

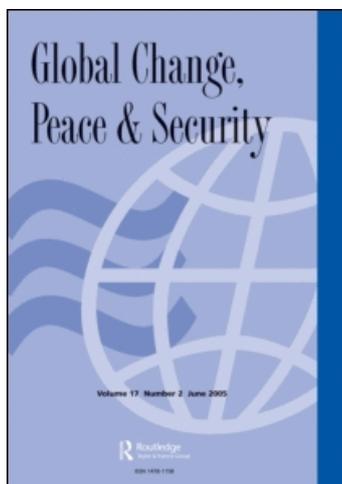
This article was downloaded by: [La Trobe University]

On: 14 January 2011

Access details: Access Details: [subscription number 909041586]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Global Change, Peace & Security

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713440448>

North Korea's emergence as a nuclear weapons state and the end of the disarmament paradigm

Ben Habib^a; Andrew O'Neil^a

^a School of Political and International Studies, Flinders University, Australia

To cite this Article Habib, Ben and O'Neil, Andrew(2009) 'North Korea's emergence as a nuclear weapons state and the end of the disarmament paradigm', *Global Change, Peace & Security*, 21: 3, 377 — 387

To link to this Article: DOI: 10.1080/14781150903169059

URL: <http://dx.doi.org/10.1080/14781150903169059>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

COMMUNICATION

North Korea's emergence as a nuclear weapons state and the end of the disarmament paradigm

Ben Habib and Andrew O'Neil*

School of Political and International Studies, Flinders University, Australia

Introduction

Writing shortly after North Korea's inaugural nuclear test in late 2006, Jonathan Pollack observed that 'a decision to proceed with additional testing would constitute compelling evidence that the DPRK deemed the first test results unsatisfactory and that Pyongyang's goals for its nuclear program are more ambitious than a one-time demonstration of strategic autonomy'.¹ Pollack's observation, while perceptive, is probably only partly correct. While there can be no doubt that Pyongyang's nuclear ambitions go far beyond a straightforward 'look at me' statement of autonomy, it is not clear the DPRK's 2009 test was undertaken because the 2006 test was a failure. Given North Korea's long-standing weapons research and development (R&D) programme, it is very plausible that the low yield of the first test was in fact deliberate and aimed at developing a small warhead for the country's medium range Nodong missile force. Whatever the reasons, it is clear that the North Korean testing programme will have significant repercussions for the future security of East Asia and the Asian region more generally. How the international community responds to this programme will be watched with considerable interest by other would-be proliferators, particularly Iran.

The key claim underpinning the analysis here is that North Korea's decision to undertake a second nuclear test confirms that Pyongyang is determined to become the world's ninth nuclear weapons state.² It heralds the arrival of a new phase in North Korea's nuclear weapons development programme, where the emphasis will henceforth be on acquiring an *operational* capability for deployment, as distinct from the programme's first phase which was concerned with generating sufficient fissile material and honing warhead design as a springboard for developing an operational force.

The bad news in our analysis is that North Korea's nuclear weapons programme has become so deeply ingrained in the DPRK's political economy that disarmament is no longer an option for the regime in Pyongyang. The good news, however, is that despite its extreme anti-social behaviour in East Asia, North Korea has an established pattern of rationality in its approach to strategic issues. If stable relations with a nuclear-armed North Korea are to be achieved, the key for the international community will be to engage the DPRK as a nuclear weapons state, not as a state that can somehow be disarmed of its nuclear weapons. Persisting with the

*Corresponding author. Email: andrew.oneil@flinders.edu.au

- 1 Jonathan Pollack, 'North Korea's Nuclear Weapons Program to 2015: Three Scenarios', *Asia Policy* 3, no. 2 (2007): 118.
- 2 Russia, the United States, France, the United Kingdom and China are recognised nuclear weapons states under the Non-Proliferation Treaty; India and Pakistan have tested their inventories; and the overwhelming consensus is that Israel possesses a large nuclear weapons force despite never having undertaken a nuclear test. Most agree that Iran is not yet a nuclear weapons state, although there remains widespread disagreement over how far it is from acquiring such a capability.

failed strategy of disarmament is a flawed approach that mistakenly assumes North Korea will be willing to de-link its nuclear weapons ambitions from its national security doctrine. Such an approach will merely make it harder to address some of the key challenges in managing the birth of a new nuclear weapons state.

