The Nuclear Nonproliferation Regime at a Crossroads

Emily B. Landau and Azriel Bermant, Editors

Memorandum 137

INSS
המכון למחקרי ביטחון לאומי
THE INSTITUTE FOR NATIONAL SECURITY STUDIES
INCORPORATING THE JAFFEE CENTER FOR STRATEGIC STUDIES
TEL AVIV UNIVERSITY אוניברסיטת תל-אביב

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INSS Institute for National Security Studies

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Preface

This collection of articles is an outgrowth of the 2013 annual arms control conference held under the auspices of the Arms Control and Regional Security Program at the Institute for National Security Studies (INSS) in Tel Aviv. The conference, "The Nuclear Nonproliferation Regime at a Crossroads," took place on February 11-12, 2013, and was held in conjunction with the Paris-based Fondation pour la Recherche Stratégique.

The articles compiled in this volume grapple with questions and dilemmas that arise from a growing sense in recent years that the Nuclear Non-Proliferation Treaty (NPT) has reached a critical juncture, and that its continued role as the centerpiece of the nuclear nonproliferation regime is at risk. This is the result of a process that has unfolded gradually since the end of the Cold War, which also spelled the end of the bipolar global structure that, in the minds of many, helped keep nuclear proliferation in check.

The tensions that exist between state interests, norms, and notions of collective security regarding nuclear nonproliferation efforts lie at the heart of the articles that comprise the opening two sections of this volume. The first of these sections focuses on interests that have driven the NPT from its inception to its current possibly precarious status; the second section considers future prospects for the treaty. In the third section, authors direct their attention to proliferation and nonproliferation trends at the global level, specifically, the impact of changes in the international system, President Obama's embrace of the Global Zero agenda, Russia's perspective on nonproliferation, and the impact of Pakistan on the global nuclear order. An effective verification mechanism is critical for ensuring that states uphold their nonproliferation commitments to the NPT, and the two chapters of the following section focus specifically on this sometimes elusive goal. The volume's closing section is devoted to the Middle East, and focuses in particular on the terms and conditions for establishing a regional security regime, and the problems encountered vis-à-vis the initiative adopted at the

2010 NPT Review Conference to hold a conference on a weapons of mass destruction-free zone in the Middle East.

While the idea of the volume began with the 2013 international conference, the contributors took the conference proceedings as their starting point and then composed updated analytical articles on their respective topics. In addition, the volume includes four articles not based on conference lectures that were written specifically for this collection. It also includes the full text of the two keynote addresses that were delivered at the conference, "Forging Ahead: Challenges and Opportunities for the NPT," by Rose Gottemoeller of the US State Department, and "Nonproliferation and Regional Security: An Israeli Policy Perspective," given by Ambassador Jeremy Issacharoff of the Israeli Ministry of Foreign Affairs.

Our sincere thanks go to the authors of this collection for their dedication to the project, and their willingness to devote time not only to participation in the conference but to presentation of their ideas in written form as well. We also want to express our gratitude to Judith Rosen, editor at INSS, for her valuable contribution. Our hope is that this collection will be a meaningful contribution to the ongoing debate over the future of the still very important Nuclear Non-Proliferation Treaty.

Emily B. Landau and Azriel Bermant
Tel Aviv, May 2014

PART I

The Nuclear Non-Proliferation Treaty: Past Dynamics and Current Assessments

Forging Ahead: Challenges and Opportunities for the NPT

Rose Gottemoeller

Acting Under Secretary for Arms Control and International Security
US Department of State
Remarks at the Institute for National Security Studies (INSS)
Tel Aviv, February 12, 2013

It is an honor to be here. As you all know, John Kerry was sworn in as the new U.S. Secretary of State just about a week and a half ago. He begins his tenure at State fully seized of the challenges that we face around the globe, including the future of the Nuclear Non-Proliferation Treaty (NPT). Under the direction of our new Secretary, the Department of State will continue its efforts to support this vital regime.

The title for this conference is apt. We are at a crossroads, but not a dead-end. Over the course of the last 40 years, the NPT has taken some hits, not least this highly provocative act announced by North Korea today. But it is precisely because of those hits that we have acquired the experience needed to deal more effectively with the challenge of nuclear proliferation.

In order to look to the future, it is important to remember the past. It was just over 50 years ago that tension brought on by the Cuban Missile Crisis threatened to turn the Cold War hot. The world watched in fear for those 13 days in October 1962 when Soviet missile placements in Cuba very nearly became the spark that would start a fire we could not possibly control.

As the United States and the Soviet Union teetered on the edge of nuclear war, leaders in Washington and Moscow sought a diplomatic solution. One of

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Rose Gottermoeller was confirmed as Under Secretary for Arms Control and International Security by the United States Senate on March 6, 2014.

the challenges confronting both sides was making sure that their perceptions, objectives, and proposals were getting across to each other clearly. This was not an easy thing to do without email, dedicated phone lines, or fifty years of cooperation across many different issues.

Resolute and sober in their determination, leaders in Washington and Moscow stepped back from the brink of a nuclear conflict, using every avenue available to settle the crisis peacefully. After those frightening 13 days, both sides learned ways to reduce the tension in our relationship.

A New Beginning

To say that things have changed dramatically since October 1962 is an understatement. The Cuban Missile Crisis was a turning point. The United States and the Soviet Union came to the edge of the abyss and then started to back away from it. In the months following the crisis, a "Hotline" between the Kremlin and the White House was established, allowing for direct, immediate communications between our leaders.

In the summer of 1963, in a Commencement Address at American University, President John F. Kennedy laid out a bold vision on how we could turn away from what had seemed like an inevitable march towards nuclear catastrophe. "Peace need not be impracticable," he said, "and war need not be inevitable. By defining our goal more clearly, by making it seem more manageable and less remote, we can help all peoples to see it, to draw hope from it, and to move irresistibly toward it."

I like that concept. Defining goals does make things more manageable. Working step by step, we can slowly fix seemingly intractable, unsolvable problems.

In that particular speech, one of the defined goals was to achieve a ban on nuclear testing. While it was not comprehensive, the Limited Test Ban Treaty went into force just four months later. It outlawed nuclear explosive tests on land, in the sea, in the atmosphere, and in space. This was a tremendous step in the right direction and one that helped create political conditions to conclude the NPT, an even more ambitious treaty, several years later.

The Path Before Us

The grand bargain of the NPT, where nuclear weapon states pursue disarmament, non-nuclear weapon states abstain from the pursuit of nuclear weapons, and all countries are able to access the benefits of peaceful

nuclear energy, sets an enduring standard that is as relevant today as it was at the Treaty's inception. For over forty years, the regime has bent, frayed, and broken in places, but it has never collapsed. It has slowed the tide of proliferation; it has facilitated cooperation among its States Parties; and it has institutionalized the norms of nonproliferation and disarmament.

Despite our past successes, there are very pressing challenges all around us and on the horizon. Most critically, we have grave concerns about the actions of a few countries. North Korea, Iran, and Syria violated their NPT obligations, and have failed to take the steps necessary to rectify these violations. The United States is gravely concerned about all of these programs, as I am sure is the case for everyone in this room. These transgressions threaten international security and undermine confidence in the nonproliferation regime. These cases also stand directly in the way of our shared disarmament goals.

