

Nuclear Arms Limitation with China?

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In May 2019, a Chinese government spokesperson vehemently asserted that it will not take part in any trilateral negotiations pertaining to the nuclear weapons in its possession. China's response was triggered by President Donald Trump's statements regarding the potential of disarmament talks between the US, Russia and China. Coming a few months after the US pull out from the Intermediate Nuclear Forces (INF) treaty citing Russian and Chinese missile technology, such developments hold salience given the geopolitics of the region and China's nuclear posture. Given the background, this paper is an attempt to understand and probe the feasibility of a new arms control agreement between the US, Russia and China.

China's Nuclear Posture

Besides India, China is the only nuclear weapon state (NWS) to have professed a 'No First Use' nuclear pledge. Since its first nuclear test in 1964, China has maintained that its nuclear arsenal is for purely deterrence and

defence purposes, and has since, followed the tenets of an 'assured retaliation' strategy (Cunningham 2015). This is reaffirmed in the 2013 edition of *The Science of Military Strategy*, published by the Academy of Military Sciences of the People's Liberation Army of China (Kulacki 2015). Providing insight into China's nuclear thinking, the document summarises the three salient principles stated to govern its nuclear policy:

- 1. China's Nuclear Programme exists purely for defensive and deterrent purposes and to mitigate any nuclear threat from other nations. As a result, it is directed only towards other Nuclear Weapon States (NWS)
- 2. During any conflict with a NWS, Chinese nuclear weapon use shall only be triggered by a nuclear attack by NWS, and not conventional military action.
- 3. Chinese Nuclear Weapons shall only be employed on successful confirmation of an incoming nuclear attack.

Rather than exercise massive retaliation as a means to employ their nuclear weapons, Chinese strategic thought prefers a limited strike to give the opponent an opportunity to take pause, and consider the implications of continuing a nuclear exchange (Kulacki 2015). The defensive nature of the nuclear policy is reiterated here, as the objective is not to 'win' a nuclear war, but to impose sufficient costs on

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an opponent so they re-evaluate the downside of further nuclear strikes.

By adhering to the tenets of an assured retaliation strategy, China is believed to favour a limited counter-value targeting of civilian and military targets, and not of the opponent's nuclear facilities (Heginbotham 2017a). This is in tune with the strategy of imposing costs highlighted above, as counter-value targeting would be far more effective in inflicting damage designed to halt a nuclear exchange. Additionally, as the Chinese nuclear aresenal has a purely defensive role ,limited countervalue targeting does not require the constant, accurate intelligence gathering and cutting edge military technology that a counter-force strategy entails. This ensures the country's nuclear programme is not a disproportionate drain on the military budget.

This defensive nuclear doctrine is reflected in the relatively small number of warheads it has stockpiled estimated at less than 300 (Kristensen 2018b) as compared to the tens of thousands of nuclear warheads the USA and erstwhile-USSR possessed at the height of the Cold War. It also highlights why China is currently investing in extensive second-strike capabilities, such as modernisation of missile technology and multiple independent targetable re-entry vehicles (MIRVs), among others. Because of its NFU and assured retaliation posture, it has to be able to guarantee nuclear retaliatory strikes, while also ensuring that its limited nuclear arsenal is utilised to the best of its ability. This involves first-strike survival, as well as accurate targeting and strike capabilities. While some scholars believe the strides it is making in this modernisation is indicative of a shift in its nuclear strategy, it still sticks to the basic principles of ensuring first-strike survival, limited and successful retaliation, and a reserve to allow future deterrence (Cordesman 2018). Merely investing in and improving nuclear military technology is not indicative of a shift in China's nuclear posture, but should instead be viewed in conjunction with improvements in military technology in other countries it perceives as rivals.

However, while China's nuclear posture is not as major a cause of concern as that of Pakistan or North Korea, aggressive developments in its threat environment as well as certain domestic factors can quickly result in a more incendiary nuclear posture. (Heginbotham 2017b).

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Threat Environment and Recent Capability Development

China's nuclear threat environment primarily constitutes India and the USA, countries with which conventional skirmishes might snowball into a nuclear conflict. While border incidents such as the Doklam crisis of 2017 have caused significant tensions between China and India, numerous factors including two No First Use pledges ensure this dyad is not considered a nuclear tinderbox, unlike the India-Pakistan conflict. As China views the United States as its primary strategic rival, the US-China bilateral is the most significant while discussing China's nuclear weapons program. This is given American extended deterrence in East Asia involving support to Taiwan, Japan and South Korea, as well as tensions in the South China Sea.