Pyongyang's road to nuclear weapons

Since the 1950s, North Korea has invested a significant portion of its scarce national resources in pursuing the acquisition of nuclear weapons. Soviet training of DPRK nuclear scientists began shortly after the end of the Korean War, and during the 1960s and 1970s Moscow supplied North Korea with advanced nuclear reactor technology. This included help with the construction in 1965 of an eight megawatt (MW) research reactor located near the town of Yongbyon, 90 kilometres north of Pyongyang. Responding to pressure from Moscow, in 1977 North Korea agreed to place this research reactor under International Atomic Energy Agency (IAEA) safeguards. In the late 1970s North Korea began construction of a second, five MW reactor based near Yongbyon, which commenced operating in 1987. North Korea's overall nuclear programme expanded at a rapid rate during the 1980s with the development of facilities for the fabrication and conversion of uranium, as well as the reprocessing of plutonium. Facilities slated for construction were a 50 MW reactor at Yongbyon and a 200 MW reactor at Taechon. It is believed that the DPRK began work sometime during the 1980s on a plutonium reprocessing facility at Yongbyon.³

North Korea became a member of the Non-Proliferation Treaty (NPT) in 1985. However, Pyongyang refused to ratify a bilateral safeguards agreement with the IAEA until 1992. By this time, there were widespread suspicions that Pyongyang had systematically flouted its non-proliferation commitments under the NPT by removing spent fuel rods from the Yongbyon reactor and reprocessing them into weapons grade plutonium.⁴ In January 1993 North Korean authorities refused the IAEA entry to two undeclared nuclear waste facilities adjacent to the Yongbyon reactor suspected of holding fissile material.⁵ With international pressure building, Pyongyang announced its intention to withdraw from the NPT shortly thereafter. Following a protracted diplomatic process, which included Washington agreeing to conduct bilateral talks with Pyongyang, this decision was reversed.

It was around this time that the United States produced a National Intelligence Estimate – the authoritative assessment of all US intelligence agencies – that described the chances of North Korea already possessing a nuclear bomb as 'better than even'.⁶ While tensions declined somewhat during the remainder of 1993, they did not recede entirely, and the first half of 1994 witnessed a major crisis over North Korea's nuclear activities. During the crisis, North Korean authorities consistently sought to foil IAEA attempts to track nuclear material inside the DPRK. Against the background of continued wrangling with the United States and the IAEA over its alleged non-compliance with the NPT, North Korea began removing nuclear fuel from the Yongbyon reactor in May 1994, precipitating a major standoff with the United States. With the Clinton administration laying the groundwork at the United Nations (UN) Security Council for the imposition of sanctions against the DPRK, and its close consideration of plans for possible military strikes against key nuclear installations in North Korea, a serious

3 Federation of American Scientists, 'North Korea's Nuclear Weapons Program', <http://www.fas.org/nuke/guide/dprk/nuke/index.html> (accessed 19 June 2009).

4 David Albright, 'How Much Plutonium Does North Korea Have?', *Bulletin of the Atomic Scientists* 50, no. 5 (1994): 46–53.

5 Global Security.org, 'Yongbyon 5-MW(e) Reactor', <http://www.globalsecurity.org/wmd/world/dprk/yongbyon-5.htm> (accessed 10 June 2009).

6 Jeffrey Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: W. W. Norton & Company, 2006), 523.

confrontation between Washington and Pyongyang seemed inevitable.⁷ The crisis was resolved with the conclusion of the Agreed Framework in October 1994, which committed North Korea to freezing its *declared* nuclear program.⁸ There is general agreement in the published assessments of various intelligence agencies and among independent strategic observers that all operations at each of North Korea's known nuclear facilities were frozen under the Agreed Framework between 1994 and 2002.

North Korea's move to jettison its long-standing opaque approach to its nuclear ambitions and capabilities began in the second half of 2002. In December 2002, after its officials had reportedly acknowledged the existence of an active clandestine uranium enrichment and plutonium programme, North Korea announced it was ending its commitment to the Agreed Framework and that it would resume operations at all of its Yongbyon facilities and recommence construction work at the Taechon facility site.⁹ Both Washington and Pyongyang alleged that the other side had failed to implement their respective commitments under the Agreed Framework – in truth, implementation by both sides remained patchy over the eight year lifespan of the agreement. By the end of 2002 Pyongyang had taken the dramatic step of announcing an end to all nuclear inspections on DPRK territory and ejecting all IAEA inspectors from North Korea. It followed this up in January 2003 by declaring North Korea's 'automatic and immediate' withdrawal from the NPT.¹⁰ With this declaration, the DPRK became the first state to terminate its membership of the NPT.