Addressing these compliance challenges is essential to preserving the integrity of the nonproliferation regime and we have taken important steps in the past several years to do so. The IAEA found Syria in noncompliance with its safeguards obligations for attempting to build a covert nuclear reactor, and we are continuing to build on the stringent sanctions the UN Security Council adopted against Iran in 2010. That, combined with actions taken before 2010, represents clear reinforcement of the importance of full compliance. NPT Parties must be willing to keep the pressure on countries that violate their obligations. As President Obama has said many times, the international community must stand up to States that violate their nonproliferation obligations. NPT rules must be binding and there must be consequences for those who break them.

There is a continued push for universal adherence to the IAEA safeguards agreements and Additional Protocols. As we have learned from past and present safeguards violations from countries such as Iran and Syria, the Additional Protocol must be the standard for verification of the NPT. Since 2010, 18 states have brought Additional Protocols into force, bringing the total to 119. Another 20 have signed the Protocol but not yet completed the ratification process. That is excellent progress, but we must continue to press for more.

The United States will also work with all Parties to discourage states from abusing the NPT's withdrawal provision, a priority we share with many of our international partners.

Building on our pledge to reduce the role of nuclear weapons in our defense strategy, we are also making progress on nuclear-weapon-free zones (NWFZ). The nuclear-weapon states, also known as the P5, and ASEAN have agreed on a revised Protocol to the Southeast Asia NWFZ (SEANWFZ) Treaty that resolved outstanding differences. We hope that the Protocol signing can take place soon. For its part, this Administration sent the protocols to the African and South Pacific NWFZs to the U.S. Senate for its advice and consent. The United States also remains committed to consulting with the Central Asia NWFZ (CANWFZ) parties to reach an agreement that would allow us – along with the rest of the P5 – to sign the protocol to that treaty.

A longer term goal is achievement of a Middle East zone free of all weapons of mass destruction. The United States supports this goal and stands ready to help facilitate discussions among states in the region at the proposed Helsinki conference. But we do so recognizing that the mandate for a zone can only come from within the region; it cannot be imposed from outside or without the consent of all concerned states. We regret the Helsinki conference could not be convened last year, but remain committed to working with our partners to create conditions for a successful event.

An immediate concern is securing vulnerable nuclear materials in order to keep them out of hands of terrorists. Under President Obama's direction, we have held two Nuclear Security Summits, with a third to take place in The Hague next year. In anticipation of The Hague Summit, we will continue to build on pledges that are resulting in more material secured, removed, and eliminated. These are real and durable achievements that help protect nations against the threat of nuclear terrorism. We will continue to use the Summits to strengthen the global architecture – the treaties, institutions, norms, and rules – that governs nuclear security, and to promote the concept of "assurance;" that is, states execute their sovereign security responsibilities in ways that assure neighbors, allies, and rivals that they are doing so effectively. Israel and others here are valued partners in the Summit process, and we look forward to continued cooperation to promote these shared goals.

Regarding the disarmament agenda, there have been successes on both the bilateral and multilateral fronts. The United States is committed to a step-by-step process to reduce the overall numbers of nuclear weapons. The two year anniversary of the New START Treaty's entry into force has just passed. As many of you know, I was the lead New START negotiator for the United States and it is very satisfying to see how pragmatic, business-

like, and positive the implementation has been. We are now exploring the possibilities of what a future agreement with Russia would look like – one with reductions in all categories of nuclear weapons – strategic, non-strategic, deployed, and non-deployed.

Beyond bilateral treaties, ratification and entry into force of the Comprehensive Nuclear Test-Ban Treaty (CTBT) remains a top priority for the United States.

As we move forward with our ratification process, we encourage all other nations to do the same. We also remain committed to launch negotiations on a Fissile Material Cutoff Treaty. It is unfortunate that, to date, the Geneva Conference on Disarmament has been blocked in its efforts to move this agreement forward.

We are also engaging with other P5 states on disarmament-related matters. Following the first meeting in London in 2009, P5 conferences were held in Paris in 2011 and Washington in 2012. At those high level meetings, we started discussions on key nuclear weapons related issues, including confidence building, transparency, and verification experiences. Russia announced recently that it will host the next P5 conference in April, just before the second NPT PrepCom.

While some are quick to dismiss the utility of meetings and conferences, they would be forgetting their history. As the United States and Russia approach the lowest levels of deployed nuclear warheads since the 1950s – and that will happen when the New START Treaty is fully implemented in 2018 – it is important to remember that their success was born out of direct communication. Communication builds trust. Trust paves the way for cooperation. This is the type of process we are cultivating in the P5 setting.

We also support new frameworks for civil nuclear cooperation that reduce the spread of dangerous technologies. Establishment of an IAEA fuel bank represents an important step forward, as it can help assure the reliability of nuclear fuel supply and avoid the unnecessary investment in indigenous enrichment.

Forging Ahead

Having just run through the challenges and opportunities, the road ahead can seem daunting. Some states continue to forsake their freely taken and legally binding obligations. Proliferation is aided by the speed and anonymity provided by the information age. Conflicts around the globe make

cooperation difficult or dangerous. Even in the face of these challenges, it is incumbent upon us to find ways to strengthen nonproliferation norms, bolster compliance, and quickly adapt to ever-changing circumstances and security needs.

There are some new tools that could aid us in our travels. The United States is and has always been committed to innovation, and the arms control and nonproliferation arenas are no exception. To respond to the challenges we face, we are thinking about creative ways to use technologies – including open source technologies – to tackle long-standing verification and monitoring problems. We hope that other states will join us in this endeavor.

All of what I have discussed will require hard work. However, we are at a crossroads, not a cliff. We are fully able to choose the path that leads us to a safer, more secure world. We have with us the lessons of the Cold War and the knowledge that even in our darkest hours, we found a way forward. In his speech at American University 50 years ago, President Kennedy left the students with a final thought: "Confident and unafraid, we labor on – not toward a strategy of annihilation but toward a strategy of peace."

We have come a long way since then, but we have a long way to go. We just have to keep moving forward step by step, confident and unafraid.

The NPT Review Conferences

Harald Müller

Introduction

This essay looks at the Non-Proliferation Treaty (NPT) Review Conferences (RevCons) from 1975 to 2000.[1] RevCons, apart from their particular function in the respective treaty regime, are seismographs for regime stability as measured by the degree of consensus and conflict among its members. For the NPT, the lack of consensus among the membership is known to be its Achilles' heel. However, the intrinsic inequality between nuclear weapon states (NWS) and non-nuclear weapon states (NNWS) creates an inherent structural difficulty that can be removed only through complete nuclear disarmament. As long as this is not accomplished, disputes are bound to recur.

The following analysis explores how the controversies within the NPT have evolved over the thirty-five years from 1975 to 2010, focusing on disarmament (NWS against NNWS), nonproliferation measures and peaceful uses of nuclear energy (suppliers against recipients, developed against developing countries), and universalism (concentrating mainly on the Middle East, with Egypt and the US as protagonists).

When the negotiation parties to the final round of NPT talks agreed on including a clause within the treaty stating that a RevCon be held five years after the treaty entered into force, they introduced a relatively new concept. Moreover, the NPT itself provided only for the first review, while the ensuing sequence of one such conference every five years was created by the practices of states party to the treaty. The institution of the RevCon was part of the compromise often labeled the "grand bargain," and constituted a concession by the NWS to the NNWS. The latter party, skeptical of the commitments of the NWS to their disarmament pledges and uncertain about

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Prof. Harald Müller is the Executive Director of the Peace Research Institute Frankfurt.

the consequences of the impending verification measures for their nuclear power industries, sought to ascertain how the treaty would work in practice while maintaining some leverage with the NWS.

