head of think tank at the Center for Security Studies (CSS), ETH Zurich. The views expressed here are the author's own.
www.css.ethz.ch/people/CSS/tholiver

Policy Perspectives is edited by the Center for Security Studies (CSS) at ETH Zurich. The CSS is a center of competence for Swiss and international security policy. It offers security policy expertise in research, teaching, and consultancy. The CSS promotes understanding of security policy challenges as a contribution to a more peaceful world. Its work is independent, practice-relevant, and based on a sound academic footing.

Editor: Martin Zapfe / Assistant Editor: Prem Mahadevan

Comments welcome at PolicyPerspectives@sipo.gess.ethz.ch

Recent editions of **Policy Perspectives**:

- **How to Use Climate Finance** (2/5) by Mark Daniel Jaeger, Axel & Katharina Michaelowa
- **Putin's Patriotic Pivot** (2/4) by Aglaya Snetkov
- **War Risks in Asia – Deciphering 1914** (2/3) by Jonas Grätz, Micheal Haas, Prem Mahadevan and Martin Zapfe

For more editions, and for a free online subscription, visit www.css.ethz.ch/publications/PolicyPerspectives

ISSN: 2296-6471