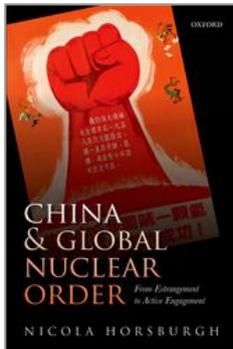


Rising China and a Weakened Global Nuclear Order in the 2000s

University Press Scholarship Online

Oxford Scholarship Online



China and Global Nuclear Order: From Estrangement to Active Engagement

Nicola Horsburgh

Print publication date: 2015

Print ISBN-13: 9780198706113

Published to Oxford Scholarship Online: May 2015

DOI: 10.1093/acprof:oso/9780198706113.001.0001

Rising China and a Weakened Global Nuclear Order in the 2000s

Nicola Horsburgh

DOI:10.1093/acprof:oso/9780198706113.003.0006

Abstract and Keywords

Chapter 5 assesses China's engagement as a rising power with global nuclear order in the 2000s. Particular attention is paid to shifts in US nuclear policy towards ballistic missile defence and counter proliferation since these are deemed problematic in China in terms of its nuclear deterrent. Despite these difficulties, China has displayed remarkable restraint in its nuclear strategy and continues to engage with key nuclear institutions, but at a chequered pace, displaying some resolve over the North Korean nuclear crisis, but a lack of resolve elsewhere, as with Comprehensive Test Ban Treaty ratification. The chapter ends by examining Chinese perspectives on efforts to repair a global nuclear order seemingly under strain, as well as recent developments such as the 2008 US-India civilian nuclear deal.

Rising China and a Weakened Global Nuclear Order in the 2000s

Keywords: missile defence, counter-proliferation, North Korea, Iran, nuclear weapons free world, nuclear security, US-India civilian nuclear deal

In the 2000s, a consensus has emerged among nuclear scholars: the global nuclear order is in crisis, under strain, perhaps even broken.¹ But does China share this view? If so, to what extent has a rising China engaged in the process of upholding nuclear order? It is to these questions that this chapter refers. The chapter is divided into four sections. The first section unpacks the nature of the crisis facing nuclear order, pointing to proliferation concerns and institutional deadlock, as well as changes in US nuclear posture. The second section explores China's response to these changes in terms of its own strategy and whether it remains based on a retaliatory force capability. The third section will focus on China's wider actions regarding the institutional paralysis and proliferation crises that have plagued the non-proliferation regime in the 2000s. The last section will turn to more recent developments and Chinese perspectives on the future of global nuclear order, in particular the call for a nuclear weapons free world, nuclear security efforts, and the controversial 2008 US-India civilian nuclear deal.

It will be argued that China has contributed to maintaining nuclear order by remaining committed to a retaliation-based strategy and by continued engagement with institutional aspects of nuclear order, even playing a direct role in trying to resolve the proliferation challenge posed by North Korea. However, in other areas China has adopted a cautious attitude, for example in negotiations towards a FMCT, fearful perhaps that nuclear order is moving away from the more representative order China has long preferred, towards an order based on US nuclear hegemony. (p.121)

Three Challenges to Global Nuclear Order

By the early 2000s, the global nuclear order that had consolidated in the first half of the 1990s faced deconstruction. The seeds of this deconstruction can be traced back to the late 1990s but this process gained considerable pace in the early 2000s.

Rising China and a Weakened Global Nuclear Order in the 2000s

The first set of challenges was proliferation-based, triggered by fears of nuclear terrorism following the 9/11 attacks on New York and Washington in 2001; growing global interest in civilian nuclear energy, part of a so-called 'nuclear renaissance'; suspected nuclear weapons programmes in Iraq, North Korea, and Iran; as well as the exposure in 2004 of an illicit nuclear trafficking network led by a former Pakistani nuclear scientist, A.Q. Khan.² In regards to the latter, the IAEA discovered a Chinese nuclear warhead design from the 1960s that had turned up via the A.Q. Khan network in Libya.³ Taken together, these developments placed serious strains on the NPT regime and questioned the efficacy of nuclear deterrence with respect to non-state actors such as terrorists.

Institutional deadlock represented the second serious challenge to the arms control and non-proliferation pillars of global nuclear order: the CTBT eluded ratification in Beijing and Washington, and attempts to negotiate an FMCT languished at the CD, held up by procedural issues. In addition, a number of nuclear armed states such as India, Pakistan, and Israel (and, by 2003, North Korea) remained outside both the NPT and CTBT. Third, important shifts were underway in US and Russian nuclear thinking, with the latter placing renewed emphasis on nuclear weapons in overall military strategy,⁴ and the former undertaking a comprehensive review of its nuclear posture in the early 2000s.

Given these developments, Chinese officials such as Liu Jieyi, the Chinese Director General for Disarmament and Arms Control, declared in 2002 that 'the global strategic landscape is transforming and the international security environment is facing new challenges'.⁵ Similarly, in 2005 Zhang Yishan, head (p.122) of the Chinese delegation to the CTBT, noted that 'severe challenges' confront the non-proliferation regime, arms control, and the disarmament process.⁶

Changes in US nuclear weapons posture proved particularly problematic for China. Beijing was aware of gradual changes underway in US thinking that began with the 'Lead and Hedge' strategy in 1995 and official documents like the Presidential Decision Directive 60 in 1997 which declined to

Rising China and a Weakened Global Nuclear Order in the 2000s

rule out using nuclear weapons to preserve US hegemony and security.⁷ However, from 2000 the US posture underwent deeper shifts, suggestive perhaps of a desire for nuclear hegemony, in other words, a disarming first strike capability that could potentially undermine the nuclear deterrents of other nuclear armed states.⁸ Indeed, during the 2000 US presidential campaign George W. Bush criticized President Clinton for 'active engagement' with countries like Russia and China.⁹ Then, Bush began his first term of office by initiating major reviews of all national security policies.¹⁰ By May 2001 Bush had a 'nuclear plan'.¹¹ According to this plan, more attention would be paid to improving US nuclear strategy, promising to 'refashion the balance between defenses and deterrence'.¹² Crucially, the US no longer seemed prepared to settle for mutual deterrence with Russia or China.¹³ Post 9/11, this shift accelerated, with the added incentive to combat the threat of nuclear terrorism and nuclear suspects in the 'axis of evil'.

This approach to nuclear threats was evident in US policy documents such as the 2001 Nuclear Posture Review (NPR), portions of which were leaked to the *Los Angeles Times* and *New York Times* in 2002. The 2001 NPR continued a trend already developed in Clinton's 1995 NPR: a capabilities-rather than intentions-based approach to policymaking. In the 2001 NPR, a new triad of nuclear forces was proposed, introducing new capabilities, including NMD. It was also contended that China 'could be involved in an immediate or potential contingency' and was placed on the nuclear targets list.¹⁴ China later featured in a new US war plan in 2005, known as the OPLAN (p.123) 5077, to include the use of nuclear weapons over a crisis involving Taiwan.¹⁵ In addition to the 2001 NPR, in 2002 the US National Security Strategy was published, introducing the doctrine of pre-emption, an extension of the 1997 US counter-proliferation policy. Then, in 2003, the US abrogated the ABM treaty, freeing itself to pursue NMD. In essence, all these developments fed into Bush's nuclear plan of invulnerability and unilateralism. This plan, if realized, had serious implications for nuclear order, suggesting that the US was reworking strategies to combat proliferation as well as the rules of nuclear deterrence so that

Rising China and a Weakened Global Nuclear Order in the 2000s

it would now be guided not so much by MAD but by a more unilateral form of assured destruction, the ability to overwhelmingly destroy the enemy and survive a nuclear war.¹⁶

What did this mean for China? According to one Beijing scholar, Wu Rui, the US wanted to simply 'capture Chinese nuclear deterrence, rather than know it'.¹⁷ In particular, three features of US nuclear posture were of concern to the Chinese: NMD, the proposed new triad, and US abandonment of the arms control regime.

First, as Jan Lodal explains, if operational, NMD represented the 'ultimate military capability' granting the US a first strike capability to destroy the second strike force of any opponent.¹⁸ This would mean that any state, irrespective of capability, would be vulnerable to US nuclear attack. Worse still, for China, US missile defence plans extended to Japan and Taiwan.¹⁹ Thus, Chinese officials like Liu Jieyi remained unconvinced that China was not the real target of US missile defence plans.²⁰ According to Chinese expert Sun Xiangli, of the Arms Control Division of the IAPCM in Beijing, NMD had the potential to neutralize the Chinese nuclear deterrent.²¹ By the early 2000s, China's deterrent remained based on uncertainty regarding the effectiveness of its retaliatory capabilities. This meant that the US would not know the exact number of Chinese ICBMs and therefore could not be certain that a first strike would be successful.²² Thus, although the US and China shared unbalanced levels of capability, the relationship remained stable. NMD promised to override this stability by rendering China's capacity for retaliation irrelevant. NMD was also of wider concern to the Communist regime for fear (p.124) that NMD perhaps represented a 'trick to bring China into an arms race that would exhaust its resources and harm its economic development'.²³ In addition, NMD, if extended to Taiwan, might degrade China's missile capabilities stationed on the Fujian coast.²⁴ Worse still, Taiwan might consider missile defence a de facto military alliance with the US and, based on this perception, declare its independence from China.²⁵

Rising China and a Weakened Global Nuclear Order in the 2000s

Second, the 2001 US NPR outlined plans for a coercive force based on a new triad of unprecedented nuclear and conventional capabilities with the capacity to destroy previously invulnerable targets. This is problematic, according to Tian Jingmei, of the Arms Control Division of the IAPCM, because the 'new TRIAD blurs the distinctions between nuclear weapons and conventional weapons, making it more likely that the US would employ nuclear forces'.²⁶ Furthermore, as retired PLA General Pan Zhenqiang has suggested, this could undermine the credibility of China's NFU policy by introducing new scenarios whereby the US might use tactical nuclear weapons over Taiwan or conventional weapons against China's ICBM silos.²⁷

Third, there was little to no room for arms control in Bush's nuclear plan. Indeed, US arms control officials in the Bush administration were reported to 'detest the CD'.²⁸ By 2001, Bush had rejected several treaties, including the CTBT and ABM treaty. The Chinese particularly lamented the loss of the ABM, which they considered a 'cornerstone of strategic stability'.²⁹ In May 2002, the US and Russia signed the Strategic Offensive Reductions Treaty (SORT, otherwise known as the Moscow Treaty), but this treaty was ambiguous and open-ended, based on asymmetric reductions, all reversible and favourable to the US.³⁰ From 2003 onwards, written negotiated treaties were, in the words of the US Secretary of Defense, 'ancient history'.³¹ China considered these developments problematic, devaluing the arms control and non-proliferation pillars of nuclear order. Whereas the US had played a positive role in encouraging China's growing engagement with nuclear order in the 1990s, now the US threatened to have the opposite effect.³² China also (p.125) feared that US actions might have wider spillover effects, with other states leaving or losing confidence in the nuclear order.³³

In summary, the 2000s began with a series of challenges to global nuclear order, from proliferation crises to institutional deadlock and changes in US nuclear posture. From China's perspective, the discovery of an old warhead design in Libya that had passed through the A.Q. Kahn network cast, yet

again, its non-proliferation record with Pakistan in the international spotlight. However, far more problematic for Beijing was the unilateral turn in US nuclear posture. This was considered especially destabilizing, devaluing arms control and non-proliferation efforts, as well as refashioning traditional ideas of nuclear deterrence. More concretely, Bush's nuclear plan threatened not only China's deterrent but also Beijing's preferred vision of a more multilateral nuclear order.