These announcements were followed by explicit statements in the country's official news media that North Korea was actively seeking to acquire nuclear weapons.¹¹ Following a visit to the DPRK in early 2004, former director of the Los Alamos National Laboratory, Siegfried Hecker, confirmed in Congressional testimony that North Korean authorities had removed 8000 spent fuel rods from the Yongbyon reactor where they had been under IAEA safeguards until late 2002.¹² In February 2005, North Korea claimed for the first time that it had acquired a nuclear capability.¹³ On 3 October 2006, North Korea's official news agency announced that the country intended to carry out a nuclear test to substantiate this claim. In issuing the statement, KCNA declared that North Korea 'will never use nuclear weapons first and strictly prohibit any threat of nuclear weapons and nuclear transfer'.¹⁴ Six days later, North Korea conducted its inaugural nuclear test. While of a sub-kiloton yield, the test nevertheless provided immediate clarity of North Korea's nuclear capability and represented the culmination of its earlier decision in 2002 to discard its long-standing opaque nuclear strategy.

The international response – enshrined in UN Security Council 1718 – represented a classic compromise between the Council's permanent five powers; it vigorously condemned the test, but

7 For a fascinating insight into the policy dynamics of the 1993–94 nuclear crisis from the perspective of former senior Clinton administration officials, see Joel Wit, Daniel Poneman and Robert Gallucci, *Going Critical: The First North Korean Nuclear Crisis* (Washington, DC: The Brookings Institution, 2004).

8 For the text, see Korean Peninsula Energy Development Organization, 'Agreed Framework Between the United States of America and the Democratic People's Republic of North Korea, Geneva, October 21, 1994', <http://www.kedo.org/pdfs/AgreedFramework.pdf> (accessed 18 June 2009).

9 For an excellent discussion of the timeline and the various events surrounding the collapse of the Agreed Framework, see Jonathan Pollack, 'The United States, North Korea, and the End of the Agreed Framework', *Naval War College Review* 56, no. 3 (2003): 11–49.

10 Hamish McDonald, 'North Korea's Nuclear Threats Based on Hope for a Future', *The Sydney Morning Herald*, 11 January 2003.

11 'North Korea Admits Nuclear Arsenal', *BBC News Online*, 17 November 2002, <http://news.bbc.co.uk/2/hi/asia-pacific/2485829.stm> (accessed 13 June 2009).

12 'US Senate Committee on Foreign Relations, "Hearing on "Visit to the Yongbyon Nuclear Scientific Research Centre in North Korea", Siegfried Hecker, Senior Fellow, Los Alamos National Laboratory, University of California, January 21, 2004', <http://foreign.senate.gov/testimony/2004/HeckerTestimony040121.pdf> (accessed 17 June 2009).

13 Jack Kim and Jon Herskovitz, 'N. Korea Says It Has Nuclear Arms, Spurns Talks', *Reuters*, 10 February 2005.

14 'DPRK Foreign Ministry Clarifies Stand on New Measure to Bolster War Deterrent', *Korean Central News Agency*, 3 October 2006.

authorised only limited sanctions covering mainly military and luxury items.¹⁵ A desire to have US financial sanctions against North Korean assets lifted seems to have been the motivating factor that persuaded Pyongyang to return to the Six Party Talks in 2007 where it pledged that it would disable its nuclear programme as a quid pro quo for Washington's release of over \$US25 million in frozen DPRK assets in June that year. In a step that has become its stock-in-trade in nuclear negotiations, Pyongyang quickly backed away from earlier disarmament commitments once serious discussion about verification and implementation began. In April 2009, following sharp international criticism of its attempted 'satellite' launch – which used dual-use technology applicable for ballistic missile R&D – Pyongyang stated that it was abandoning the Six Party Talks altogether and restarting its nuclear programme. The subsequent May nuclear test (measuring some three to four kilotons) provoked a similar Security Council resolution to that passed in 2006, which tightened financial and arms related restrictions on the DPRK, but has had little apparent effect in blunting Pyongyang's resolve to push ahead with the program.¹⁶

What is North Korea's current and likely future nuclear weapons capability? As one study points out, the key factor in assessing how many weapons North Korea can now produce is whether the DPRK needs to use more or less material than the IAEA standards of 8 kg of plutonium and 25 kg of high enriched uranium per weapon: the more advanced the warhead design a country possesses, the less material it needs.¹⁷ In short, if North Korea has made solid strides in fashioning advanced warhead design – and there is every reason to assume it has done given the historical duration of its weapons R&D programme – it will be in a position to build a larger number of warheads for delivery via its short and medium range missile inventory. The most authoritative unclassified estimate has been provided by Siegfried Hecker, who in 2006 concluded that Pyongyang had sufficient fissile material for between four to eight nuclear weapons.¹⁸ More recently, Hecker has noted that North Korea is in a position to produce enough plutonium to manufacture at least one additional nuclear weapon every year for the next five years.¹⁹ Extrapolating from this, North Korea will have around a dozen operational warheads by 2015.