Before the 1995 Extension

The first two NPT Reviews, in 1975 and 1980, respectively, were highly controversial. In 1975, an imposing conference president, Swedish Disarmament Minister Inga Thorson, prevailed over the assembled all-male conference in virtually dictating a short consensus document after a difficult and conflict-ridden meeting.[2] In 1980, there was no consensus over the disarmament issue and there was a particular focus on the Comprehensive Nuclear Test Ban Treaty (CTBT).[3] In addition, this conference might be most memorable for its Iraqi presidency, one year before the Osiraq reactor was bombed by the Israeli Air Force following suspicions that the facility was designed for military purposes – suspicions that were corroborated a decade later following the inspections in the wake of the 1991 Gulf War.

In 1985, the NPT Review was also under an Arab presidency – this time, under Egypt's Mohammed Shaker. Egypt was a newcomer to the NPT, and the most significant accession country since 1980. Shaker provided prudent leadership and was well advised, relying on selected representatives of key countries who helped him forge a viable consensus. Somewhat unexpectedly, Shaker was gallantly assisted by Lewis Dunn, the leader of the US delegation representing the Reagan government, who had worked hard before the RevCon to narrow the gap between the different groups. Dunn sought to dispel the deep-seated distrust of non-aligned countries in the good faith of his government. The Gordian knot was cut with the assistance of the ingenious formula on the CTBT, where the final declaration noted dryly that some parties (the US and the UK) were opposed while a majority was supportive. The last obstacle to agreement concerned the Middle East: not the Arab-Israeli conflict, but a hostile confrontation between the warring parties of Iraq and Iran. Each side insisted that the conference should condemn the other. This matter was resolved by the mediation of Australian Ambassador Richard Butler who convinced the two representatives of Iraq and Iran that it was time to cooperate.

The final declaration of the 1985 RevCon, apart from the bogus consensus on the CTBT, contained the first substantive document of an NPT review, giving serious consideration to the various pillars of the NPT and recommending

potentially useful steps to enable it to function more effectively. However, a split emerged between Western countries supporting the strong promotion of stricter export controls and curbs on the fuel cycle (the US, Canada, Australia, Ireland, Sweden, and Austria) and other Western parties (including Germany, Switzerland, Belgium, and Japan), which insisted on the right to unrestricted use of civilian nuclear energy.[4]

By 1990, the divisions among Western countries had dissipated. Following a series of export scandals relating to Libya, Iraq, and Pakistan, as well as the concerns of certain parties over whether a newly reunified Germany would play by the rules, Germany swiftly adopted a responsible export control policy. The new policy included not only the application of full scale safeguards as a condition for export licenses, but also moved to extend export controls to dual use goods and intangible technology transfers. Other exporters followed suit, and the application of full scale safeguards emerged as the new consensus norm for nuclear exports. Other controversies were settled, except for one: Mexico would not accept the 1985 formula on the CTBT. In turn, the US and the UK, which otherwise might have been willing to agree to a vaguely positive statement on the CTBT, could not agree on the concrete steps on which Mexico, under the formidable leadership of Miquel Marin Bosch, insisted. The conference therefore failed to reach an agreement, even though there appeared to be greater consensus among members than in previous conferences.[5]

The Extension Climax

During the first four NPT reviews, the Arab-Israeli conflict played a marginal role. True, Arab parties always articulated their misgivings about imbalances in the Middle East in regard to nuclear capabilities, and condemned Israel in 1985 and 1990 for the attack against Osiraq. However, this was not a significant item on the agenda, unlike issues such as disarmament and peaceful uses of nuclear energy. This changed decisively at the 1995 conference.

The 1995 RevCon was a singular event. This time not only was the NPT reviewed, but the parties also had to decide whether to extend the regime, and if so, whether to do so for a limited period or indefinitely. The Western NWS and Russia, as the nuclear successor of the Soviet Union, have all attached considerable importance to the NPT. The fact that the fate of the NPT was at stake gave all NNWS, the Non-Aligned Movement (NAM), and the Arab states more leverage than they possessed before or after this

event. The international community was keenly conscious of this fact. The NWS adopted an unprecedentedly soft approach – they had embarked on a negotiation path towards the CTBT the year before – while some Western middle-ranking powers were eager to work for the indefinite extension of the NPT as an expression of their good global citizenship. In turn, the developing countries were wary of conceding the bargaining chip of the NPT's existence. As the conference approached, two alternatives emerged that were each connected to a potential candidate for the conference presidency. Venezuela's ambassador, Adolfo Taylhardat, pleaded for an extension of 25 years, leaving the fateful decisions on the future of the treaty for a future conference. Jayantha Dhanapala, a Sri Lankan diplomat who had skillfully chaired the Main Committee I of the 1995 conference, did not reveal his preference, but this indicated a possible readiness to support an indefinite extension under the right circumstances.

There was also a new important player on the stage: South Africa. The nuclear-armed pariah state had become a model for the cause of disarmament under the leadership of icon Nelson Mandela. South Africa entered a partnership with Canada, then a leading proponent within the Western world for disarmament and nonproliferation. Together, they worked out a solution to combine an indefinite extension with a set of standards against which future performance would be assessed, including specific steps for disarmament and an intensified review process that would be better able to undertake this assessment. In line with this development, President Dhanapala oversaw the intense negotiations within a small and representative group of key countries, while the review followed the normal sequence (general debate, main committees, drafting committee, and final plenary). All the while, the Canadians were actively collecting signatures for indefinite extension, and during the third week, it became clear that a majority would support this position. For the opponents of an indefinite extension of the NPT, the options had diminished.

This was Egypt's moment. Most leading NAM states had sought to fight for a limited extension of the NPT, but this cause was lost. The only way forward was to struggle for substantial "principles and objectives" and for reforms in the review process that would preserve some leverage. Egypt, leading the Arab states (some of which, including Syria, Libya, and Algeria, were particularly unhappy with the option of an indefinite extension), opened a new front in a bid to make the Middle East issue the "fourth pillar" of the

NPT, alongside disarmament, nonproliferation, and peaceful uses of nuclear energy.

Egypt was aware that the Western states and Russia wanted to avoid an open vote that would expose the degree of dissent among NAM states. It presented the prospect of an indefinite extension without a vote if the Middle East issue was part of the package. In view of this possibility, the Egyptians indicated to the Americans that they would persuade the Arabs to concede, and likewise persuade the NAM leaders not to insist on a vote. They achieved their objective. The "Middle East Resolution" was one of the four official decisions of the 1995 RevCon, alongside the extension vote, the "Principles and Objectives," and the document on the "Enhanced Review Process." The Middle East Resolution expressed a commitment of all the parties to work toward a Middle East Nuclear Weapon Free Zone, as well as a particular commitment of the depository states, including Russia, the UK, and the US, to take an initiative to foster this cause. By adopting this package, the RevCon extended the treaty indefinitely.[6]

In contrast, the review part of the conference failed. Dhanapala, by default, had left this activity to the main committee chairmen. One of them was Nigerian Ambassador Ayewah, possibly the most radical NAM diplomat participating in the conference, whose only success was leading the Main Committee I (charged with the disarmament issue) straight into a stalemate. Dhanapala, on his return from the small group negotiations after the votes had been taken two days earlier, did not have enough time to pull things together. The failure of the review signaled that the extension debate could have had a different outcome if a few details had been changed. Apart from an indefinite extension to the regime, the main result of the conference was to put the Middle East nuclear question right at the center of the NPT.