Nuclear Strategy: Moving Beyond Retaliation?

In light of the challenges above, especially the changes in US nuclear posture, China could be expected to have reconsidered its nuclear strategy based on retaliation. However, a review of China's nuclear strategy in the 2000s, during which Chinese leadership was transferred from Jiang Zemin to Hu Jintao, suggests continuity rather than change. Only slight, though significant, changes in Chinese declaratory policy emerged, alongside a new internal debate. Here, Beijing's response to changes in US nuclear posture will be considered in terms of declaratory policy, internal debates, and force modernization.

Declaratory Policy

From 2000–3, China offered more transparency regarding the direction and scope of its nuclear weapons strategy. Indeed, for the first time, China's 2000 defence white paper openly stated that its nuclear forces were intended for nuclear deterrence, declaring that 'China maintains a small but effective nuclear counterattacking force in order to deter possible nuclear attacks by other countries'.³⁴ At a press briefing in Beijing on missile defence in 2001, Chinese Ambassador Sha Zukang pointed to 'existing mutual deterrence' between China and the US, stressing that 'we are against NMD, not because we intend to threaten the security of the US with our nuclear weapons. We just hope that the existing mutual deterrence between the two countries (p.126) can be preserved'.³⁵ Then, in 2001, Sha spoke of China's nuclear arsenal as the smallest and least advanced among the five nuclear powers. This estimation was reiterated in 2004, suggestive perhaps that China's nuclear forces numbered less

Rising China and a Weakened Global Nuclear Order in the 2000s

than 200.³⁶ Overall, this transparency about the size of the Chinese arsenal, and the open embrace of nuclear deterrence, could perhaps be understood as part of a wider effort by China to suggest that it should not be a target of or reason for the unilateral turn in US nuclear strategy.

In the latter part of the decade, China continued to offer more detail on its nuclear strategy in defence white papers and through ad hoc comments made by senior Chinese political officials and retired military leaders. In this regard, China's 2006 defence white paper highlighted a 'self-defence nuclear strategy' consisting of two main principles: counter-attack and limited development so as to possess a lean and effective nuclear deterrent.³⁷ Here, counter-attack implies retaliation and thus reinforces the policy of NFU, while a lean and effective force commits China to the limited development of its nuclear arsenal. These terms also featured in China's 2008 defence white paper, which dedicated an entire section to nuclear doctrine, planning during a crisis, and retaliation after a nuclear attack. According to the 2008 paper, should China come 'under a nuclear threat, the nuclear missile force of the Second Artillery Force will . . . get ready for a nuclear counterattack'.³⁸ In addition to white papers, in the last two years, a growing number of comments have been made by Chinese officials and retired PLA leaders reinforcing counter-attack and self-defence. In 2010, at the Nuclear Security Summit in Washington, DC, President Hu Jintao reiterated China's commitment to a nuclear strategy based on self-defence and NFU.³⁹ After the summit, Retired PLA Major General Xu Guangyu elaborated on nuclear strategy in the *Liberation People's Daily*, stating that 'China resolutely adheres to a defensive nuclear strategy'. For Xu, 'the most basic feature of China's nuclear strategy is to be a deterrent but present no threat'.⁴⁰

The emphasis on retaliation is also reflected in Chinese military studies published in the 2000s, including *Science of Second Artillery Campaigns* (2004),⁴¹ *The Science of Military Campaigns/Operational Studies* (2000 and 2006), *Science of Military Strategy* (2005),⁴² and a study in 2001/2 by Xue Xinglin, of China's NDU, titled *Campaign Theory Study*

Guide.⁴³ All these documents argue that China's nuclear strategy should be focused on prevention, survival, and retaliation. No mention is made of tactical nuclear weapons or offensive warfighting capabilities. Instead, these internal documents highlight the need for a second strike force capability, incorporating the principle of 'striking after the enemy has struck'. Emphasis is placed on the survivability of nuclear forces, on self-protection, as well as signalling so as to retaliate in a timely manner to a first strike.⁴⁴ In *Operational Studies*, three tasks for China's nuclear forces are outlined: a willingness to retaliate, the ability to ride out a nuclear attack, and the capability to respond to a nuclear attack.⁴⁵

Internal Academic Discussions of Strategy

Beyond declaratory policy, changes in US nuclear posture sparked a wider 'inside debate about the future nuclear policy in China'.⁴⁶ This debate, among civilian and military analysts in China, offers an additional lens through which to interpret contemporary Chinese nuclear strategy.

In the early 2000s, a diverse set of positions emerged from these discussions. For some, the impact of NMD was deemed as minimal and temporary, to be undone by the next US President.⁴⁷ A second view, popular among a small group of experts in Shanghai, argued that NFU should be discarded, contending that 'if conventional weapons are used against Shanghai or Beijing . . . this might justify a nuclear response'.⁴⁸ This group thus argued that in response to NMD China should develop up to a thousand ICBMs. At the time, a wider questioning of NFU was evident from a small number of military commentators, most infamously Major General Zhu Chenghu, a former dean at China's National Defence University, who suggested, in a personal remark in 2005 that China perhaps ought to consider using nuclear weapons in a conventional crisis over Taiwan. The specific comment was: 'if American's draw their missiles and position-guided ammunition onto the target zone on China's territory, I think we will have to respond with nuclear (p.128) weapons'.⁴⁹ A third position, representative of the majority of Chinese analysts, called for measured improvements to the existing strategy of uncertain retaliation. PLA General Pan argued that

Rising China and a Weakened Global Nuclear Order in the 2000s

NMD was technically unfeasible and therefore NFU would remain a credible aspect of China's strategy.⁵⁰ Tsinghua University Professor Li Bin suggested China simply consider developing mobile missiles and countermeasures to NMD so as to maintain 'a stable if asymmetric nuclear relationship with the US'.⁵¹ A warfighting strategy was considered costly, in terms of security, economics, and image. It would also require a drastic shift in modernization plans.

After the mid-2000s, innovative ideas entered the internal debate. These ideas can be roughly divided into two camps. In the first camp, a number of PLA officers and scientists started to call for a more flexible and credible form of deterrence, based on the development of nuclear weapons with the potential for a tactical role, as well as sea- and air-based nuclear forces.⁵² A leading voice in this regard was former deputy SAC commander, Zhao Xijun, whose work shed light on circumstances under which NFU might be abandoned: in response to a conventional attack on nuclear targets in China; a change in declaratory nuclear policy to bolster leverage in a crisis, for instance over Taiwan; and when national survival is at stake.⁵³

In the second camp, which represents the majority view, emphasis was placed on the distinctiveness of China's nuclear strategy by refusing to attach traditional labels such as minimal deterrence to strategy, emphasizing instead China's reliance on NFU, as well as notions of retaliation and limited development.⁵⁴ A leading voice here was Li Bin, for whom China's nuclear strategy has always been based on the concept of 'counter-coercion' (*fanhe weiya* 反核威压).⁵⁵ This concept does not entail warfighting capabilities, but instead works with NFU and defending China through the threat of retaliation.⁵⁶ According to counter-coercion, China need not reach (p.129) a condition of assured destruction with the US in order to achieve stable deterrence. Instead, China need only be able to retaliate with a few ICBMs. China's nuclear forces can thus remain limited but still deter.

Other voices in this camp include Sun Xiangli of IAPCM, Xia Liping of Tongji University, and PLA Major General Yao Yunzhu of the AMS. In their respective work they have sought

Rising China and a Weakened Global Nuclear Order in the 2000s

to emphasize continuity as well as uniqueness in China's nuclear strategy, based on limited forces, restraint in military modernization, and NFU. For Sun, China's military modernization has always been limited and focused on the development of mobile ICBMs.⁵⁷ Similarly, Xia has argued that China's lean and effective approach to modernization is one of 'utmost restraint'. Moreover, strategy has evolved from countering nuclear blackmail to a minimum type deterrence strategy.⁵⁸ For Yao, China's nuclear force is based neither on denial nor punishment; instead it rests on the 'advantage of uncertainty' not the traditional 'show of force'.⁵⁹ Crucially, then, China is 'willing to accept vulnerability as its NFU policy indicates'.⁶⁰ Limited development is also possible because for China, nuclear deterrence is based not just on numbers but also on the credibility of counter-attack and the survivability of forces.⁶¹

Military Modernization

A third lens through which to examine China's nuclear strategy is the status and future projection of its nuclear force in the context of military modernization. Indeed, in 2009 General Jing Zhiyuan, commander of SAC, emphasized the need to modernize in order to maintain an effective and retaliatory nuclear force.⁶² Yet throughout this period, the US has remained concerned about the ambiguity over the scope, pace, and purpose of China's military modernization. In 2005 there were even reports of infighting between the Pentagon and senior administration officials over this issue.⁶³ This has resulted in widespread speculation in the US that China is fast becoming a (p.130) 'peer competitor' in military terms.⁶⁴ Indeed, relative to past Pentagon assessments of China's military power, the 2008 annual report noted an increase in China's nuclear arsenal by 25 per cent since 2006.⁶⁵

However, at present it is estimated that China has around 240 nuclear warheads, making it one of the smallest nuclear arsenals in the world.⁶⁶ China's nuclear deterrent rests on twenty land-based ICBMs, the DF-5 series first deployed in the 1980s, based in two locations, with the warheads stored separately. This reflects a low-alert status. In 2008, two land mobile solid fuel ICBM systems, the DF-31 and DF-31A, were

Rising China and a Weakened Global Nuclear Order in the 2000s

deployed. The DF-31A series has a range of 12,000 km and could potentially support multiple warheads and penetration aids.⁶⁷ Beyond ICBMs, China has twelve DF-4, and between fifty and one hundred DF-3 and D-21 IRBMs, suggesting a more effective deterrent at a regional level, with reference to Taiwan.