The political economy of nuclear ambition

North Korea's long history of nuclear development, culminating in its 2009 nuclear test, strongly suggests that Pyongyang has no intention of relinquishing its nuclear programme. The best evidence supporting this argument lies in Pyongyang's motivations for nuclear proliferation. We believe that North Korea will not willingly relinquish its nuclear programme because its nuclear capability is too important to the political economy of the Kim regime.

Prior to the famine of the mid-1990s, the North Korean economy had all the hallmarks of a typical Soviet-style command economy. The command system prior to 1991 suffered from long-term reductions in output through key economic sectors. Rather than restructure the economy to increase efficiency, the regime's response was to prime the system with ever more inputs of

15 United Nations Security Council, 'Resolution 1718 Adopted by the Security Council at its 5551st Meeting on 14 October 2006', <http://daccessdds.un.org/doc/UNDOC/GEN/N06/572/07/PDF/N0657207.pdf?OpenElement> (accessed 20 June 2009).

16 Martin Fackler, 'North Korea Vows to Produce Nuclear Weapons', *The New York Times*, 14 June 2009.

17 Mary Beth Nikitin, 'North Korea's Nuclear Weapons' (Congressional Research Service Paper, RL34256, 5 May 2009), 4.

18 Siegfried Hecker, 'Report on North Korean Nuclear Program' (Center for International Security and Cooperation, Stanford University, 15 November 2006).

19 Siegfried Hecker, 'The Risks of North Korea's Nuclear Restart', *Bulletin of the Atomic Scientists* (May 2009), <http://www.thebulletin.org/web-edition/features/the-risks-of-north-koreas-nuclear-restart> (accessed 15 June 2009).

resources and labour. Over time, the success of this strategy experienced declining returns despite the increasing scale of inputs. The moribund North Korean economy, increasingly reliant on imported energy supplies, agricultural inputs and manufactured goods from the communist bloc, was vulnerable to disruptions to its input flow. This vulnerability was exposed when the Soviet Union collapsed, as the complexity of the economy could no longer be maintained without the enormous throughput of resources to cover for its glaring inefficiencies. The result was a splintering of the command economy into a number of parallel economies throughout the 1990s, including the huge military economy, an entrepreneurial economy, a court economy, and the illicit economy, along with the remnants of the command system.²⁰

The political system was similarly transformed as the economy broke down, again as a result of long-term degenerative trends. North Korea today can be thought of as an eroded totalitarian state, where the foundations of the totalitarian order remain in place, though substantial changes to the political economy of the state have worn down social controls. The economic transformation that has taken place has triggered political change at the grass-roots level that is undercutting the institutions of the old order, a process which does not appear to have reached its conclusion. The regime is utilising the nuclear programme as a tool to regenerate the totalitarian order through its use as a bargaining chip to acquire inputs for the economy, as a symbol of self-reliance in regime propaganda, and as a symbol of prestige for bureaucratic interests within the military, the paramount institution in post-famine North Korea. Therefore it seems clear that the nuclear programme is indispensable to the political-economy of the Kim regime, which by implication suggests that the efforts of the international community to denuclearise North Korea have little chance of success.

North Korea's motivations for going nuclear fall into three broad realms: national security; domestic politics; and international diplomacy.

In terms of the North's national security, the nuclear capability provides a low-cost strategic equaliser against US and South Korean forces across the demilitarised zone (DMZ), providing a deterrent against attack or invasion from the South. This is the reason most often cited in North Korea's official statements, which maintain that proliferation is necessary to deter the United States. The United States maintains the world's largest nuclear arsenal and has issued several threats to use nuclear weapons against the DPRK over the past half-century. As US power begins to wane in Northeast Asia, the regime may also come to see its nuclear deterrent as a means to avoid unnecessary entanglement in the emerging Sino-Japanese rivalry. For a small state like North Korea, the rationale of proliferation is not to develop second-strike capabilities, but rather to maintain a nuclear threat just large enough to raise sufficient uncertainty in the calculations of an adversary that a pre-emptive first strike would not be completely successful.²¹

Additionally, the nuclear capability may have a role in Pyongyang's offensive war plan. Traditionally, the DPRK's war fighting strategy has been heavily predicated on reunifying Korea by force. The war plan is based around a two-front surprise attack utilising asymmetric capabilities. The first front consists of a massive artillery bombardment followed by full-frontal attack across the DMZ, with the objective of rapidly capturing Seoul. Simultaneously, ballistic missile attacks would target military bases, ports and command and control facilities in South Korea and Japan, in an attempt to disable reinforcement of allied forward defences. Special forces teams are to be infiltrated by sea, air and tunnel to create a second front, attacking US/ROK troops and important facilities from the rear. The objective is to capture Seoul quickly and then overrun the peninsula before American reinforcements arrive from abroad, with the aim

20 For discussion, see Marcus Noland, *Avoiding the Apocalypse: The Future of the Two Koreas* (Washington, DC: Institute for International Economics, 2000), 59–141.