After Extension: Another Triumph and Disaster

The mood of the 1995 conference was shaped by the numerous disarmament steps taken in the preceding years, starting with the Intermediate-Range Nuclear Forces (INF) Treaty in 1987 and continuing with the two START treaties (1992 and 1993), as well as the promising launch of the CTBT talks, accompanied by a provisional suspension of all testing. The extension of the NPT without a vote would probably not have taken place had there been no progress in the disarmament realm.

By 2000, the atmosphere had changed. Ratification of START II had stalled, and the US Senate, strongly influenced by neoconservative Republicans, had rejected the CTBT. The Clinton administration made an heroic effort before the 2000 conference to mend fences and to reassure the NPT community that a return to the disarmament process was imminent. Beyond this diplomatic campaign, however, the conference profited from the determined commitment of a group of seven states (Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden) known as the New Agenda Coalition (NAC) that promoted the disarmament agenda by forging a compromise with the NWS. Of the seven states, Egypt and Mexico were two crucial agitators; Brazil was a newly emerging NPT power that had only recently acceded; and Ireland, South Africa, and Sweden were three resourceful small and middle-ranking actors with a particular commitment to the field. Of the latter three countries, South Africa stood out as a disarmament hero and savior of the NPT in 1995. As in previous successful conferences, the negotiations were conducted on a dual track basis. The New Agenda Coalition negotiated with the NWS, with Norway as the chair, while the bulk of the parties engaged in the customary review game with all the predictable controversies. After protracted night sessions, the participants agreed on "Thirteen Steps" for nuclear disarmament, including, an "unequivocal undertaking" by the P5 that they would eventually eliminate their nuclear arsenals, adopt transparency measures, and include tactical nuclear weapons in the disarmament track. Egypt succeeded in reaffirming the central importance of the 1995 Middle East Resolution. After a difficult night session, concerning the review of the past five years on disarmament, which almost destroyed the compromise, a valiant British diplomat rescued the conference by introducing suitable compromise language. With a decent review and agreement on some specific steps, the 2000 event was the most successful NPT RevCon ever. The Middle East played a less central role, but the 1995 resolution was reaffirmed. When the delegates returned home, there was a sense that the treaty was in good shape.[7]

This positive feeling did not last long. The preparatory process was damaged by the attitude of the first Bush administration on many arms control issues. Chief negotiator John Bolton became persona non grata in the non-aligned world and in much of the West, as a result of his hostility to arms control agreements that appeared to constrain America's freedom of action. The US entered the 2005 review determined not to compromise

on disarmament, and to demand much stronger nonproliferation measures, including export controls, a halt to the spread of fuel cycle facilities, harsh penalties in case of treaty withdrawal, strong sanctions against wrongdoers, and stricter verification. This approach repelled even well-disposed NAM states such as South Africa, Brazil, and Indonesia. It silenced the NAC whose room for maneuver was reduced to zero.

Egypt would not be silenced, however, as the Egyptians had decided that they could not do business with the Bush administration. The Bush administration made it clear that it had no interest in the Middle East Resolution and was complacent regarding Israel's nuclear weapons. Egypt sought to undermine US objectives to introduce stricter nonproliferation measures. Iran, sharing Egypt's priorities, albeit for other reasons, was content to hide behind Cairo's broad shoulders. In a similar vein, France silently shared Washington's refusal to accept the Thirteen Steps for nuclear disarmament. The US delegation declared that the results of the 2000 NPT RevCon were irrelevant as they had been accepted by a previous US administration and therefore were not binding on the present one. This declaration constituted an unprecedented devaluation of the entire institution of review. Those struggling for compromise, including a number of EU member states and Canada, found themselves stuck between the American rock and the Egyptian hard place. Despite the best efforts of President Sergio Duarte of Brazil, the conference ended without a declaration, after more than three weeks of disagreement on the agenda alone. Ultimately, it required the strong efforts of several members to formulate a final document stating that the parties had met. This was an unprecedented disaster for the NPT.[8]

The 2010 Recovery: Glass Half Full or Half Empty?

It took the momentum created by President Obama's new policy to turn the situation around. Many people were encouraged by his Prague speech of April 2009 in which he pledged to work for the goal of a world without nuclear weapons. The 2010 conference took place in the wake of numerous events that helped pave the way for a more positive outcome, following the 2005 disaster. These events included the UN Security Council summit of September 2009, in which nuclear disarmament was declared a common goal; the first ever P5 consultations on nuclear issues in the same month; the New START treaty; and the US-Russian agreement to reduce stockpiles of military plutonium signed on the occasion of the Washington Nuclear

Security Summit in April 2010. This summit rallied world leaders around the objective of preventing nuclear terrorism and overshadowed completely Tehran's counter summit held at the same time. The preparatory process also reflected the progress made not least by the smooth manner in which the parties adopted an agenda, in contrast to the discord of 2005.

It was therefore no surprise that the conference adopted a final declaration including a "64-Point Plan of Action," which covered all the three pillars of disarmament, nonproliferation, and peaceful uses of nuclear energy. A closer glance, however, shows that little progress was actually made. Seemingly bold steps such as a nuclear weapons convention or curbs on the development of new nuclear warheads, as well as the universal adoption of the Additional Protocol, a document providing for much tougher verification than the original safeguards system under the NPT, were wrapped in soft language. The French were at the forefront of NWS reluctance to compromise on nuclear disarmament, while the NAM were unwilling to concede stringent measures to strengthen the nonproliferation toolbox. Although Iran was increasingly isolated as a result of its efforts to wreck the consensus, the NAM states demonstrated solidarity towards Tehran and would not allow Iran to be condemned for being in non-compliance with its undertakings. The conference president, Ambassador Libran Cabactulan, focused on small group consultations with the Egyptians, reflecting the fact that the review section of the conference concluded on a disappointing note, in spite of promising developments during the last few days of the conference.

The most significant development was the paragraph on the Middle East. Egypt, through the skillful utilization of its chairmanship of both the moderate NAC and the less moderate NAM, managed to extract a major concession from Washington: the promise of action on the Middle East WMD-Free Zone. The depositaries renewed their pledge to work toward this goal, while the conference adopted a plan for a meeting to foster that objective, calling on the UN Secretary General, in consultation with the depositaries and the countries from the region, to appoint a facilitator for this meeting. With this success, Egypt led the non-aligned countries towards a compromise and successfully blocked the Iranian attempt to prevent consensus. Egyptian diplomats justifiably claimed that the Middle East WMD-Free Zone was then established as the fourth pillar of the NPT.[9]

Conclusion

NPT RevCons have uniformly exposed fault lines concerning three major issues:[10] nuclear disarmament, non-proliferation/peaceful uses of nuclear energy, and the Middle East. On nuclear disarmament, reviews have led to a much more detailed and specified understanding of what Article VI of the NPT means, largely eroding NWS opposition to such specification. Today, there is a long list of agreed positions and promised actions against which the behavior of NWS states can be measured. The issues of nonproliferation and peaceful uses of nuclear energy are intimately interwoven. The deep but unfounded distrust of NAM states concerning nonproliferation measures that are perceived as a means to impede the peaceful uses of nuclear energy in the developing world has meant that they are unwilling to embrace such measures without caveats and reservations. This also applies to planned responses to NPT withdrawal, strong enforcement instruments, and the emphatic support of multilateral fuel cycle and fuel supply arrangements. As long as there is no significant progress on disarmament, it is unlikely that developing countries will readily support what they perceive as additional burdens on themselves without reciprocal concessions by the NWS parties.