So far, modernization plans have centred on the deployment of the DF-31 and DF-31A. China has also invested in countermeasures against NMD, for example infrared and stealth technology, and in 2008 China made public a system of underground tunnels, known as the 'Great Wall nuclear counterattack project', to ensure the survivability of its force.⁶⁸ Efforts have also focused on the development of a JL-2 SLBM.⁶⁹ Chinese nuclear naval forces currently consist of a single submarine, the Xia—a noisy submarine, of medium-range capacity, currently out of operation. In the late 1980s, China began to develop new submarines, the Type 094 Jin class (with global range) and Type 093 (with regional range). The Type 094 Jin class will likely carry sixteen JL-2 single warhead SLBMs (with 7,200 to 8,000 km range). However, (p.131) at present China has no deployed SLBMs and the 094 Jin class and JL-2 SLBMs are reportedly encountering technical problems.⁷⁰

Based on current plans, then, it would seem that China is only modernizing the means to deliver its nuclear warheads by replacing older, liquid-fuelled ballistic missiles with mobile solid fuel missiles. It does not seem to be designing, testing, or producing any new nuclear designs. Moreover, in spite of these efforts, serious weaknesses in its arsenal remain, notably the lack of an early warning system, the decision to forgo placing multiple warheads (MIRVs) on missiles, and the failure to deploy 094 Jin class and JL-2 SLBMs. In addition, Zhang Hui has recently claimed that China, having halted production of highly enriched uranium and plutonium in the 1990s, has one of the smallest stockpiles of fissile material among the nuclear weapons states, with limited reserves for making new nuclear weapons.⁷¹

Given these weaknesses, pessimists tend to point to non-nuclear aspects of China's military modernization as

threatening, in particular advanced conventional weaponry, such as short-range ballistic missiles (DF-11 and DF-15), anti-ship ballistic missiles (DF-21C and DF-21D), land attack cruise missiles (DH-10), stealth technology, and an aircraft carrier.⁷² Space is another area of concern following the PLA's Anti-Satellite Missile Test (ASAT) on 11 January 2007.⁷³ In this vein, Desciscio has noted the potential benefits of ASAT testing in improving ICBMs and targeting.⁷⁴

However, China's nuclear force modernization indicates no drastic deviation from a strategy based around retaliation. As Li Bin and Wu Rui argue, China seeks to maintain a strategic balance rather than numerical and qualitative parity with the US.⁷⁵ In other words, China is not attempting to match US nuclear forces and is quite eager to avoid an arms race with the US.⁷⁶ In 2010, Chinese Foreign Ministry spokeswoman Jiang Yu reiterated China's commitment to limited development, telling journalists that Beijing 'exercises extreme restraint over developing nuclear weapons and we will continue (p.132) to maintain our nuclear power at the lowest level, only for national security needs'.⁷⁷

In summary, Chinese approaches to nuclear strategy and force modernization have remained remarkably unchanged despite the challenges posed by the unilateral turn in US nuclear posture. In declaratory policy, discussions of nuclear deterrence have become more transparent and from internal debates a majority view has emerged arguing that China should maintain retaliation as the basis of its nuclear strategy.

Cautious Engagement with Nuclear Order

China has also used the arms control and non-proliferation regime to voice its concern over not just US nuclear posture but wider institutional and proliferation challenges facing nuclear order. Indeed, institutional paralysis and proliferation crises have arguably deepened mid-way through the decade, particularly following the failure of the NPT Review Conference in 2005 and North Korea's nuclear tests in 2006, 2009, and 2013. In response to these developments, China has adopted a mixed approach. Two aspects of this behaviour will be explored here: continued emphasis on multilateral efforts,

Rising China and a Weakened Global Nuclear Order in the 2000s

highlighting growing Chinese concern over counter-proliferation and pre-emption in tackling proliferation issues; and a 'wait and see' approach to the FMCT and CTBT.

Multilateral Efforts

Initially, from 2000-5, numerous Chinese officials like Ambassador Zhang Yishan called for international efforts to repair the nuclear order and maintain global strategic balance.⁷⁸ Calls were also made by Chinese officials for a ban on the development of new nuclear weapons designs.⁷⁹ According to China's Ambassador for Disarmament, Hu Xiaodi, 'no research and development work should be conducted into low-yield nuclear weapons or "mini-nukes" aimed at probable battlefield use' and efforts should be made to prevent an arms race in space.⁸⁰ China's white papers on non-proliferation and arms control in 2003,⁸¹ 2005,⁸² and 2007⁸³ referred to the shifts that had taken place in US nuclear strategy, with the 2003 paper stating that 'unilateralism and double standards must be abandoned, and great importance should be attached and full play given to the role of the United Nations'.⁸⁴

China reaffirmed commitments to institutional aspects of nuclear order, reforming national regulations on export control,⁸⁵ entering into dialogue with international export control groups like the Wassenaar Arrangement, and even joining the Nuclear Suppliers Group (NSG) in 2004. During this period, China also deepened its participation in security dialogues with a number of developed countries, including the US, culminating in an 'experts talk' between both countries on nuclear strategy in Washington, DC in 2009.⁸⁶ In addition, China was actively engaged in promoting non-proliferation and arms control norms. According to Hu Xiaodi, 'these norms are good for everyone, including China'.⁸⁷ Later, in 2003, China became host of the Six Party Talks to resolve the North Korean nuclear crisis;⁸⁸ sponsored a seminar on arms control and disarmament with the United Nations; signed a joint declaration in 2004 on non-proliferation and arms control with the European Union;⁸⁹ and in 2005 supported UNSCR 1540 on non-proliferation.⁹⁰

Rising China and a Weakened Global Nuclear Order in the 2000s

Of the above commitments, China's decision to host the Six Party Talks represented an active form of engagement in defending the non-proliferation pillar of nuclear order.⁹¹ In tackling this crisis, the international community initially pinned considerable pressure and hope on China to turn this threat to nuclear order around. In hindsight, this reflected an inflated reading of (p.134) China's influence over North Korea. Nevertheless, on this issue China considers itself to have made a 'significant contribution to the stability of the Northeast Asian situation'.⁹² Thomas J. Christensen, former Deputy Assistant Secretary of State for East Asian and Pacific Affairs during the Bush administration, adds that 'almost none of the progress to date in the talks would have been possible without China's active engagement in the process'.⁹³ More specifically, in late 2006 and early 2007 China exerted economic pressure on North Korea, which led to the disablement of nuclear facilities at Yongbyon. China's assertiveness came amid sharp reaction to North Korea's testing of a nuclear weapon in 2006, for which Beijing reportedly received only a twenty-minute warning.⁹⁴ China subsequently supported UNSCR 1695, which imposed technology transfer and financial sanctions on North Korea, and Hu Jintao labelled the test a 'flagrant' (*hanran* 悍然) act that China was resolutely against.⁹⁵ These represented strong words from China and a serious effort to uphold the non-proliferation norm. Since then the Six Party Talks have been suspended, and North Korea has conducted additional nuclear tests in 2009 and 2013. China responded to the second nuclear test in 2009 by voting in favour of UNSCR 1874 but refrained from using strong diplomatic language. Instead, China called for the resumption of the Six Party Talks but received criticism, particularly in the US, for deepening its economic and political ties to North Korea and for not adopting a stronger stance to pressure the regime back to the negotiating table.⁹⁶ China's response to North Korea's third nuclear test, conducted on 12 February 2013, has been slightly stronger.⁹⁷ In this regard, China has supported UNSCR 2094, which makes it harder for the North Korean regime to transfer cash, and prohibits the sale of luxury goods. Additional Chinese efforts include publicly issuing a comprehensive list of prohibited export items to North Korea

Rising China and a Weakened Global Nuclear Order in the 2000s

in September 2013, and freezing North Korean bank accounts in a number of major Chinese banks.⁹⁸ (p.135)

In contrast, on the Iranian nuclear issue China has largely abstained from active involvement. In fact, for some China's lack of action represents a step backwards in terms of its engagement with the non-proliferation regime, with Beijing deliberately delaying and weakening the effect of sanctions on Iran, in particular UNSCR 1929, which applied a fourth round of sanctions in June 2010.⁹⁹ In general, China remains unconvinced of Iranian nuclear weaponization efforts, and considers sanctions a poor tool in countering said activities if they indeed exist.¹⁰⁰ Chinese analysts like Shen Dingli argue that should harder evidence emerge of Iranian nuclear weapons development, China will be placed in an increasingly difficult position.¹⁰¹ So far, however, China has sought to emphasize the pursuit of multilateral E3+3 diplomacy (UK, France, Germany, Russia, China, and US) to resolve this issue, insisting throughout on the sovereign right of all countries to nuclear energy. In this regard, in November 2013 China was part of the so-called P5+1 negotiations (between Iran and the US, Russia, China, the UK, France, and Germany) that led to the Geneva interim deal on Iran's nuclear programme.¹⁰²

As will be argued later in this chapter, on this particular issue China is constrained by a number of important domestic interests. More fundamentally, Beijing sees the Iranian nuclear question through a different lens to Washington, attributing the crisis to mistakes in US foreign policy, from the 1979 revolution to Bush including Iran in an 'axis of evil', as well as what Beijing perceives to be genuine concerns in Iran over regional security, particularly vis-à-vis Israel.¹⁰³

Moreover, given that China officially remains unconvinced of Iranian nuclear weaponization efforts, this means that it does not share the same sense of urgency over this issue (and the implied challenge it poses to global nuclear order) as the US.