Perceived US military threats to China most prominently include an air and naval base at Guam, and United States Forces Japan, hosting approximately 50,000 troops including the US Navy Seventh Fleet. While US military support to Taiwan has always raised hackles in China, the significant US military presence in South Korea is also considered worrisome, as well as recent developments involving facilities for US forces in military bases in the Philippines (Reuters 2016). Tensions have the potential to come to a head by the US's Freedom of Navigation Operations (FONOPs) in and around the South China Sea, most recently the two naval ships that sailed through the Taiwan Strait in February 2019. From a nuclear security perspective, the threat environment constitutes not only a US military presence in China's immediate neighbourhood, but also the low breakout times associated with Japan and

South Korea in the event of a receding US security umbrella (Roehrig 2017).

China's threat environment hence brings us to why certain capability development is considered essential to its national security. While much of China's response to its security challenges has been conventional, including arguably the fastest naval modernisation ever, this paper will focus only on technology developments that play a role in its nuclear policy.

These capability developments, several of which have prompted protests and concerns from American administrations are arguably measures undertaken to stay in line with Chinese nuclear policy, i.e assured retaliation. While US Military supremacy, conventional or nuclear is undisputed, its superior cutting-edge armaments, warhead numbers and accuracy of delivery vehicles are a huge source of concern for China. As mentioned earlier, China's defensive nuclear arsenal is premised on its ability to ensure retaliation in event of a nuclear attack, calling for first-strike survival and inflicting substantial deterrent costs on an opponent through its second-strike capabilities.

U.S criticism of continued Chinese nuclear modernization (inducting more road mobile ballistic missiles, MIRVs, nuclear-armed submarines, among others) is diluted when one considers that China is simply seeking to maintain a status quo in terms of its nuclear policy vis-à-vis the US's technological advancements along similar lines. For instance, US development of Anti-Ballistic Missile (ABM) Defence after its withdrawal from the ABM Treaty in 2002 led to a diminished effectiveness of existing Chinese nuclear weapons and delivery methods (Roberts 2004), prompting increased mobile missile production and development of the much touted DF-17 (Hypersonic Glide Vehicle). Additionally, US primacy in terms of accurate targeting and superiority threatens land-air-sea the effectiveness of the Chinese nuclear deterrent, and is coupled with a fear of pre-emptive strikes by the United States against its nuclear infrastructure (Heginbotham 2017a). As US capabilities threaten both the survival and effectiveness of warheads and delivery vehicles. China's response is the induction of new technologies that the US is concerned about. It

is hence fallacious to state that China is engaging in a destabilising modernisation program with regard to nuclear weapons, as various US administration statements claim, but is merely sticking to the core principles of its nuclear policy.

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Existing Nuclear Arms Control Treaties

There exist several broad multilateral treaties, agreements and arms control regimes relating to nuclear weapons, but very few agreements between Nuclear Weapon States, such as those between the US and Russia (erstwhile Soviet Union). These include the ABM Treaty, Intermediate-range Nuclear Forces (INF) Treaty and New Strategic Arms Reduction Treaty (START), of which only New START remains in force. China is a signatory to several multilateral agreements such as the Non-Proliferation Treaty, Outer Space Treaty, Seabed Arms Control Treaty, etc. Despite this, it has not acceded to bringing its nuclear programme under the microscope to allow any discussion about arms limitation, and is unlikely to do so in the future.

Donald Trump announced the US pull-out from the INF Treaty in September 2018, citing multiple reasons including Russian violations, and Chinese missile technology development. With reference to the latter, the US's rationale is that Chinese development and deployment of precision missiles puts it at a disadvantage in terms of matching capabilities, as well as increases costs incurred in mirroring such deployment through other means (Heim 2016). While this can be substantiated by a costbenefit analysis, China's threat environment in its immediate neighbourhood may well warrant such capabilities. Substantial commentary has detailed the destabilising nature of this move (Immenkamp 2019), especially for Europe. In the Asian sphere, this is expected to lead to a destabilising deployment of Medium Range Ballistic Missiles (MRBMs) and Intermediate Range Ballistic Missiles(IRBMs) in Guam, Japan, South Korea and possibly others, ostensibly in response to Chinese missiles in the same range class (Kulacki 2019, Vaddi 2019). A reminder is due here, that missile technology has several conventional uses. However, the danger of increasing the number of missiles deployed in and around China lies in the inability to gauge a missile strike as conventional or nuclear, which can possibly trigger a premature nuclear response on the part of China. This is likely in an escalating situation, taking into account Chinese fears of US pre-emptive strikes threatening the survivability of their meagre arsenal, and is hence a consideration while discussing nuclear limitation talks.