The Middle East issue has now entered the NPT agenda largely as the result of skillful Egyptian diplomacy. Whether the overall Egyptian strategy has been thought through as clearly as the tactical maneuvers in the nonproliferation regime is open to question. The refusal to accept the tangible Advisory Committee on Reactor Safeguards (ACRS) compromise in the 1990s, as well as the blocking of consultations after the 2012 Middle East conference had been postponed *sine die*,[11] betrays a reluctance to take what one can reasonably get at a given moment as a starting point on which one can then build. This casts doubt over the viability of the Egyptian strategy.

The fault lines in the treaty community are structural and impede the strengthening of the nonproliferation toolbox and united action against rule-breakers. However, they are not an insurmountable obstacle to an incremental improvement of the regime. Whenever improvements occurred, they were the result of bridge-building groupings working outside the formal structure of the review, such as the small negotiation group convened by President Dhanapala in 1995, the NAC's bargaining with the P5 in 2000, and the consultations with Egypt in 2010. This incremental progress is limited, but remains the best one can hope for as long as the major controversies are not laid to rest.

Notes

1 I was a witness to six out of eight RevCons, starting in 1985. At my first two conferences, I participated as a non-governmental observer, while in the latter four conferences, I served as an expert member of the German delegation. This essay draws on my own writings as well as other accounts by expert witnesses.

2 Onkar Marwah, "Epilogue: The NPT RevCon," in *Nuclear Proliferation and the Near-Nuclear Countries*, eds. Onkar Marwah and Ann Schulz (Cambridge, MA: Ballinger, 1975), pp. 301-13; "The Implementation of Agreements Related to Disarmament," *SIPRI Yearbook 1976* (Cambridge and London: MIT Press, 1976), pp. 363-64.

3 "The Second NPT RevCon," *SIPRI Yearbook 1981* (London: Taylor and Francis, 1981), pp. 297-372.

4 Harald Müller and David Fischer, "Non-Proliferation Beyond the 1985 Review," CEPS Papers No. 26, Centre for European and Policy Studies, 1985; and Jozef Goldblat, "The Third Review of the Non-Proliferation Treaty," in *SIPRI Yearbook 1986* (Oxford: Oxford University Press, 1986): pp. 469-97.

5 Harald Müller and David Fischer, "A Treaty in Trouble: Europe and the NPT after the Fourth RevCon," *PRIF Reports* no. 17, Peace Research Institute Frankfurt, 1991.

6 Jayantha Dhanapala and Randy Rydell, "Multilateral Diplomacy and the NPT: An Insider's Account," UNIDIR (2005); and Harald Müller, David Fischer, and Wolfgang Kötter, *Nuclear Non-Proliferation and Global Order* (Oxford: Oxford University Press, 1995).

7 Rebecca Johnson, "The 2000 NPT RevCon: A Delicate, Hard-Won Compromise," *Disarmament Diplomacy* 46 (2000): 2-20; John Simpson, "The 2000 NPT RevCon," in *SIPRI Yearbook 2000* (Oxford: Oxford University Press, 2001), pp. 487-502.

8 Rebecca Johnson, "Politics and Protection: Why the 2005 NPT Review Conference Failed," *Disarmament Diplomacy* 20 (2005), www.acronym.org.uk/dd/dd80/80npt.htm; Harald Müller, "A Treaty in Troubled Waters: Reflections on the Failed NPT RevCon," *International Spectator* 40, no. 3 (2005): 33-44.

9 Rebecca Johnson, "Assessing the 2010 NPT RevCon," *Bulletin of the Atomic Scientists* (July/August 2010), www.acronym.org.uk/npt/2010.REJ.Bulletin.07.10.pdf; Harald Müller, "The 2010 NPT RevCon: Some Breathing Space Gained, But No Breakthrough," *International Spectator* 45, no. 3 (2010): 5-18; and Harald Müller, "A Nuclear Nonproliferation Test: Obama's Nuclear Policy and the 2010 NPT RevCon," *Nonproliferation Review* 18, no. 1 (2010): 219-36.

10 I draw here on Harald Müller, Una Becker-Jakob, and Tabea Seidler-Dieckmann, "Regime Conflicts and Norm Dynamics: Nuclear, Biological and Chemical Weapons," in *Norm Dynamics in Multilateral Arms Control: Interests, Conflicts, and Justice*, eds. Harald Müller and Carmen Wunderlich (Athens/London: University of Georgia Press, 2013), pp. 51-81; and Harald Müller, "Conclusion: Agency is Central," *Norm Dynamics in Multilateral Arms Control*, pp. 337-65.

11 Egypt and the Arab League as a whole requested that all parties participating in such consultations commit themselves to attending the future conference. However, it cannot be expected that all countries would from the outset committ to what was as yet an unknown result.

The NPT toward 2015: NAM and Non-Nuclear Weapon States Perspectives

Rebecca Johnson

The second Preparatory Committee meeting (PrepCom) for the 2015 Review Conference of parties to the Nuclear Non-Proliferation Treaty (NPT), held in the spring of 2013, was dominated by two key issues: concerns over the failure to convene the 2012 Helsinki conference on the Middle East, and the "Humanitarian Disarmament Initiative," led by a group of countries including Norway, Switzerland, South Africa, and Mexico. The nuclear weapon states were surprised when South Africa obtained 80 co-sponsors for the "Joint Statement on the Humanitarian Impact of Nuclear Weapons,"[1] which built on the sixteen-nation humanitarian initiative of Switzerland at the 2012 PrepCom. But the biggest surprise for the PrepCom occurred when Egypt's Ambassador Hisham Badr led a walk-out of his entire delegation on April 29, 2013, in protest at the lack of progress on convening the mandated Middle East conference.

Progress on implementation of the 1995 Resolution on the Middle East[2] and movement toward the establishment of a Middle East zone free of nuclear and other weapons of mass destruction (WMDFZ) have long been priorities for the Arab League, endorsed by the Non-Aligned Movement (NAM). When it became clear that the 2012 Middle East Conference mandated by the 2010 NPT Review Conference[3] would not take place, there were rumors – which did not materialize – that the Arab League would boycott the 2013 PrepCom. Instead, many Arab states spoke in the general debate and the special session on regional issues of their concerns and disappointment. The special session heard first from Finland's Under-Secretary of State for

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Foreign and Security Policy, Jaakko Laajava, the facilitator charged with organizing the 2012 conference. In addition to a joint statement from the NPT depositaries (Russia, United Kingdom, and the United States), who are also responsible for implementing the 2010 decision,[4] Thomas Countryman, US Assistant Secretary for International Security and Nonproliferation, told the 2013 PrepCom that though the postponement constituted a "major disappointment…. this was not a breach of the [2010] Action Plan as some suggest." This did not go down well with the NAM and Arab states.