China's dislike of sanctions as a tool to combat nuclear proliferation extends beyond the North Korean and Iranian issue. In a general sense, China considers sanctions unnecessarily intrusive and ineffective tools, all part of a US-led counter-proliferation strategy to curtail nuclear weapons

Rising China and a Weakened Global Nuclear Order in the 2000s

development.¹⁰⁴ China's decision not to participate in the PSI, launched (p.136) by the Bush administration in 2003, also reflects its attitude to coercive sanctions.¹⁰⁵ Like sanctions, PSI acts as a pre-emptive/counter-proliferation measure by interdicting ships at sea suspected of transporting dual-use sensitive technology and equipment. China objects to the PSI on the grounds that it is a selective initiative led by the US, acting on shady international legal grounds, and targeting specific ships. It also bypasses the UN Security Council and prioritizes the use of force to counter nuclear proliferation.¹⁰⁶ In essence, from the Chinese perspective, by promoting double standards and embedding discrimination into global nuclear order PSI is counterproductive to the goal of non-proliferation.¹⁰⁷

Reservations Over FMCT and CTBT

Elsewhere during this period, in relation to treaty commitments, China approached with caution negotiations towards an FMCT, initially linking its position to a treaty banning weapons in space (known as the Prevention of Arms in Outer Space Treaty, or PAROS).¹⁰⁸ Indeed, in the early part of the decade prevention of an arms race in space arguably became the main goal of China's arms control and non-proliferation policy, overshadowing all other aspects. Between 2000 and 2004 China even abandoned efforts to achieve an international NFU agreement, instead issuing working papers to the CD for the completion of PAROS.¹⁰⁹ According to Medeiros, in linking PAROS to an FMCT the Chinese were 'intentionally obstructionist' and driven by an 'anti-NMD campaign in the Conference on Disarmament'.¹¹⁰ Eventually, by 2003, China dropped the linkage between the FMCT and PAROS. However, scepticism remains even today over China's commitment to an FMCT. Although China has maintained official support for an FMCT since 1997 and discontinued the production of fissile material, it has refrained from offering (p.137) an official moratorium. More recently, in June 2009, China was faulted for delaying negotiations over procedural issues at the CD, where an FMCT is likely to be negotiated.¹¹¹

The CTBT represents another area of relative inaction from Beijing. China has so far failed to ratify this treaty, despite

periodically declaring its intention to do so. In 2003, there were high hopes for ratification of the treaty when China set up a national preparatory authority for implementation of the CTBT, established International Monitoring System facilities, and co-hosted a regional workshop for the CTBT.¹¹² However, it would seem that US rejection of the CTBT during the Bush administration was a major setback that had, according to Chinese official Wang Guangya, 'cast a dark shadow on the treaty's entry into force'.¹¹³ Similarly, China remains concerned by the fact that India resides outside the CTBT. Given the perceived high cost of the CTBT to China's nuclear deterrent, some have observed that Chinese delegates were actually 'relieved' the US would decide against ratification.¹¹⁴ Others have pointed to deficiencies in the treaty, notably the lack of an NFU provision and technical difficulties for certain countries to match international monitoring standards.¹¹⁵

In sum, in the 2000s China's engagement with institutional aspects of nuclear order has been cautious and incomplete. On the one hand, China has gone so far as to defend the non-proliferation pillar of nuclear order by hosting the Six Party Talks. Such behaviour reinforces China's long-held vision of a more representative global nuclear order. On the other hand, China is not a member of PSI and dislikes the growing use of sanctions, considering these tools discriminatory and destabilizing to nuclear order. China has also remained largely unhelpful over the Iranian nuclear issue, as well as frustrating, at times, discussions of an FMCT at the CD, and failing, as yet, to ratify the CTBT.

Understanding China's Engagement in the 2000s

China's response to the crisis in global nuclear order has been explored here in terms of the impact of changes in US nuclear posture on China's nuclear (p.138) strategy, as well as Beijing's approach to proliferation crises and institutional aspects of nuclear order. On both fronts, China's behaviour reflects continuity rather than change. China maintains a nuclear strategy based on retaliation, and remains engaged with nuclear order, making clear, as in the past, its preference for a more multilateral order.

Rising China and a Weakened Global Nuclear Order in the 2000s

In understanding the continued commitment to retaliation in nuclear strategy, domestic variables related to economics and technology are useful. Internal discussions are in keeping with China's original strategy of uncertain retaliation, established in the 1980s. The emphasis placed on uncertainty, including the potential pursuit of more assured forms of retaliation,¹¹⁶ preserves NFU and demands no drastic change to China's limited nuclear force modernization plans. Consequently, retaliation is a cheaper and less provocative strategy compared to warfighting, which is more likely to spark an arms race with the US. According to Gu Dexin and Niu Yongjun of China's NDU, this approach complements economic and political goals but also reflects a new external reality in which China does not need a strategy based on assured destruction to deter other states. All that is required for nuclear deterrence is the ability to threaten a few cities.¹¹⁷

China's decision to continue modernizing its nuclear forces has both a technical and a security explanation. As to the technical side, China has a history of slow nuclear modernization. It was not until the 1980s, with the completion of an ICBM and SLBM programme, that China for the first time satisfied the very basic requirements of nuclear deterrence. Consequently, the starting point for China's modernization is extremely low relative to other nuclear weapons states.¹¹⁸ In terms of security and safety, all nuclear weapons states at some point have to modernize their nuclear arsenals. In this vein, the UK recently decided to renew its Trident programme, and powerful voices in the US have called for modernization.¹¹⁹ Ye Ruan, former Vice President of the China Arms Control and Disarmament Association (CACDA), thus argues that critics of China's modernization ignore 'a universal rule that strengthening and modernizing national defence is a key guarantee for protecting a country's security'.¹²⁰

In understanding China's uneven engagement with non-proliferation and institutional aspects of nuclear order in the 2000s, considerations of external (p.139) security are especially relevant. China's initial switch in focus to PAROS, and the linking of this to an FMCT, perhaps reflected genuine

Rising China and a Weakened Global Nuclear Order in the 2000s

concern over the weaponization of space.¹²¹ Since then, China's lack of assertiveness over FMCT negotiations and CTBT ratification reflects long-term security concerns: given China's limited stockpile of fissile material an FMCT would likely place far-reaching restrictions on the future size and scope of China's nuclear arsenal.¹²² Similarly, CTBT ratification could prove restrictive because China has a limited amount of nuclear testing data at its disposal relative to the original five nuclear weapons states. China has conducted only a small number of nuclear tests (forty-five), equal in number to the UK but far less than the US (1,032), Russia/former Soviet Union (715), and France (210).¹²³ In addition, shifts in US nuclear strategy have created an external security environment not conducive to deeper institutional commitments. For example, neither the US nor India have ratified the CTBT. More generally, from the Chinese perspective the shift to pre-emption and counter-proliferation in US nuclear policy (with the growing use of sanctions and mechanisms like PSI) reflects a negative trend moving away from a multilateral nuclear order to an order based on nuclear hegemony.

Elsewhere, China's decision to host the Six Party Talks from 2003 to 2009 can be understood initially in terms of fears of US military strikes against North Korea in 2003 when the regime withdrew from the NPT; the continuing rationale that North Korea's nuclear and missile activities prompts US theatre missile defence plans in Northeast Asia; and in the longer term, the potential loss of a security buffer, were the North Korean regime to fail, to US armed forces stationed in South Korea. In addition, internal security concerns might have contributed to the decision to host the talks, since regime collapse in North Korea would likely lead to a humanitarian crisis and the influx of refugees into northern regions of China such as Dandong.¹²⁴ Similarly, since 2009 external and internal security concerns account for the toning-down in China's assertiveness over this issue, with Beijing prioritizing future relations with the North (and its new leadership) and stability on its border in Dandong over the denuclearization of the peninsula.¹²⁵ (p.140)

Rising China and a Weakened Global Nuclear Order in the 2000s

Variables associated with image offer additional insight into China's decision to host the Six Party Talks. As host, China indicated its support for non-proliferation at a time when its past proliferation record vis-à-vis Pakistan was again under scrutiny following the discovery of a 1960s Chinese warhead design that had passed through the A.Q. Khan network into Libya. More generally, leadership was intended to allay regional and global fears over China's rapid economic and military growth,¹²⁶ as well as respond to calls, particularly from the US, for it to be a more responsible stakeholder in international affairs.¹²⁷ However, as with security concerns, image initially served as a motivating factor for Chinese action, but it has since had the opposite effect. Where once the Six Party Talks had pride of place in China's foreign policy record, with the stalling of talks since 2009 and the intransigence displayed by North Korea, including a third nuclear test in 2013, this issue has become an irritant and a disappointment to the Chinese government. Over Iran, image concerns may not explain China's policy though they can be used to justify it, where Beijing has sought to reinforce the peaceful right to nuclear energy and in the process appeal to non-aligned states, as well as encourage an international approach to solving this issue.¹²⁸ However, China's lack of action over the Iranian nuclear crisis throughout most of the 2000s suggests that image is insufficient in accounting for its behaviour. Instead, considerations of national economic development, in particular extensive investments in Iranian energy resources, have constrained China.¹²⁹ Some analysts have even suggested that a nuclear Iran is in China's interest, preventing US control of Persian Gulf oil, and that sanctions inadvertently benefit China by providing an economic vacuum of low competitiveness for China to fill.¹³⁰

In summary, it would seem that self-interested concerns related to security and economic development shed important analytical light on the cautious nature of China's engagement: whether this is because of deeper treaty commitments, where an FMCT and ratified CTBT would place greater restrictions on China's limited nuclear arsenal and stockpile; or in opposition to tough sanctions on North Korea and Iran, where the former might alienate relations and contribute to regime

collapse on its borders, and the latter might damage Chinese commercial and energy investments deemed (p.141) critical to national development. On a more positive note, considerations of international image still prove influential in driving Chinese engagement, for instance in the decision to host the Six Party Talks. However, it should be noted that in assuming this role, one of the best examples of positive Chinese engagement with nuclear order in this period, China's action did not undermine self-interests related to security. In fact, it would seem that where self-interest might conflict with considerations of non-proliferation, as it has done on the Korean Peninsula nuclear question since 2009, the former is likely to win out.¹³¹ However, this is not to say that China's level of engagement with global nuclear order boils down to whether it is in its interest to engage positively or not with that order. The reality is a lot more complicated. Both Chinese action on multilateral issues of a universal nature, as well as inaction elsewhere, for instance over PSI, reflect a preference driving Chinese engagement since the 1980s for a more representative global nuclear order.