21 Victor Cha, 'North Korea's Weapons of Mass Destruction: Badges, Shields, or Swords?', *Political Science Quarterly* 117, no. 2 (2002): 209–30.

of forcing a political settlement in which the North Korean occupation is accepted as a fait accompli.²²

It does not require too much imagination to envisage a role for nuclear weapons in the plan. To compensate for its conventional military inferiority, the North has enhanced its ability to strike longer range targets using ballistic missiles, self-propelled artillery, and multiple rocket launchers. This allows the DPRK military to project force beyond the forward theatre without the need for wholesale movement of troops and military hardware. Nuclear warheads could be placed on short-range Scud-C missiles targeting military bases and logistical hubs in South Korea, such as port facilities in Seoul and Busan, or in artillery rounds targeting frontline troops in the forward theatre.²³ The objectives of the war plan could certainly be achieved without nuclear weapons; after all, North Korean missiles are more than capable of destroying targets with conventional warheads. If North Korea were to use nuclear weapons in a war scenario, they are likely to be the weapon of last resort.

Beyond national security, the nuclear programme has value for the Kim regime in domestic politics, where it has become an integral tool of legitimacy. In 1998 Kim Jong-il consolidated his grip on power through the introduction of *Songun* or 'military-first' politics, which is based on the idea of making North Korea a 'strong and powerful country'.²⁴ The nuclear programme has value in this regard at two levels. First, it provides an ideological rallying point to justify diversion of the nation's key resources to the military. In this way, it helps legitimise the privations that ordinary citizens bear in order for the military to be the privileged recipient of state resources. Second, the nuclear programme is the defining symbol of North Korea's unique anti-American nationalism. The regime has painted itself into a corner through its rampant use of virulent anti-American, anti-imperialist propaganda. The profligacy of the regime's anti-American rhetoric is a function of the practical failure of *Juche*, as the legitimising paradigm of the state anti-imperialism is the only ideational pillar the regime has left.

Nuclear weapons development also serves the narrow bureaucratic interests of institutions within the North Korean state. In general, the vested institutional actors include the state's nuclear establishment, which maintains all facilities related to the nuclear fuel cycle, and important units within the military bureaucracy. These institutions have a powerful interest in self-perpetuation and are likely to be actively acquiring more resources and expanding their role. The fledgling bureaucracy established during the 1940s to run the Manhattan Project acquired a large pool of resources – including funding, personnel, and physical plant – which gave it a strong incentive to fulfil its mission to perfect a nuclear weapon. Once this task was achieved, the continued existence of this bureaucracy was contingent on the deployment of the weapon it had created and the continued manufacture of further weapons to augment the existing stock.²⁵ Dismantlement of North Korea's nuclear establishment would be extremely difficult because once created, organisational influence and sunk costs cause institutions to take on a life of their own.

Possession of nuclear weapons can dramatically alter the prestige and diplomatic clout of a country. Nuclear proliferation represents a demand for a state to be treated as a major power in

22 See Andrew Scobell and John Sanford, *North Korea's Military Threat: Pyongyang's Conventional Forces, Weapons of Mass Destruction, and Ballistic Missiles* (Carlisle: Strategic Studies Institute, Army War College, 2007), 32–8; and James Minnich, *The North Korean People's Army: Origins and Current Tactics* (Annapolis: Naval Institute Press, 2005), 73–5.

23 Jonathan Pollack, 'The Strategic Futures and Military Capabilities of the Two Koreas', in *Strategic Asia 2005–06: Military Modernization in an Era of Uncertainty*, eds. Ashley Tellis and Michael Wills (Seattle and Washington, DC: National Bureau of Asian Research, 2005), 137–8.

24 See Adrian Buzo, *The Guerilla Dynasty: Politics and Leadership in North Korea* (St Leonards, NSW: Allen and Unwin, 1999), 204–32.

25 For discussion of the Manhattan Project, see Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1986).

regional or global politics, often above and beyond what would otherwise be the case. For the leaders of nuclear-armed states, possession gives them greater leverage in their relations with other countries and allows them to be bolder in the pursuit of their national interests. North Korea's use of ambiguous nuclear blackmail and overt nuclear posturing has certainly succeeded in attracting the attention of its powerful neighbours in Northeast Asia. The brandishing of the nuclear card is often used by nuclear weapon states as a signal in international diplomacy that their vital interests are engaged, or that a particular policy position is absolute and immovable.²⁶ It is possible that the October 2006 nuclear test was intended not only as a demonstration of the North's nuclear capability, but also as a diplomatic signal to indicate that the unfreezing of North Korean assets in Banco Delta Asia was an important national interest that required the immediate attention of Washington.