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The New START treaty between the US and Russia is one of the most important nuclear treaties in place today, signed by Presidents Obama and Medvedev in April 2010. It will remain in force till 2021, with an option to extend it by another 5 years in event of consensus between the two leaders. New START stipulates that the US and Russia each restrict themselves to no more than 700 delivery vehicles (deployed ICBMs, SLBMs and heavy bombers), with no more than 1550 deployed warheads each, taking into account the use of MIRVs (Woolf 2019). It should be noted that the US and Russia both keep some missiles (SLBMs as well as ICBMs) on alert, i.e keep their warheads mated with their delivery vehicles (Kristensen 2017). China on the other hand has been viewed as possessing de-alerted nuclear weapons (Lewis 2009), i.e not mating its warheads with its delivery vehicles, which is a reflection of its NFU pledge. A possible exception to this would be their new ballistic missile submarines, which have to keep warheads mated with missiles as a necessity.

Arms Control and China

As mentioned earlier, Donald Trump has expressed a desire to bring together the US, Russia and China for a trilateral nuclear arms agreement, and has even gone so far as to say 'China would very much want to be part of such a deal'. Russia has also expressed a similar interest after the signing of the New START. In May 2019, a Chinese government spokesperson stated there was no possibility of entering into such a deal, also citing the US's recent withdrawal from the INF treaty as impacting global stability and eroding strategic mutual trust. He remarked 'As to the trilateral negotiations on arms control, China's position is clear-cut. The premise and basis for trilateral arms control negotiations do not exist at all, and China will never participate in them' (O'Connor 2019).

The vast disparity between the nuclear arsenals of US, China, and Russia need to be reiterated here. China is estimated to possess less than 300 nuclear warheads, and the US and Russia have approximately 6500 warheads each in total, including non-deployed and stockpiled warheads. This is accompanied by decades of continuously improving their nuclear capabilities for Escalation Dominance and Assured Mutually Destruction. whereas China's nuclear program is understood to have maintained the bare minimum in meeting its deterrence needs.

Revisiting *The Science of Military Strategy*, as well as other reports (Heginbotham 2017a) it is understood that Chinese thinking views arms control as an inevitable and important part of global military affairs. However, an important caveat made is that nuclear arms control is also a means of "fighting for and protecting nuclear superiority, strategic superiority for limiting, weakening the nuclear capabilities of strategic opponents" by large nuclear nations (Kulacki While advising caution in moving 2015). ahead with nuclear arms control agreements, the document, along with other white papers released by the Chinese government states that any such agreement must be compatible with the "standard and requirements of protecting national security and development interests" (Jia 2016).

China's reluctance to accede to a multilateral arms control regime is reflected in these government publications, official which convey the mistrust with which China views efforts by Russia and the US to organise a multilateral nuclear arms limitation treaty (Klotz 2013). For different nations to come to the table, and for subsequent multi-lateral agreements to last there have to exist some similarities between the different countries' militaries. Chinese nuclear forces are not even of the same magnitude as the USA and Russia, have a stated NFU, and do not keep their warheads on alert, ready to be launched on a hair trigger. The USA and Russia differ from China in all these parameters. Where then is the common ground that these countries can converge on to hold multilateral talks? Even with the reductions agreed to under the New START, the US and Russia have each operationalized more than 5 times the warheads possessed by China.