Repairing Global Nuclear Order

In the late 2000s, several initiatives have emerged in an effort to either repair or reconstitute global nuclear order. The first initiative, with worldwide appeal, at least among governmental elites in most nuclear weapons states, is a 'nuclear spring' initiated by US President Obama in 2009.¹³² Chiefly focused on restoring confidence in nuclear order, major aspects of this initiative included three important developments by April 2010: revised US nuclear, ballistic missile defence, and space posture reviews; a new START treaty between the US and Russia; and a Nuclear Security Summit. Added to this, the NPT Review Conference in May 2010 fared much better than the previous one in 2005.¹³³ A second and third initiative call respectively for 'global zero' and a 'nuclear weapons free world'.¹³⁴ Of these initiatives, the first is focused on shoring up the existing nuclear order, whereas the second and third seek to transform nuclear order into a non-nuclear order. Neither initiative enjoy universal support—the nuclear free world idea, for instance, has support in the UK, Japan, and

Rising China and a Weakened Global Nuclear Order in the 2000s

Australia, but in France the idea is vehemently rejected. (p.142)

China's response to these efforts has largely been positive, welcoming the Obama agenda and the call for a world free of nuclear weapons.¹³⁵ However, for Beijing the idea driving these initiatives—global nuclear disarmament—is an old one. As early as the 1950s, China outlined its support for disarmament by promoting the Stockholm Appeal, and supporting Soviet disarmament proposals, even calling for a world disarmament conference on this topic in 1963 and 1964. Moreover, since 1964 disarmament has remained a key component of its declaratory nuclear policy.

China has nevertheless taken this opportunity to further underscore its strong support for nuclear disarmament. For instance, in September 2009, at a special session on nuclear weapons issues at the United Nations General Assembly, Chinese President Hu Jintao outlined a 'five-point nuclear proposal' to realize a world free of nuclear weapons. These five points included: a need to 'maintain global strategic stability and vigorously advance nuclear disarmament'; 'abandon the nuclear deterrence policy based on first use'; 'consolidate the nuclear non-proliferation regime; 'the right of all countries to the peaceful use of nuclear energy'; and lastly, develop 'strong measures to enhance nuclear security'.¹³⁶ Chinese experts have also contributed to the debate by focusing on de-emphasizing the value of nuclear weapons and offering a number of steps to realize this goal: negative security assurances, an international NFU treaty, de-alerting nuclear forces, withdrawing nuclear forces deployed abroad, and an end to the production of new nuclear weapons.¹³⁷ Absent from these discussions is the question of timing and at what numbers Beijing would feel comfortable participating in multilateral negotiations to reduce nuclear arsenals.¹³⁸ China has instead insisted that the US and Russia bear 'special responsibility' as the oldest and largest nuclear weapons states to lead nuclear reductions, and that for China, as a small nuclear weapons state, it would be unrealistic and damaging to the credibility of its nuclear deterrent to engage too early in this process.¹³⁹ In this light, (p.143) China was initially a reluctant participant in the P-5 conferences on

Rising China and a Weakened Global Nuclear Order in the 2000s

multilateral arms control that have taken place in London (2009), Paris (2011), Washington, DC (2012), Geneva (2013), and Beijing (2014).¹⁴⁰ However, China has since assumed a proactive role in the P-5 process by taking the lead in devising a glossary of nuclear terms.¹⁴¹

Elsewhere, China has invested in the nuclear security aspect of the Obama agenda, using it as a platform to improve its image as a nuclear weapons state.¹⁴² Since 2006, China has been a founding member of the Global Initiative to Combat Nuclear Terrorism and has engaged in a plethora of related activities: revising national guidelines on the physical protection of nuclear facilities in 2008, ratifying the amendment of the Convention on the Physical Protection of Nuclear Materials in 2009 as well as the International Convention for the Suppression of Acts of Nuclear Terrorism in 2010, and signing the Practical Arrangement in the Field of Nuclear Security with the IAEA.¹⁴³ At the 2010 Washington Nuclear Security Summit, a Memorandum of Understanding was signed between the US National Nuclear Security Administration and China's Atomic Energy Agency on nuclear security. This resulted in a commitment to build a nuclear security centre for excellence in Asia, to open in 2015, to train custom officials on the detection of the trafficking of nuclear materials.¹⁴⁴

Despite China's embrace of the nuclear security agenda, Beijing considers the more ambitious aspects of the Obama agenda and the goal of a nuclear free world problematic. Three sets of concerns drive China's position. First, given the difficulties in passing the new START agreement in the US, it is unclear to the Chinese whether Congress is fully sold on the agenda put forward by the Obama administration and the associated steps that would need to be taken, such as ratification of the CTBT.¹⁴⁵ Second, the Obama agenda itself does not seem up to the task. More concretely, the 2010 US NPR does not embrace possible steps to realize a nuclear weapons free world, (p.144) such as NFU.¹⁴⁶ The 2010 NPR also highlights a growing reliance on missile defence and advanced conventional capabilities (for example Global Prompt Strike, or GPS) as a way to de-emphasize nuclear

Rising China and a Weakened Global Nuclear Order in the 2000s

weapons. As Lavina Lee points out, such an approach acts as a double-edged sword: missile defence and systems like GPS are considered by Beijing as destabilizing to a small nuclear deterrent based on NFU, thereby complicating its participation in multilateral arms control and disarmament.¹⁴⁷ Furthermore, Chinese analysts fear that US-extended nuclear deterrence commitments continue to perpetuate nuclear deterrence, undermining the disarmament goal.¹⁴⁸ Third, more widely, China has experienced an erosion of confidence in US commitments to arms control and non-proliferation following the US decision to withdraw from the ABM treaty in 2003, the failure to ratify the CTBT, and a growing preference for counter-proliferation. China sees these developments as negative and not conducive to realizing a world without nuclear weapons.

In particular, China points to the 2008 US-India civilian nuclear deal¹⁴⁹ as counterproductive to repairing the nuclear order and its position within that order. For China, the deal was problematic from many angles. First, the deal exposed double standards exercised by the US, since the exemption made by the NSG was only granted to India, a country that has not signed the NPT or the CTBT.¹⁵⁰ Despite this, the US deemed India sufficiently responsible to bend NSG rules.¹⁵¹ Second, given that the deal went some way to grant India recognition as a responsible nuclear weapons state, it undermined not only nuclear order but also China's status as the sole recognized nuclear weapons state in the region.¹⁵² Third, more widely, the deal has had a damaging effect on the non-proliferation regime, undermining for instance the CTBT since the deal is weak on testing and safeguards. In turn, this has added momentum to the pursuit of similar deals such as the Pakistan-China nuclear reactor deal, a deal also likely to undermine the institutional basis of nuclear order.¹⁵³ Fourth, the US-India deal was perceived in Beijing as part of a wider attempt by the US to contain a rising China. According to Shen Dingli the (p.145) deal demonstrates that 'the United States has decided that using India to check and balance China is of more importance than non-proliferation'.¹⁵⁴ In addition, from a security standpoint, the deal will allow India

to complete its nuclear triad and develop minimal deterrence against China.¹⁵⁵

In sum, China has welcomed initiatives to repair the nuclear order in the late 2000s, in particular efforts related to nuclear security. However, Beijing remains unconvinced by the level of US commitment to this task, and is concerned by a number of destabilizing developments, most notably the 2008 US-India nuclear deal, which poses challenges not just to the future of nuclear order but also to China's own position in that order.

Conclusion

In the 2000s, global nuclear order has faced a number of challenges, from proliferation crises and institutional deadlock, to changes in US nuclear posture. Of these, changes in US nuclear posture have proved particularly problematic for China in terms of its own nuclear deterrent but also for fear that the nuclear order was moving away from the more representative order it preferred, towards a unilateral order based on US nuclear hegemony. Despite these difficulties, China has contributed to maintaining nuclear order by remaining committed to a nuclear strategy based on retaliation, and through continued engagement with institutional aspects of the nuclear order, albeit at a sometimes chequered pace.

China's decision to continue with a retaliation-based nuclear strategy was a positive development, reinforcing the deterrence pillar of nuclear order. Aspects of Bush's nuclear plan, such as NMD and the new TRIAD, undermined China's nuclear deterrent. Despite this, Chinese approaches to nuclear strategy and modernization have remained remarkably unchanged. In declaratory policy, Chinese nuclear strategy has become more transparent, and from internal debates a majority view has emerged to remain with retaliation. This reliance on retaliation continues to offer an alternative way of thinking about nuclear deterrence to notions of assured destruction by demonstrating that, even as a rising power, China can have credible nuclear deterrence at low numbers and under a condition of NFU.

Rising China and a Weakened Global Nuclear Order in the 2000s

In addition, China has continued to engage with multilateral aspects of nuclear order, even going so far as to defend the non-proliferation pillar of that order by hosting the Six Party Talks from 2003 to 2009. However, China (p.146) has refrained from participation in the PSI and the promotion of sanctions to combat nuclear activities in Iran and North Korea, considering these part of a counter-proliferation and pre-emption strategy that is destabilizing to nuclear order. Beyond proliferation crises, China's caution has extended to negotiations on an FMCT, which has remained stalled at the CD, and the CTBT, which it has yet to ratify. Self-interested domestic considerations of security and economics play a significant role in guiding this inaction. Taken together, China's engagement as a rising power in the 2000s has both positive and negative implications for nuclear order. On the one hand, China's decision to host the Six Party Talks and remain engaged in a number of multilateral efforts has served to reinforce nuclear order. On the other hand, Chinese inaction over the Iranian nuclear crisis, the FMCT, and CTBT ratification has undermined the non-proliferation pillar of nuclear order.