Nuclear capability gives the regime the bargaining leverage it needs to plug holes in its economy with inputs of aid from the international community. Stephen Haggard and Marcus Noland estimate that North Korea derives approximately one-third of its revenues from international aid. However, rather than using humanitarian assistance as an addition to supply, the regime used it as balance-of-payments support, offsetting aid by cutting commercial food imports and allocating savings to other priorities. Also, as aid shipments are distributed by the military, they become a rent-seeking commodity as they are diverted from formal distribution channels to be sold for huge profit by the military on the private market.²⁷

North Korea has used this coercive bargaining tactic consistently in denuclearisation negotiations since the Agreed Framework in 1994, and prior to that in its relations with the USSR and China. The regime's deliberate, carefully focused provocations put pressure on the United States and regional states to provide material inducements to persuade it to pull back from the brink. These deliberate 'pinpricks' fall short of war but are serious enough to raise concerns about possible escalation. Once the provocation has been executed, Pyongyang often issues new demands, or restates previous claims as conditions for a return to negotiations. The consistency with which Pyongyang has employed this strategy is a good indication that the regime is not serious about a denuclearisation deal.

By late 2008, negotiations had reached a point where the North was being asked to take significant steps toward nuclear dismantlement, steps that would have cut into sections of its nuclear capability that it had no intention of giving up. The nuclear programme had matured in a technical sense from the development stage to the cusp of a fully-fledged nuclear deterrent. Further progress in denuclearisation negotiations would degrade the North's operational nuclear capability, in return for, on paper, much less than was offered as compensation under the 1994 Agreed Framework. If Pyongyang's nuclear programme was, at least in part, a tool for extracting external inputs from the international community, then by mid-2008 the Six Party Talks had reached the end of its usefulness for that purpose.

This, of course, presented Pyongyang with a dilemma. Without the Six Party Talks as a forum to extract international largesse, the regime had to develop a new plan for its economic survival. In December 2008 the regime instituted a new mobilisation campaign, based on a revival of the *Chollima* movement, to reconsolidate the totalitarian political order and turn the DPRK into a 'strong and prosperous country' by 2012, in time for the centenary of Kim Il-sung's birth. This new strategy appears to have taken shape in late 2008 in the wake of speculation in the United States and South Korea about Kim Jong-il's ill health and the prospects of regime collapse.²⁸ North Korea's provocative and escalatory behaviour since late 2008

26 Peter Beckman, Paul Crumlish, Michael Dobkowski, and Steven Lee, *The Nuclear Predicament: Nuclear Weapons in the Twenty-First Century* (Englewood Cliffs, NJ: Prentice Hall, 2000), 187.

27 Stephen Haggard and Marcus Noland, *Famine in North Korea: Markets, Aid, and Reform* (New York: Columbia University Press, 2007), 5–13.

28 'North Korea's Nuclear Test: On Mushroom Cloud Two', *The Economist*, 30 May 2009, 27–8.

indicate that Pyongyang has decided to go it alone. The rocket launch conducted on 4 April 2009, ostensibly to place a satellite in orbit, occurred amid the fervent revolutionary surge of the revived *Chollima* movement.²⁹ Advances in space and nuclear technology are important sources of national pride, giving the launch tremendous domestic value as a representation of the national effort to build a 'strong and prosperous country' and as a symbol of scientific nationalism.

The end of the disarmament paradigm

While the lion's share of intellectual and political effort has been devoted to coaxing North Korea into disarmament commitments, there is little evidence of any serious thought among policy elites and expert analysts about how the DPRK should be dealt with if these efforts come to nothing. With military action to counter Pyongyang's nuclear programme increasingly unlikely, attention must now turn to managing North Korea as a nuclear weapons state. Any strategy must have as its ultimate aim persuading the regime in Pyongyang that the use of nuclear weapons serves no instrumental purpose whatsoever.