At the end of the first day of the special session, Egypt made a hard-hitting statement asserting that "the breach of the 2010 Action Plan's clear decision to hold a Conference in 2012 is yet another failure to implement a key NPT commitment." After characterizing the 1995 Resolution on the Middle East as "an essential element of the 1995 Conference and of the basis on which the Treaty was indefinitely extended without a vote in 1995," Badr announced that Egypt would not participate in what remained of the 2013 PrepCom as a protest against the failure to implement the 1995 Middle East Resolution. The delegation's intention was to "send a strong message of dissatisfaction with the lack of seriousness in dealing with the issue of establishing a zone free of nuclear weapons, a central component of regional, Arab and Egyptian national security, which impacts directly international peace and security."[5] Though the Arab League members were as surprised as other PrepCom participants by Egypt's withdrawal from the PrepCom, they had expressed similar concerns, calling for the Helsinki conference to be convened in 2013.

If progress toward the Helsinki conference does not occur – a particular challenge, given the many different expectations and views of what would constitute "progress" – many are predicting that the Middle East issue could create obstacles and cause the 2015 Review Conference to fail. The NPT regime has weathered periodic review conference failures, as happened in 2005, but there are worries that each failure exposes the regime's weaknesses in addressing the core nuclear challenges. Non-implementation of consensus commitments further erodes the credibility of the treaty as a means to achieve nonproliferation and disarmament. Assessments are further complicated by the domestic political upheavals in Egypt and elsewhere in the Middle East, as well as by the election in Iran of a more moderate president, Hassan Rouhani, who possesses significant experience in the complexities of nuclear diplomacy.

Middle East Developments at the 2012 and 2013 PrepComs

The first PrepCom for the 2015 Review Conference was held in Vienna in April-May 2012. Chaired by Peter Woolcott of Australia, it swiftly adopted an agenda for the next three NPT PrepComs. It was essentially a talk shop, as there was no requirement to negotiate consensus agreement.[6] Having been appointed seven months earlier as facilitator for the 2012 conference, Laajava took his first opportunity to report on his efforts to organize the event.[7] He had clearly worked hard, conducting meetings across the region and around the world. In his forward-looking 2012 report, he indicated that the conference would be hosted at the prestigious Finlandia Hall in Helsinki, possibly in December.[8] By the following year, the facilitator's report to the 2013 was very different, as he sought to explain why the Helsinki conference was not convened in 2012 after all, in spite of over 300 rounds of various discussions with the relevant states, agencies, and civil society actors.[9] Calling the decision to postpone "unfortunate," Laajava indicated that time had run out to secure the participation of all states in the region. His report did not go into detail, but a number of Arab states accused the US of preempting Finland and the other convenors with its "unilateral" announcement of the postponement, a view that was reportedly confirmed by Russian diplomats.[10] The US appeared to pull the plug just after Iran made a late announcement of its participation in November 2012, arguably because of Israel's reluctance to attend the conference and Syria's descent into chaos.

Reporting to the 2013 PrepCom, Laajava still appeared to believe that the conference would take place, indicating that it "would be relatively brief with the aim of reaffirming the common objective of a WMD-free zone in the Middle East." He added that a sustainable process would require "regional cooperation and expert level work…both within the arms control domain and in the area of confidence-building."[11] While acknowledging that many states had asked for a new date to be set in 2013, he had little to offer except "multilateral consultations" and further "preparations." The US, UK, and Russia appeared to back the idea of "preparatory consultations" among regional states, initially earmarked for Geneva, with the aim of building agreement on issues like the conference agenda and "next steps" that might be outlined in an outcome document. Aware that many Arab states were wary of being pushed into talks with no conference, Russia's Ambassador Mikhail Ulyanov stressed that the "proposed consultations" were not intended as a "substitute [for] convening the Conference."[12] US

officials privately expressed confidence that Israel would be prepared to join such consultations, depending on the terms of reference. At a meeting of the EU Consortium in Brussels on October 1, 2013, Laajava indicated that the first such talks would take place in Glion, Switzerland, on October 21-22.

One reason why the Arab League decided not to boycott the PrepCom as a whole was to ensure that their working paper "Implementation of the 1995 Resolution on the Middle East"[13] would be submitted and discussed. This working paper underscored the negative impact of the ongoing failure to implement the 1995 Middle East Resolution and, in particular, what had been agreed in the 2010 action plan. It called on the PrepCom to adopt the position that the "unilateral postponement by the [2012 Conference] organizers should be considered a shirking of their responsibilities under the [2010] action plan." Furthermore, the paper indicated that Israel and the depositary governments (particularly the United States) were undermining progress toward the achievement of a WMD-free zone in the Middle East, and that the postponement damaged the credibility of the NPT and the review process. The working paper asserted a direct link between the success of the 2015 NPT Review Conference and the convening of the Helsinki conference in 2013, along with realization of perceptible success through the initiation of a negotiation process within a specific time frame to achieve a WMDFZ in the Middle East.[14] The Arab group was willing to support the idea of a preparatory meeting (as proposed by Laajava and the depositary states), provided that it complied "with the terms of reference and agreements" decided in 2010, and there was agreement on a definite date for the Helsinki Conference in 2013.

After walking out, Egypt did not reappear at the 2013 PrepCom, despite appeals from Laajava, representatives of the depositaries, and the PrepCom Chair, Ambassador Cornel Feruta of Romania.[15] In Feruta's summary of the PrepCom, he noted that the state parties regretted the postponement of the 2012 conference, but support was expressed for Laajava's proposal for "multilateral preparatory consultations involving the States of the region." Appreciation was also shown "for the constructive engagement of the Arab states."[16]

Humanitarian Disarmament Developments 2010-2013

The "Humanitarian Disarmament Initiative" looks set to become a major issue in the run-up to 2015. Led by a cross regional group of European,

African, Latin American, and Asian governments, it builds on language inserted by a number of key governments into the consensus conclusions and recommendations of the 2010 Review Conference final document, which states: "The Conference expresses its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons and reaffirms the need for all States at all times to comply with applicable international law, including international humanitarian law."[17]

This statement formed the basis for efforts by civil society leaders, international organizations, and a growing number of nuclear-free states to draw attention to the humanitarian and environmental consequences related to the use of nuclear weapons, nuclear miscalculations, or accidents involving nuclear detonations. In an early development in November 2011, the Federation of Red Cross and Red Crescent Societies built on studies from the International Committee of the Red Cross (ICRC) and adopted a ground breaking resolution on nuclear weapons, revisiting the issue at a high level for the first time since the 1980s. Expressing concern *"*about the destructive power of nuclear weapons, the unspeakable human suffering they cause, the difficulty of controlling their effects in space and time, the threat they pose to the environment and to future generations and the risks of escalation they create," the resolution called for "negotiations to prohibit the use of and completely eliminate nuclear weapons through a legally binding international agreement."[18] Alongside ICRC briefings on the humanitarian aspects of nuclear weapons, various governments such as Switzerland, Austria, and Norway resourced a number of academic studies and meetings. Civil society organizations, such as the International Campaign to Abolish Nuclear Weapons (ICAN), Acronym Institute for Disarmament Diplomacy, International Physicians for the Prevention of Nuclear War, and the UN Institute for Disarmament Research (UNIDIR) raised these and similar issues in significant research and publications in the years 2009-2013.[19]

The renewed interest in the humanitarian impact of nuclear weapons was fueled by three considerations: new research from climate scientists and doctors showing that the security, food resources, and health of all people could be seriously affected by the use of a relatively small number of nuclear armaments attacking cities, even if the direct detonations were confined to a specific region; lessons applied from recent initiatives to prohibit other weapons with deleterious humanitarian consequences; and analyses into the logic and dynamics of conflict and war that have prompted a reconsideration

of Cold War assumptions and theories of deterrence, especially in the context of military and political decision making, crisis instability, asymmetric threats, and communications with multiple interlocutors.