In the late 2000s there have been concerted efforts to repair global nuclear order, led by the Obama administration. China officially supports these efforts but remains unconvinced of US commitment, given the shift towards counter-proliferation and pre-emption in US nuclear thinking and the 2008 US-India civilian nuclear deal. China is also wary of Western intentions to integrate Beijing too early into a multilateral arms control and disarmament process, which it perceives as damaging to its small nuclear deterrent. More generally, China does not share the same urgency as the US over the threat posed by Iranian nuclear activities to nuclear order; nor does it agree with prescribed methods, such as tough sanctions, to deal with the North Korean nuclear weapons programme. Despite these misgivings and areas of disagreement, China recognizes that the nuclear order is in trouble. Beijing has thus invested in the nuclear security agenda, and has taken these initiatives to repair nuclear order as an opportunity to reiterate its own ideas regarding nuclear deterrence and disarmament, in particular NFU, which might be conducive to realizing a world

Rising China and a Weakened Global Nuclear Order in the 2000s

free of nuclear weapons. Placed in wider historical context, since 1949 China has come a long way: from challenging nuclear order and offering its own model during the Maoist era, to promoting a more multilateral nuclear order in the 1980s and 1990s, and ultimately emerging as a pivotal actor in the process of repairing that order in the 2000s.

Notes:

(1) Walker, 'Nuclear Order and Disorder', p. 722; Commission of Eminent Persons on the Future of the Agency, 'Reinforcing the Global Nuclear Order for Peace and Prosperity, the Role of the IAEA to 2020 and Beyond'; and Allison and Zedillo, 'The Fragility of the Global Nuclear Order'.

(2) On these, see Walker, 'Nuclear Enlightenment and Counter-Enlightenment', pp. 431-53; and David Albright and Corey Hinderstein, 'Unraveling the A.Q. Khan and Future Proliferation Networks', *The Washington Quarterly*, Vol. 28, No. 2, 2005, pp. 111-28.

(3) The designs were surrendered by Libya as part of a denuclearization process. This exposure shed further light on China's complicated past with Pakistan, with negative implications for its image as a nuclear weapons state. See *Los Angeles Times*, 'Chinese Warhead Drawings Among Libyan Documents', 16 February 2004. According to David Albright, the design was for a Chinese warhead tested in 1966 that Pakistan had somehow acquired from the Chinese in the early 1980s for its own nuclear weapons programme. See 'Swiss Smugglers Had Advanced Nuclear Weapons Designs', ISIS Report, 16 June 2008.

(4) Rose Gottemoeller, 'Nuclear Necessity in Putin's Russia', *Arms Control Today*, April 2004.

(5) Liu Jieyi, 'Strengthening International Cooperation, Safeguarding World Security', speech at the 12th International Arms Control Conference sponsored by the Sandia National Laboratory, 19 April 2002.

(6) Zhang Yishan, statement by head of the Chinese delegation at the Conference on Facilitating the Entry into Force of the CTBT, 22 September 2005.

Rising China and a Weakened Global Nuclear Order in the 2000s

- (7) Bruce Blair, 'START III, Nuclear War Plans and the Cold War Mindset', *The Defense Monitor*, 2000.
- (8) Tian Jingmei, 'The Bush Administration's Nuclear Strategy and its Implications for China's Security', CISAC Working paper, Stanford University, March 2003, p. 4.
- (9) *Arms Control Today*, 'Presidential Election Forum: The Candidates on Arms Control', September 2000.
- (10) Robert Kerrey and William Hartung, 'Toward a New Nuclear Posture: Challenges for the Bush Administration', *Arms Control Today*, April 2001.
- (11) *The Economist*, 'Bush's Nuclear Umbrella', 4-11 May 2001.
- (12) Jim Garamone, 'Rumsfeld Details DoD Goals', *PM*, January-February 2001.
- (13) Nikolai Sokov, 'The Fate of Russian Nuclear Weapons: An Anticlimax on August 11', CNS report, 2002; and Joanne Tompkins, 'How US Strategic Policy is Changing China's Nuclear Plans', *Arms Control Today*, January/February 2003.
- (14) Zhu Feng, 'Nuclear Posture Review and China: Why the United States' Re-Introduction of China's "Nuclear Deterrent" Policy?' *Studies of International Politics*, No. 2, May 2002, pp. 82-91.
- (15) Kristensen et al., *Chinese Nuclear Forces and US Nuclear War Planning*, p. 19.
- (16) Liu Huaqiu, *Arms Control and Disarmament Handbook*, p. 3.
- (17) Wu Rui, 'American Perspectives About Chinese Nuclear Policy: Report of the Interviews in Washington DC', 2003.
- (18) Jan Lodal, 'Pledging No First Strike: A Step Toward Real WMD Cooperation', *Arms Control Today*, 2001.
- (19) Evan Medeiros *Reluctant Restraint*, pp. 181-4.

Rising China and a Weakened Global Nuclear Order in the 2000s

(20) Liu Jieyi, statement at the 4th China-US Conference on Arms Control, Disarmament and Non-Proliferation, 14 March 2002.

(21) Sun Xiangli, 'China's Nuclear Strategy: Nature and Characteristics', *World Economics and Politics*, No. 9, 2006, pp. 23-9.

(22) Li Bin, 'The Effects of NMD on Chinese Strategy', pp. 49-52.

(23) Li Bin, Zhou Baogen, and Liu Zhiwei, 'China Will Have to Respond', *Bulletin of the Atomic Scientists*, Vol. 57, No. 6, 2001, pp. 25-8.

(24) IISS, *The Military Balance 1999-2000* (London: IISS, 2000), p. 171.

(25) Kori Urayama, 'China Debates Missile Defence', *Survival*, Vol. 46, No. 2, Summer 2004, pp. 123-42.

(26) Tian, 'The Bush Administration's Nuclear Strategy and its Implications for China's Security', p. 6.

(27) Pan Zhenqiang, 'On China's No First Use of Nuclear Weapons', Pugwash Conferences on Science and World Affairs, 15 November 2002.

(28) Wade Boese, 'Chinese Concession Fails to End UN Disarmament Conference's Stalemate', *Arms Control Today*, October 2003.

(29) *Xinhua*, 'China Urges Preservation of ABM Treaty', 21 February 2001.

(30) National Defense Resources Council, 'The Moscow Treaty's Hidden Flaws', February 2003.

(31) Garamone, 'Rumsfeld Details DoD Goals'.

(32) Medeiros, *Reluctant Restraint*, p. 175.

(33) Li Bin, 'China: Weighing the Costs', *Bulletin of the Atomic Scientists*, Vol. 60, No. 2, 2004, pp. 21-3.

Rising China and a Weakened Global Nuclear Order in the 2000s

(34) Information Office of the State Council of the PRC, *China's National Defense in 2000*.

(35) Statement by Ambassador Sha Zukang at an NMD briefing, Beijing, China, 14 March 2001.

(36) Jeffrey Lewis, 'Nuclear Numerology Chinese Style', *Arms Control Today*, Letters to the Editor, March 2005; and Lewis, *Minimum Means of Reprisal*, p. 54.

(37) Information Office of the State Council of the PRC, *China's National Defense in 2006*.

(38) Information Office of the State Council of the PRC, *China's National Defense in 2008*.

(39) *Xinhua*, 'Chinese President Urges Concerted Action to Enhance Nuclear Security', 14 April 2010.

(40) Chris Buckley, 'China Military Paper Spells Out Nuclear Arms Stance', *Reuters*, 22 April 2010.

(41) People's Liberation Army, *Science of Second Artillery Campaigns* (Beijing: Jiefangjun Chubanshe, 2004), pp. 297-316.

(42) Peng Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005).

(43) For more on these studies, see M. Taylor Fravel and Evan S. Medeiros, 'China's Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure', *International Security*, Vol. 35, No. 2, Fall 2010, pp. 75-80.

(44) Medeiros, 'Evolving Nuclear Doctrine', pp. 63-4.

(45) Quoted in Lewis, *Minimum Means of Reprisal*, p. 42.

(46) Kristensen et al., *Chinese Nuclear Forces and US Nuclear War Planning*, p. 32.

Rising China and a Weakened Global Nuclear Order in the 2000s

(47) See Tompkins, 'How US Strategic Policy is Changing China's Nuclear Plans'; and Wang Fan, 'Nature of Preemption', *Beijing Review*, 30 January 2003, pp. 11-12.

(48) Tompkins, 'How US Strategic Policy is Changing China's Nuclear Plans'.

(49) Ting Wai, 'The Potential Flashpoint: Taiwan', in Bolt and Willner, *China's Nuclear Future*, pp. 143-66; and Bruce G. Blair, 'General Zhu and Chinese Nuclear Preemption', *China Security*, No. 1, 2005, pp. 15-22.

(50) Pan, 'On China's No First Use of Nuclear Weapons'.

(51) Li, 'The Effects of NMD', p. 52.

(52) See, Zhang Peimin, 'How to Develop the Means of Strategic Deterrence', *Military Art*, 2004, p. 34.

(53) Zhao Xijun, *Intimidation Warfare: A Comprehensive Discussion of Missile Deterrence* (Beijing: Guofang Daxue Chubanshe, 2003), pp. 42-8, 160, and 173.

(54) Wang Zhongcun, *Nuclear Weapons, Nuclear Powers and Nuclear Strategy* (Beijing: Xiandai Chubanshe, 2007), pp. 214 and 217. See also Lora Saalman, 'How Chinese Analysts View Arms Control, Disarmament, and Nuclear Deterrence after the Cold War', in Cristina Hansell and William C. Potter, eds., *Engaging China and Russia on Nuclear Disarmament*, CNS Occasional Paper, No. 15, 2009, pp. 47-71.

(55) Li Bin, 'China's Nuclear Strategy', paper presented at the Carnegie International Nonproliferation Conference, Washington, DC, 25-6 June 2007.

(56) Li and Nie, 'Analysis on the Strategic Stability between China and the US', pp. 13-19.

(57) Sun, 'China's Nuclear Strategy: Nature and Characteristics', pp. 23-29.

(58) Xia Liping, 'On the Structure and Evolution of China's Nuclear Strategy', *Contemporary Asian Pacific*, No. 4, 2010, pp. 124-5.