Central to the development of this strategy is understanding the burdens and potentially large costs confronting North Korea as a new nuclear weapons state. Such burdens and costs have, in the not too distant past, dissuaded many other nuclear-capable states from taking the plunge to acquisition. While nuclear weapons are regarded as a key force equaliser against conventionally stronger adversaries, they are expensive to achieve, maintain, and upgrade if a state seeks to retain a secure second strike capability over time. A cash-strapped state like North Korea is in no position to acquire the most reliable second-strike platform – a submarine-based strategic force – as part of its arsenal. Moreover, even the relatively modest goal of protecting its emerging arsenal from a disarming first-strike while ensuring that it is in a position to employ these weapons during a crisis or conflict requires serious infrastructure investment. There is also the challenge of integrating nuclear forces into existing military force structure. Questions about secure command and control are critical for all nuclear powers, but they are particularly important for new nuclear weapons states with no first-hand experience in coordinating nuclear forces in peacetime or during crises.³⁰ In addition, the issue of nuclear weapons doctrine poses a particular conundrum for new nuclear powers. Under what specific circumstances, if any, would North Korean decision makers authorise the employment of nuclear weapons? Would targets be solely military in nature, or would they also encompass population centres, inviting certain overwhelming retaliation from the United States and its regional allies?

Manipulating costs and benefits to induce certain behaviour lies at the heart of effective deterrence. Inducing restraint on the part of North Korea will not be easy, but it is important to emphasise that the DPRK – despite its frequent hair raising rhetoric – is a rational strategic actor and the regime has a strong track record of acting in its own self-interest. Pyongyang's declaration soon after its 2006 nuclear test that it would not be the first to use nuclear weapons replicates the no-first use doctrines of China and India. And North Korea's commitment that it will not export its nuclear programme is somewhat reassuring, notwithstanding circumstantial evidence that it helped Syria develop a nuclear reactor that was destroyed by

29 The announcement of the satellite launch on KCNA alluded to the mission as a triumph of North Korea's indigenous scientific advancement. See 'North Korea Space Launch "Fails"', *BBC News Online*, 5 April 2009, <http://news.bbc.co.uk/2/hi/asia-pacific/7984254.stm> (accessed 19 June 2009).

30 Command and control challenges still exist for the United States, the world's oldest nuclear power, which puts into perspective the magnitude of the challenge confronting new nuclear weapons states. See Robert Critchlow, 'Nuclear Command and Control: Current Programs and Issues' (Congressional Research Service Report, RL33408, May 2006). For a more optimistic view, see Jordan Seng, 'Less Is More: Command and Control Advantages of New Nuclear States', *Security Studies* 6, no. 4 (1997): 50–92.

Israel in late 2007.³¹ Such commitments are in line with the conspicuously defensive rationale permeating North Korean statements on nuclear issues since the early 1990s and provide some foundation for surmising that North Korea will behave with some restraint as a new nuclear power.³²

Against this background, any strategy to deal with a nuclear North Korea needs to encompass three specific elements.

The first is that the United States must maintain the credibility of its overall deterrence posture in East Asia. Washington should avoid the sort of inflammatory language used by Pyongyang (as well as 'axis of evil' type characterisations employed by the former Bush administration) but also make it clear that the United States will not hesitate to use force against North Korea in the event of US forces or American allies in the region being attacked, with conventional or nuclear weapons.³³ Publicly and privately reassuring its regional allies, Japan and South Korea, immediately following North Korea's 2006 and 2009 nuclear tests that the United States remains fully committed to its extended deterrence commitments in East Asia sent an important message to Pyongyang. This message needs to be consistently reinforced each time North Korea engages in provocative strategic behaviour. The other benefit of periodically reaffirming US extended deterrence in East Asia is that it helps dilute, though by no means eliminate entirely, latent proliferation pressures in Japan and South Korea.

Those who routinely dismiss North Korea as 'undeterrable' overlook the fact that Pyongyang has been effectively deterred from taking military action on the Korean peninsula for three to four decades because it understands that a militarily superior United States and South Korea would move to terminate the regime in Pyongyang in the final stages of any conflict. The regime in Pyongyang may have scant regard for the welfare of its own citizens, but its emphasis on self-preservation shines through clearly in its proven ability to behave provocatively but never to the extent of inviting military retaliation from a militarily superior United States and South Korea. In short, North Korea knows where to draw the line. Ultimately, this is a key test of the political resolve of the Obama administration and the extent to which Washington is willing to reinforce the credibility of its extended deterrence posture in East Asia.

The second element in any strategy must encompass constructive politico-security engagement with Pyongyang. This may sound infeasible given North Korea's refractory and at times duplicitous behaviour, but the temptation to further isolate North Korea in the wake of its second nuclear test must be resisted. In dealing with an emerging nuclear state, one of the worst outcomes is deeper isolation of that country. It is not a question of 'rewarding bad behaviour', but rather a question of minimising the prospect of Pyongyang deploying its new nuclear force on a hair trigger alert posture. This tends to be the default position of new nuclear states that believe they face adversaries intent on undertaking first-strike action to disarm them of nuclear weapons. As a precaution, the would-be target state structures its deployments and institutes procedures in such a way to ensure immediate launch once the order is given. This 'use it or lose it' mindset is inherently destabilising because of the risk that nuclear weapons use will be authorised on the basis of faulty intelligence – the shorter the lead time for launch, the less time authorities have for reflecting on whether they are making an informed decision.