After the groundbreaking Red Cross/Red Crescent resolution, sixteen states participating in the NPT PrepCom in May 2012 presented a joint statement on the humanitarian dimension of nuclear disarmament, calling on states to "intensify their efforts to outlaw nuclear weapons and achieve a world free of nuclear weapons."[20] A similarly worded statement was circulated in October 2012 at the UN First Committee (Disarmament and International Security) and received 35 national co-sponsors. By the 2013 PrepCom, the co-sponsors had grown to 80 states from all regions, and a few months later at the 2013 UN First Committee, New Zealand led the effort and attracted 125 signatories. A milder version that also highlighted humanitarian concerns was sponsored by Australia and attracted 17 signatories, mostly from states in NATO and other nuclear alliances with the United States. Joint statements like these reflect the increasing salience of humanitarian concerns in the nuclear realm over the last two years.

Drawing on the 2010 NPT outcome document, Norway convened an international conference in March 2013 on the humanitarian impact of nuclear weapons. The Oslo conference was open to all governments, whether or not they were parties to the NPT. It was attended by 127 governments as well as a broad spectrum of civil society. ICAN also organized a two-day civil society forum comprising over 500 representatives from 70 countries. Among the nine nuclear-armed states, only India and Pakistan attended. The P5 persuaded each other to undertake a joint boycott of the event,[21] with Israel and North Korea staying away. A year later, in February 2014, Mexico hosted the Second International Conference on the Humanitarian Impact of Nuclear Weapons in Nayarit, attended by 146 states and over 150 representatives of civil society, academic agencies, and international agencies, including the UN Office for the Coordination of Humanitarian Affairs (OCHA), the UN Office for Disarmament Affairs (ODA), the Red Cross and Red Crescent Societies, the World Food Programme, and Chatham House.

Conference presentations and materials disseminated in Oslo, as well as at the NPT PrepComs and various UN-related forums, have made a strong case that nuclear weapons make humanity more insecure and vulnerable, and do not deliver sustainable deterrence or security. They distort international relations and divert resources, exacerbating regional divisions and a range

of other domestic and security problems, such as poverty and development challenges, environmental/climate destruction, pandemics and global health threats, terrorism, economic chaos, water and food scarcity, shelter, and human rights. In analyzing the risks and consequences of accidents, miscalculations, and detonations involving existing nuclear arsenals, the humanitarian approach argues for solutions that prioritize human and global security, recognizing that national security cannot be effectively achieved through nuclear policies determined by individual states, divorced from regional and humanitarian considerations.[22]

The direct effects of nuclear weapons explosions and the consequent radioactive contamination and radiation sickness are well known, yet many governments were jolted by the evidence and assessments presented by experts and practitioners, including national agencies charged with organizing emergency planning and responses to nuclear disasters.[23] Perhaps they had convinced themselves that nuclear threats had declined after the Cold War ended. Representatives of states in nuclear weapons free zones (NWFZ) were particularly shocked to see depictions of the global consequences of "limited" or "regional" nuclear war, indicating that people in NWFZ could be as likely to suffer from the resulting climate distortions and disastrously reduced food resources as those in countries that deployed nuclear weapons.

Based on a hypothetical scenario of war between India and Pakistan and with the possibility of a hundred Hiroshima-sized bombs (12-15 kt) being used on urban areas, climate scientists have recently demonstrated that the detonations and resulting fires would propel millions of tons of soot, smoke, and debris into the upper atmosphere, darkening the skies, disrupting rainfall, and causing temperatures across the planet to plummet. This scenario is predicated on less than half of the South Asian arsenals being unleashed, with no other nuclear-armed state becoming involved. A similar environmental and humanitarian catastrophe could be caused across Eurasia and Africa if only half of the nuclear bombs carried on one of the UK's Trident-armed nuclear submarines were detonated on Russian cities.[24] Most of today's nuclear armaments are several times more powerful than the Hiroshima bombs, and potentially targeted cities are much larger today than Hiroshima and Nagasaki in 1945. While some scenarios and certain details in the nuclear winter studies have been contested, few deny that abrupt prolonged global cooling and prolonged agricultural disruption could

be caused by the detonation of a fraction of the nuclear weapons available to today's nuclear-armed states.

The Oslo and Nayarit conferences and a growing number of meetings in the margins of the UN and NPT have highlighted the potential lasting devastation that would result from nuclear weapons being detonated on cities, with severe consequences for agriculture and the life cycles of many species. In view of the rise in the global population and urbanization since the 1980s, these studies indicate that in addition to the millions that could die from the direct impact of nuclear detonations, one to two billion people around the world could face starvation and death due to famine, epidemics, and other disasters linked to large-scale hunger and malnutrition.[25] Closing the Oslo conference, Foreign Minister of Norway Espen Barth Eide emphasized the following points:

- It is unlikely that any state or international body would be able to respond adequately to an emergency caused by the detonation of a nuclear weapon.
- Our historical experience with nuclear weapons has demonstrated their devastating immediate and long-term effects. While political circumstances have changed, the destructive potential of nuclear weapons remains.
- The impact of the detonation of a nuclear weapon, irrespective of cause, will not be constrained by national borders, and will significantly affect states and peoples on both a regional and global level.[26]

A year later, the Chair of the Nayarit conference came to similar conclusions:

- The effects of a nuclear weapon detonation are not constrained by national borders − it is therefore an issue of deep concern shared by all.
- Beyond the immediate death and destruction caused by a detonation, socio-economic development will be hampered and the environment will be damaged. Suffering will be widespread, the poor and vulnerable being the most severely affected…
- Reconstruction of infrastructure and regeneration of economic activities, trade, communications, health facilities, and schools would take several decades, causing profound social and political harm.
- Radiation exposure could result in short and long-term negative effects in every organ of the human body and would increase cancer risks and future hereditary pathologies.
- Today the risk of nuclear weapons use is growing globally as a consequence of proliferation, the vulnerability of nuclear command and control

networks to cyber-attacks and to human error, and potential access to nuclear weapons by non-state actors, in particular terrorist groups.[27]

In light of these findings, the Mexican Chair, Juan-Manuel Gomez Robledo, concluded: "The broad-based and comprehensive discussions on the humanitarian impact of nuclear weapons should lead to the commitment of States and civil society to reach new international standards and norms, through a legally binding instrument."[28]

Some of the nuclear-armed states have argued that the Chair's summary went beyond the views of many participants in the Nayarit conference. In all salient respects, however, similar views are expressed in the joint statement co-sponsored by 125 governments at the 2013 UN First Committee. Led by New Zealand, the text closely followed the humanitarian statement to the 2013 NPT PrepCom, which received an unprecedented 80 co-sponsors. Both statements opened by stating: "Our countries are deeply concerned about the catastrophic humanitarian consequences of nuclear weapons," and then briefly described how the effects of nuclear weapons are not constrained by national borders. Sponsored by 125 governments, the New Zealand statement went a bit further than South Africa's in its conclusions