Rising China and a Weakened Global Nuclear Order in the 2000s

(59) Yao Yunzhu, 'China's Perspective on Nuclear Deterrence', *Air & Space Power Journal*, 2010, pp. 28–9. Wu Riqiang builds on Yao's point, arguing that because of China's de-alerted forces, uncertainty (not assured retaliation) forms the basis of China's nuclear strategy today. See 'Certainty of Uncertainty: Nuclear Strategy with Chinese Characteristics', *Journal of Strategic Studies*, Vol. 36, Issue 4, 2013, pp. 14–15.

(60) Yao Yunzhu, 'Chinese Nuclear Policy and the Future of Minimum Deterrence', *Strategic Insights*, Vol. 4, Issue 9, September 2005.

(61) Yao, 'China's Perspective on Nuclear Deterrence', p. 29.

(62) Jing Zhiyuan and Peng Xiaofeng, 'Building a Strategic Missile Force with Chinese Characteristics', *Seeking Truth*, No. 3, 2009.

(63) Wade Boese, 'US Unsure of Chinese Military Modernization Aims', *Arms Control Today*, September 2005.

(64) Kristensen et al., *Chinese Nuclear Forces and US Nuclear War Planning*, p. 21.

(65) US Department of Defense report to Congress, *Military Power of the People's Republic of China*, 2008.

(66) By way of comparison, the US and Russia have over 8,000 nuclear warheads (deployed and non-deployed) in their respective arsenals. See SIPRI *World Nuclear Forces 2012*. On China's nuclear arsenal, see Robert Norris and Hans Kristensen, 'Chinese Nuclear Forces 2011', *Bulletin of the Atomic Scientists*, Vol. 67, November 2011, pp. 81–7. However, estimates can vary. On this see Jeffrey Lewis, 'The Ambiguous Arsenal', *Bulletin of the Atomic Scientists*, Vol. 61, No. 3, May/June 2005, p. 54.

(67) Gregory Kulacki, 'China's Nuclear Arsenal: Status and Evolution', Union of Concerned Scientists, May 2011.

(68) Russell Hsiao, 'China's "Underground Great Wall" and Nuclear Deterrence', *China Brief*, Vol. 9, Issue 25, 2009, pp. 1–

2. In late 2011, a controversial report by Philip Karber of Georgetown University suggested that China had potentially up to 3,000 nuclear weapons in specially built tunnels in Hebei Province. The report's findings have been convincingly countered by experts, including Gregory Kulacki, Hans Kristensen, Jeffrey Lewis, and Zhang Hui. On the report, see William Wan, 'Georgetown Students Shed Light on China's Tunnel System for Nuclear Weapons', *Washington Post*, 29 November 2011. On the rebuttal, see Zhang Hui, 'The Defensive Nature of China's "Underground Great Wall"', *Bulletin of the Atomic Scientists*, 16 January 2012; and Gregory Kulacki, 'The Sources of Karber's Sources', *All Things Nuclear*, Union of Concerned Scientists, 7 December 2011.

(69) Li Bin and Wu Rui, 'The Impact of US Regional and Global Nuclear Policies on China: A Strategic Perspective', paper presented at Workshop on Prospects for East Asia Nuclear Disarmament, Japan, 2004, p. 7.

(70) Norris and Kristensen, 'Chinese Nuclear Forces 2011', p. 84.

(71) Zhang Hui, 'China's HEU and Plutonium Production and Stocks', *Science & Global Security*, Vol. 19, No. 1, 2011, p. 83.

(72) Andrew Scobell, David Lai, and Roy Kamphausen, eds., *Chinese Lessons from Other People's Wars* (Washington DC: Strategic Studies Institute, 2011), p. 210.

(73) Ashley J. Tellis, 'China's Military Space Strategy', *Survival*, Vol. 49, No. 3, 2007, pp. 41-72; and Gregory Kulacki and Jeffrey Lewis, 'Understanding China's Antisatellite Test', *The Nonproliferation Review*, Vol. 15, July 2008, pp. 335-47.

(74) Dominic Desciscuolo, 'China's Space Development and Nuclear Strategy', in Lyle J. Goldstein and Andrew S. Erickson, eds., *China's Nuclear Force Modernization* (Newport: Naval War College Papers, 2005), p. 58.

(75) Li and Wu, 'The Impact of US Regional and Global Nuclear Policies on China: A Strategic Perspective'.

Rising China and a Weakened Global Nuclear Order in the 2000s

(76) Rosemary Foot, 'Chinese Strategies in a US Hegemonic Global Order: Accommodating and Hedging', *International Affairs*, Vol. 82, No. 1, 2006, pp. 77-94.

(77) Quoted in *NTI Global Security Newswire*, 'China Vows "Extreme Restraint" in Development of Nukes', 4 May 2010.

(78) Zhang, statement at the Conference on Facilitating the Entry into Force of the CTBT.

(79) Government of the People's Republic of China, statement by the Chinese Delegation to the 2nd PrepCom for 2005 NPT RevCon, 'Nuclear Disarmament and Reduction of the Danger of Nuclear War', 30 April 2003.

(80) Hu Xiaodi, statement at the 2nd Session of the Preparatory Committee for the 2005 NPT Review Conference.

(81) Information Office of the State Council of the PRC, *China's Non-Proliferation Policy and Measures*, 3 December 2003.

(82) Information Office of the State Council of the PRC, *China's Endeavour for Arms Control, Disarmament and Nonproliferation*, 1 September 2005.

(83) Ministry of Foreign Affairs of the PRC, *China's Non-Proliferation Policy and Measures*, 21 May 2007.

(84) Stephanie Lieggi, 'A Decade of Chinese Arms Control: A Survey of Progress Ahead of Bush's Visit to China', Center for Nonproliferation Studies, 18 November 2005.

(85) Stephanie Lieggi, 'From Proliferator to Model Citizen? China's Recent Enforcement of Nonproliferation: Related Trade Controls and its Potential Positive Impact in the Region', *Strategic Studies Quarterly*, Summer 2010, pp. 39-62.

(86) The author benefitted from interviews with various experts on this issue: in Washington, DC, 9 June 2010, 7 June 2010, 17 June 2010, and 21 June 2010; in Monterey, 12 May 2010; and in Beijing, 31 August 2009 and 1 July 2011. See also Bonnie Glaser, 'US-China Relations: Chock-Full of Dialogue:

Rising China and a Weakened Global Nuclear Order in the 2000s

SED, Human Rights, and Security', *Comparative Connections*, April 2008; and Shirley Kan, 'US-China Military Contacts: Issues for Congress', *Congressional Research Service*, 6 August 2009, pp. 25–6.

(87) Hu Xiaodi quoted in Kent, *Beyond Compliance*, p. 90.

(88) Howard Krawitz, 'Resolving Korea's Nuclear Crisis: Tough Choices for China', *Strategic Forum*, No. 201, 2003.

(89) Joint Declaration of the People's Republic of China and the European Union on Non- Proliferation and Arms Control, 9 December 2004.

(90) Ministry of Foreign Affairs of the People's Republic of China, 'Report of China on the Implementation of United Nations Security Council Resolution 1540 (2004)', May/June 2005.

(91) Cheng Jingye, Statement by the Ambassador on the Korean Peninsula Nuclear Issue at the IAEA Board of Governors Meeting, 17 November 2011.

(92) Shen Dingli, 'China Plays a Bigger Role in Proliferation Control', *Xinhua*, 29 December 2008.

(93) Thomas J. Christensen, 'Shaping the Choices of a Rising China: Recent Lessons for the Obama Administration', *Washington Quarterly*, Vol. 32, No. 3, July 2009, pp. 93–4.

(94) *Reuters*, 'North Korea Says Conducted Nuclear Test', 9 October 2006. On assertiveness, see International Crisis Group, 'China and North Korea: Comrades Forever?' *Crisis Group Asia Report*, No. 112, 1 February 2006.

(95) Heungkyu Kim, 'The Sino–North Korean Relationship at the Crossroads', in Haksoon Paik and Seong-Chang Cheong, eds., *North Korea in Distress, Confronting Domestic and External Challenges* (Seoul: The Sejong Institute, 2009), pp. 192–3.

(96) Zhang Hui, 'Ending North Korea's Nuclear Ambitions: The Need for Stronger Chinese Action', *Arms Control Today*, July/

Rising China and a Weakened Global Nuclear Order in the 2000s

August 2009; and International Crisis Group, 'Shades of Red: China's Debate over North Korea', *Asia Report*, No. 179, 2 November 2009, p. 20.

(97) Mathieu Duchâtel and Phillip Schell, 'China's Policy on North Korea: Economic Engagement and Nuclear Disarmament', SIPRI Policy Paper No. 40, December 2013; and Jane Perlez, 'North Korea Draws New China Scrutiny', *New York Times*, 11 February 2013.

(98) On these efforts, see Simon Rabinovitch and Simon Mundy, 'China Reduces Banking Lifeline to N Korea', *Financial Times*, 7 May 2013; and Jane Perlez, 'China Bans Items for Export to North Korea, Fearing Their Use in Weapons', *New York Times*, 24 September 2013.

(99) Thomas J. Christensen, 'The Advantages of an Assertive China, Responding to Beijing's Abrasive Diplomacy', *Foreign Affairs*, Vol. 90, Issue 2, March/April 2011, pp. 54-67.

(100) Author interview, Monterey, 20 November 2011.

(101) Shen Dingli, 'Iran's Nuclear Ambitions Test China's Wisdom', *Washington Quarterly*, Vol. 29, No. 2, Spring 2006, pp. 55-66.

(102) Adrian Wan, 'China Plays a Key Broker Role in Iran Nuclear Deal', *South China Morning Post*, 25 November 2013.

(103) John W. Garver, *China and Iran: Ancient Partners in a Post-Imperial World* (Washington: University of Washington Press, 2006), chapter six; and John W. Garver, 'Is China Playing a Dual Game in Iran?' *Washington Quarterly*, Vol. 34, No. 1, July 2011, pp. 75-88.

(104) Shen Dingli, 'Can Sanctions Stop Proliferation?', *Washington Quarterly*, Vol. 31, No. 3, 2008, pp. 89-100.

(105) Ministry of Foreign Affairs of the People's Republic of China, 'The Proliferation Security Initiative', undated.