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Many US and Russian concerns about new technologies such as hypersonic missile glide vehicles (DF-17), the new Type-94 ballistic missile submarines, and a steady increase in the induction of land and sea based ballistic missiles are valid. It still remains to be seen how such developments by China can be integrated into a multilateral treaty, which many in the US and Russia seem to be actively leaning towards (Klotz 2013). The US National Security Advisor John Bolton, who has also served as Undersecretary of State for Arms Control under George W. Bush is famously known for his disdain of most multi-lateral agreements, especially ones concerning arms control. He has called the New START 'Unilateral Disarmament' for the USA, which severely affects its conventional strike capabilities disproportionately as compared to Russia (Bolton 2010). Citing Chinese nuclear delivery development and China urging to maintain agreements such as the INF Treaty, he has said "If I were Chinese, I would say the

same thing. Why not have the Americans bound, and the Chinese not bound" (Reuters 2018). Other recent statements have indicated the unwillingness of the current administration to assent to the extension of New START before the February 2021 deadline by another 5 years.

Implications

The implications of such a move are enormous, but also hold the potential to bring China to the negotiating table for further arms control. Negotiations on a number of warheads are bound to hit a wall, and an INF style treaty about intermediate and medium range missiles is also bound to fail, considering China's threat environment and the core tenets of its nuclear posture and national security policy (Singh 2017). With the probable dissolution of New START following the US withdrawal from the INF Treaty, one can expect increased militarisation in the East and South China Sea. as evinced by the recent Chinese Anti-Ship Ballistic Missile (ASBM) tests undertaken in the South China Sea.

This will be reflected in an US build-up of MRBMs and IRBMs, increased ship-launched missiles, and Anti-Ballistic Missiles (which are already present in South Korea), in turn prompting an acceleration of Chinese military capabilities in the region. Withdrawing from the New START, coming on the heels of a Pentagon nuclear war-fighting doctrine to restore 'Strategic Stability' of the US military (Federation of American Scientists 2019) may seriously cause China to revaluate its policy of maintaining a minimal nuclear arsenal. This policy is likely to be influenced by an increase in US and Russian Nuclear Warheads, with the US employing additional missile capabilities in proximity to China. As China's primary concern is already ensuring first-strike survival, increased militarisation will only worsen these fears, leading to the probable acceleration of developing missile capabilities, and the possible increase in nuclear warheads stockpiled and put on alert.

The consequences worsen while considering this trajectory regionally. While much of Donald Trump's statements about a receding security umbrella from Japan and South Korea are dismissed on account of the negative impact it would have on America's influence in the region, it also stokes fears of what an end to this 'extended deterrence' would entail. In the unlikely event of decoupling, China the loss of a nuclear security umbrella would certainly compel Japan and South Korea to weaponise nuclear material of their own, creating 4 nuclear powers in a region that is not known for cordial relations and managing conflicting interests.

A more dangerous spillover would be in South Asia, where India looks to maintain nuclear capabilities to deter both China and Pakistan. While Pakistan has structured its nuclear forces in a way to deter Indian military action, China's nuclear capabilities today appear to consider America the primary rival. Despite India and China both pledging NFU, Indian efforts will still focus on possessing an effective deterrent against Chinese capabilities like HGVs. As scholars like Vipin Narang have pointed out, practicing nuclear deterrence against two adversaries with vastly different capabilities results in negating India's policy of 'Credible Minimum Deterrence', as Indian capabilities are neither credible towards China, nor minimum towards Pakistan. In the event of rapid development and deployment of Chinese missile and delivery vehicle technology, India will be compelled to upgrade its own capabilities, effectively feeding the Pakistani fear of superior Indian military technology, conventional and nuclear. Arguably the bilateral with the lowest threshold for nuclear use, such developments can lead to rapid escalation during crises like the recent Balakot airstrikes.

these worrisome silver lining in The projections is the potential in bringing China to the bargaining table. As has been argued, China at the current stage is unlikely to compromise on limiting the number of warheads it possesses, or the induction of various weapons systems it is currently developing. However, it is likely that Chinese senior leadership will weigh these concerns against the costs of revising its minimalist nuclear posture, and the resources that a more aggressive nuclear posture would divert from other priorities like a blue-water navy. A few years down the line, after feeling the escalatory effects of increased militarisation vis-à-vis the USA, it is well likely that China will accede to the possibility of arms limitation. However, this is premised on the US and Russia offering sweeping concessions in return, such as dealerting warheads, as well as re-evaluating capabilities the USA has spent billions on, like ABM defence. While the costs that may prompt China to engage in limitation talks are discernible, no such clarity is apparent in the US's approach to this matter. For the sake of regional stability, one can hope that a serious crisis in East Asia is not the stimuli that will cause the US to take stock of further militarisation of the region.

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