Led by Washington, regional states should try to engage Pyongyang directly on issues relating to nuclear security and safety, including potential assistance to help safeguard against

31 David Sanger, 'Bush Administration Releases Images to Bolster Its Claims About Syrian Reactor', *The New York Times*, 25 April 2008.

32 For an elaboration of this argument, see Andrew O'Neil, 'Learning to Live with Uncertainty: The Strategic Implications of North Korea's Nuclear Weapons Capability', *Contemporary Security Policy* 26, no. 2 (2005): 317–34.

33 One fear is that Pyongyang may be emboldened to use conventional military force under the assumption that the United States and its allies will be deterred from responding with like means because of apprehension North Korea will escalate to nuclear weapons.

the accidental launching of nuclear weapons. While there is every likelihood that such efforts will be firmly rebuffed, they still need to be put forward, if for no other reason than to reinforce the message that North Korea's nuclear weapons programme has profound security implications well beyond the borders of the DPRK. Communication channels need to be nurtured and one way to promote restraint is to amend the mission of the Six Party Talks from pursuing disarmament to pursuing a cap on the number of North Korean warheads in the post-testing phase. This multilateral forum was set up in 2003 to convince the DPRK to undertake nuclear disarmament and it has patently failed to achieve its stated goal. It therefore makes perfect sense for China, Japan, Russia, South Korea, and the United States to switch the focus of multilateral diplomacy from disarmament to arms control.

The third and final element required in any strategy to deal with a nuclear North Korea is conveying unambiguously that exporting its nuclear programme will entail significant costs, including military action. One of the most worrying dimensions of the second test is that Pyongyang has evidently calculated it has spare fissile material to improve the warhead design and effectiveness of its incipient force. This concern is heightened when one takes into account North Korea's surprising admission after the test that it does have a dedicated programme for enriching uranium, in addition to its plutonium programme, something it has consistently denied.³⁴ How much spare plutonium have DPRK authorities extracted from the Yongbyon facility that they might be prepared to export to the highest bidder? The Obama administration has signalled that it will authorise the tracking of suspect North Korean vessels if they refuse to be boarded under existing UN Security Council resolutions.³⁵ But Washington and its regional allies must send a clear message that any shipment of fissile material out of North Korea is the genuine 'red line' that, if crossed, would result in direct military action against the regime in Pyongyang. The Chinese and the Russians have explicitly ruled out approving such an unambiguous line in the sand, which is reflected in the non-committal language of UN Security Council resolutions 1718 (2006) and 1874 (2009). The spur to state-based proliferation resulting from any transfers by North Korea – in addition to the potential transfer of nuclear material to terrorist organisations – provides a compelling rationale for other states to articulate, and be prepared to impose, major costs on Pyongyang should it decide to export elements of its nuclear programme analogous to its large-scale ballistic missile technology export programme.

Accepting the need for a containment strategy along the lines of that outlined above also entails accepting that there will be wider implications for global non-proliferation and disarmament efforts. Some will argue that such a containment strategy is dangerously misguided for two reasons. First, it will establish something of a precedent that other states may seek to exploit in their push for nuclear weapons. If Iran and other determined nuclear aspirants judge that North Korea has successfully 'broken' the disarmament paradigm in its single minded pursuit of a weapons capability, there is a very good chance they will endeavour to replicate Pyongyang's approach. Second, accepting North Korea as a nuclear weapons state will set back the cause of nuclear disarmament, probably fatally. While there are many who remain optimistic about the long term prospects of disarmament irrespective of North Korea's actions, acceptance of a nuclear-armed North Korea would render it highly unlikely that other states in East Asia, particularly Japan, would sign on to any nuclear disarmament agreement. These issues touch on a series of difficult dilemmas that will need to be confronted squarely by policy elites and academic researchers soon if North Korea's entry into the nuclear club is to be managed without raising the risk of nuclear war.

34 Blaine Harden, 'North Korea Says It Will Start Enriching Uranium', *The Washington Post*, 14 June 2009.

35 David Sanger, 'US to Confront, Not Board, North Korean Ships', *The New York Times*, 16 June 2009.

Note on contributors

Ben Habib is a PhD candidate at Flinders University, specialising in Northeast Asian security and the International Relations aspects of climate change. Prior to commencing graduate study he had been employed by the Commonwealth Department of Immigration and Citizenship, worked as a teacher in China, and studied in South Korea.

Andrew O'Neil is Associate Professor of International Relations at Flinders University. He is a chief investigator on the Australian Research Council project 'Australia's Nuclear Choices'.