(106) See Rosemary Foot, 'Selective or Effective Multilateralism? Chinese Perspectives on a US-led

Rising China and a Weakened Global Nuclear Order in the 2000s

Proliferation Security Initiative', *Effective Multilateralism: Through the Looking Glass of East Asia*, paper presented at a joint international conference between Fudan University and the University of Oxford, 11–13 December 2008; Ye Roan and Zhao Qinghai, 'The PSI: Chinese Thinking and Concern', *The Monitor*, Vol. 10, No. 1, Spring 2004.

(107) Zhang Yan, Director General of the Arms Control Department of Ministry of Foreign Affairs, 'Building a Common Approach to the Iran Nuclear Problem', 5 June 2007, China Foreign Affairs University, Beijing.

(108) Zhang Hui, 'China and a Fissile Material Cutoff Treaty', Kennedy School of Government working paper, 2002.

(109) Information Office of the State Council of the People's Republic of China, *China's Endeavour for Arms Control, Disarmament and Nonproliferation*.

(110) Medeiros, *Reluctant Restraint*, p. 206; and Sha Zukang, 'Can BMD Really Enhance Security?' Second US-China Conference on Arms Control, Disarmament and Nonproliferation, 28 April 1999, Monterey, California.

(111) However, many other states have held up talks on the FMCT, in particular Pakistan. See Paul Meyer, 'Breakthrough and Breakdown at the Conference on Disarmament: Assessing the Prospects for an FMCT', *Arms Control Today*, Vol. 39, No. 9, September 2009.

(112) *Agence France-Presse*, 'Signs that China Will Ratify Test Ban Treaty As Annan Urges Cooperation', 3 September 2003; and *Xinhua*, 'Chinese Foreign Ministry Spokesman on CTBT, PSI', 4 September 2003, via *Lexis Nexis*.

(113) Wang Guangya, statement on CTBTO International Cooperation and National Implementation, 6 June 2000.

(114) Keith Hansen, 'CTBT: Forecasting the Future', *Bulletin of the Atomic Scientists*, Vol. 61, No. 2, March/April 2005, p. 53.

(115) Wang, *Nuclear Weapons, Nuclear Powers and Nuclear Strategy*, p. 304.

Rising China and a Weakened Global Nuclear Order in the 2000s

- (116) Fravel and Medeiros, 'China's Search for Assured Retaliation', pp. 48–87.
- (117) Cited in Medeiros, 'Evolving Nuclear Doctrine', p. 58.
- (118) Jeffrey Lewis, 'Chinese Nuclear Posture and Force Modernization', *The Nonproliferation Review*, Vol. 16, No. 2, July 2009, p. 204.
- (119) Robert Gates, Former US Secretary of Defense, 'Nuclear Weapons and Deterrence in the 21st Century', speech at the Carnegie Endowment for International Peace, Washington, DC, 28 October 2008; and Ian Kearns, 'Beyond the United Kingdom: Trends in Other Nuclear Armed States', Discussion Paper, BASIC Trident Commission, November 2011.
- (120) Ye Ruan, 'China's Nuclear Policy', *INESAP Information Bulletin*, No. 24, December 2005, p. 23.
- (121) Lewis, *Minimum Means of Reprisal*, p. 184.
- (122) Li Bin, 'China', in *Banning the Production of Fissile Materials for Nuclear Weapons: Country Perspectives on the Challenges to a Fissile Material (Cutoff) Treaty*, International Panel on Fissile Materials, 2008, p. 8.
- (123) See Comprehensive Test Ban Treaty Organization, 'Nuclear Testing', 2009.
- (124) On these security considerations, see Yoichi Funabashi, *The Peninsula Question: A Chronicle of the Second Korean Nuclear Crisis* (Washington, DC: Brookings Institution, 2007), pp. 320–5; and Christopher W. Hughes, 'North Korea's Nuclear Weapons: Implications for the Nuclear Ambitions of Japan, South Korea and Taiwan', *Asia Policy*, No. 3, January 2007, pp. 75–104.
- (125) Christensen, 'The Advantages of an Assertive China', pp. 57–8.
- (126) See *China News*, 'Positively Participating in Upholding World Peace, China Reveals its Image as a Responsible Power', 29 September 2006; and Carla Freeman and Drew

Rising China and a Weakened Global Nuclear Order in the 2000s

Thompson, 'The Real Bridge to Nowhere: China's Foiled North Korea Policy', Working Paper, United Institute for Peace, May 2009, p. 29.

(127) Robert B. Zoellick, 'Whither China: From Membership to Responsibility?', remarks to the National Committee on US-China Relations, 21 September 2005.

(128) Author interview, Monterey, 5 December 2011.

(129) Willem Van Kemenade, *Iran's Relations with China and the West: Cooperation and Confrontation in Asia* (The Hague: Clingendael Papers, No. 24, 2009), p. 15.

(130) International Crisis Group, 'The Iran Nuclear Issue: The View from Beijing', *Asia Briefing*, No. 100, 17 February 2010. p. 6.

(131) For more see Foot and Walter, *China, the United States, and Global Order*, p. 160.

(132) US President Barack Obama in Prague, Czechoslovakia, 5 April 2009.

(133) Potter et al., 'The 2010 NPT Review Conference'.

(134) Schultz et al., 'Toward a Nuclear Free World'. An alternative view in support of nuclear deterrence was made by NATO military commanders John Shalikhshvili, Klaus Naumann, Lord Inge, Henk van den Breeman, and Jacques Lanxade in Ian Traynor, 'Pre-Emptive Nuclear Strike a Key Option, Nato Told', *Guardian*, 22 January 2008.

(135) Kong Guang and Yao Yunzhu, 'Analysis on the Campaign for a Nuclear Weapons Free World', *World Economics and Politics*, No. 9, 2009, pp. 73-80; and Shen Dingli, 'Towards a Nuclear Weapons Free World', pp. 73-80.

(136) Ministry of Foreign Affairs of the People's Republic of China, 'Nuclear Security Summit kicks off in Washington Hu Jintao Delivers an Important Speech', transcript, 14 April 2010; and People's Daily Online (English edition), 'Chinese

Rising China and a Weakened Global Nuclear Order in the 2000s

President Offers Five-Point Proposal for Safer World', 25 September 2009.

(137) Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'Nuclear Disarmament and Reduction of the Danger of Nuclear War', Working Paper, NPT/CONF.2010PC.I/WP.46, 7 May 2007, paragraph 12. For an overview of this debate, see European Council on Foreign Relations, Asia Centre, SciencesPo, 'Is China a Reliable Partner in Non-Proliferation?' *China Analysis*, No. 19, August 2008.

(138) Li Bin, 'China's Potential to Contribute to Multilateral Nuclear Disarmament', *Arms Control Today*, 2011.

(139) Ministry of Foreign Affairs of the People's Republic of China, 'Position on Nuclear Disarmament', undated.

(140) Initial wariness was noted in interviews with the author in Beijing, 30 May 2011, 12 July 2011, 25 July 2011, and 27 July 2011. On the conference, see UK Foreign and Commonwealth Office, 'Nuclear Weapon States Discuss Nuclear Disarmament Obligations', 7 July 2011.

(141) Government of the People's Republic of China, statement by the Chinese Delegation on Nuclear Disarmament at the Thematic Debate at the First Committee of the 67th Session of UNGA, 19 October 2012.

(142) Zhang Tuosheng, 'Nuclear Proliferation of Non-State Actors and Nuclear Security', *Foreign Affairs Review*, Vol. 27, No. 3, 2010, pp. 22-30; and Li Hong, 'Nuclear Security Environment in a Complicated and Pluralistic World', *Peace and Development*, Vol. 3, 2010, pp. 17-22.

(143) Li Hong (on behalf of the Fissile Materials Working Group), 'Chinese Nuclear Security Practices', *Bulletin of the Atomic Scientists*, 22 July 2011.

(144) *NTI Global Security Newswire*, 'U.S., China Agree to Expand Nuclear Security Ties', 20 January 2011; and US National Nuclear Security Administration Release I, 19 January 2011. A separate memorandum was also signed in

Rising China and a Weakened Global Nuclear Order in the 2000s

2011 between the two countries to develop a regional radiation detection training centre.

(145) Author interviews, Beijing, 14 September 2009 and 13 June 2011.

(146) Li Deshun, 'An Analysis of Obama Administration's Nuclear Posture Review', *Foreign Affairs Review*, Vol. 27, No. 3, 2010, pp. 31–9.

(147) Lavina Lee, 'Beyond Symbolism? The US Nuclear Disarmament Agenda and its Implications for Chinese and Indian Nuclear Policy', Cato Institute, Foreign Policy Briefing, 8 February 2011.

(148) Saalman, 'How Chinese Analysts View Arms Control, Disarmament and Nuclear Deterrence after the Cold War', p. 53.

(149) In 2008, the deal—first announced in 2005—was approved by the NSG.

(150) Wade Boese, 'US-Indian Nuclear Deal Reaching NSG Brink', *Arms Control Today*, September 2008.

(151) Fan Jishe, 'US-India Nuclear Agreement in Difficulty', *People's Daily*, 1 September 2008.

(152) Satu Limaye, 'Sino-Indian Relations: The Four disconnects', *PacNet* No. 7, January 2008; and author interview, Beijing, 22 July 2011.

(153) China refers to a 'grandfather clause' where cooperation was agreed prior to its membership of the NSG. For more, see Oliver Meier, 'The US-India Nuclear Deal: The End of Universal Non-Proliferation Efforts?', *Internationale Politik und Gesellschaft* (IPG), No. 4, 2006; and Sharad Joshi, 'The China-Pakistan Nuclear Deal: A Realpolitique Fait Accompli', *NTI Brief*, 11 December 2011.

(154) Quoted in Chris Buckley, 'China Likely to Swallow Anger Over India Nuclear Deal', *Reuters*, 29 August 2007.

Rising China and a Weakened Global Nuclear Order in the 2000s

(155) Charles D. Ferguson, 'India's Planned Nuclear TRIAD:
Seeking a "Credible Deterrence"', April 2008, *Arms Control
Today*; and author interview, Beijing, 30 October 2010.



Access brought to you by: Australian National University