> It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances. The catastrophic effects of a nuclear weapon detonation, whether by accident, miscalculation or design, cannot be adequately addressed. All efforts must be exerted to eliminate the threat of these weapons of mass destruction. The only way to guarantee that nuclear weapons will never be used again is through their total elimination.All States share the responsibility to prevent the use of nuclear weapons, to prevent their vertical and horizontal proliferation and to achieve nuclear disarmament, including through fulfilling the objectives of the NPT and achieving its universality."[29]

Although several NATO and EU governments signed on, the co-sponsors of both were mainly drawn from the NAM, including at least eleven countries from the Middle East. The P5 tried to play down the significance of these statements, while also exerting political pressure on others not to sign, portraying the humanitarian approach as a "distraction" from the NPT and the moribund Conference on Disarmament (CD). While some NATO

members co-sponsored the humanitarian statements, seeing no conflict with their alliance commitments and national security policies, others adopted the P5 narrative, fearing that addressing the indiscriminate humanitarian effects of nuclear weapons could cast doubt on extended deterrence arrangements with the United States that entail a threat to use nuclear weapons, and even to initiate their use in certain circumstances.[30] Under pressure from civil society, 17 states co-sponsored an alternative Australian statement that also underlined the importance of considering the humanitarian consequences of nuclear weapons and policies, though it shied away from seeking solutions beyond the traditional steps that have languished on the nuclear-armed states "to do" list for over two decades.

Other forums for debating how to achieve disarmament took place in 2013, promoted by the NAM and mandated by the UN General Assembly, including the September 26 UN High Level Meeting on Nuclear Disarmament and the UN General Assembly's Open-Ended Working Group (OEWG).[31] Amid a growing number of statements in these forums calling for nuclear weapons to be prohibited and eliminated, the Austrian President's statement to the High Level Meeting was unequivocal: nuclear weapons must be "stigmatized, banned and eliminated."[32] Austria subsequently announced that it would host the Third International Conference on the Humanitarian Impact of Nuclear weapons in late 2014. Underscoring that "reliance on nuclear weapons is an outdated approach to security," Foreign Minister Sebastian Kurz argued that "a concept that is based on the total destruction of the planet should have no place in the 21st century."[33]

Looking Forward to 2015

Judging from the 2012 and 2013 PrepComs, it is likely that the Middle East WMDFZ and humanitarian-based approaches to ban nuclear weapons will be at the center of international deliberations in the run-up to the 2015 NPT Review Conference. How these issues will play out is harder to assess.

Since the NPT was indefinitely extended in 1995, the run-up to each Review Conference tends to provoke a spate of articles about how the nonproliferation regime is "under threat" or "not fit for purpose." The ensuing panic is sometimes (but not always, as in 2005) enough to bring the key governments together to adopt a final document so that the conference can then be labeled a "success," although the real-world problems of the regime remain unsolved. No one should underestimate the depth of frustration

among Arab and NAM governments that the Helsinki conference did not take place in 2012, and the impact on the NPT regime if it does not go forward at all. The decision to hold a conference on a Middle East WMDFZ was the latest in a long line of proposals involving significant Arab and NAM input, negotiated and agreed by NPT states, from the 1995 resolution and package of decisions to the 2010 action points, via the 2000 Thirteen Steps on nuclear disarmament. Engaging with the P5, in which the United States was the major protagonist, Egypt was the key negotiator from the region. Egypt invested considerable political capital in the 2010 outcome, having utilized its role in the League of Arab States, the NAM, and also the New Agenda Coalition.

While it is recognized that the NPT has helped to prevent broad proliferation over many years, there are fundamental structural and political reasons for the perpetual concerns over its effectiveness and credibility for the future. These challenges are not removed by the adoption of agreements every five years. By creating two categories of parties ("nuclear weapon states" and "non-nuclear weapon states"), the NPT has reinforced the value attached to nuclear weapons rather than delegitimizing them. The regime has been invoked to justify nuclear sharing, nuclear use doctrines, and the modernization of nuclear arsenals, all of which run counter to the establishment of a universal and sustainable norm against nuclear weapons.

In addition, the NPT enshrines incentives for developing nuclear fuel cycle programs that can provide military nuclear capabilities, with a withdrawal provision in Article X that any NPT state party can invoke alongside its development of nuclear weapons, as North Korea has done. Such activities simply reinforce the perception that the NPT is unfit for the purpose of preventing horizontal and vertical proliferation, with worrying consequences for the Middle East in particular. Iran runs rings around the IAEA while using the NPT to justify its "peaceful" nuclear program. As long as there was some hope that the NPT regime could be strengthened sufficiently to block Iran's nuclear ambitions, the Arab states were willing to work within its constraints. After 1995, when the resolution on the Middle East was achieved as part of the package that extended the NPT indefinitely, Egypt exerted pressure for the rest of the Arab League to join the treaty, and in 2000 worked with the New Agenda Coalition to have the nuclear weapon states negotiate and agree to a step-by-step process for nuclear disarmament.

Despite regional pressure to join the NPT, Israel – believed to have developed significant nuclear weapons capabilities since the 1970s – has remained outside the treaty, together with India and Pakistan. All three have managed to maintain nuclear weapons programs while operating as "free-riders" on the regime, benefiting considerably from the regime pressures on regional adversaries without being legally constrained themselves.[34] Israel's benefits as a treaty free-rider have been diminishing, as Iran has used the NPT to justify building up nuclear facilities across the whole fuel cycle. Concerns about the NPT's toothlessness in the face of determined proliferators were exacerbated when North Korea withdrew from the treaty in 2003 and began to develop and test nuclear weapons. In all four non-NPT states, domestic politics have ensured public acceptance and support for nuclear proliferation policies on the widely accepted grounds that they are legal and provide security and deterrence. Indeed, such arguments currently sustain the nuclear weapons establishments in all the nuclear-armed states, driving the modernization of weapons to offset post-Cold War numerical reductions. The political promotion of nuclear weapons as legitimate and necessary is a major impediment to the achievement of regional and international disarmament. For the Helsinki conference to take place and be constructive in creating the conditions for a Middle East WMDFZ, all the relevant states would have to recognize that this is in their national interests. As long as Israel believes that nuclear weapons (or at least opacity about their possession and policies) are useful, they will drag their feet over denuclearizing, even if that would enhance their regional security in other ways.

For different reasons, the Arab states and Israel are now in the process of reassessing the costs and benefits of their respective positions vis-à-vis the NPT. Israel's nuclear capabilities are unusable as weapons and of declining political and security value if Iran or other states in the region become nuclear capable. This is likely to hold true even if they stay within the NPT and refrain from weaponizing. If the NPT can neither deliver nuclear disarmament nor progress toward a WMD-free zone in the Middle East, the Arab states will begin to look at alternatives. That doesn't necessarily mean they will withdraw from the NPT – some legal constraints on proliferation are better than none. But even while they would prefer to see nuclear disarmament fully implemented, some will hedge their bets if they think progress toward disarmament and universality is no longer viable.

If the humanitarian approach leads toward international negotiations to prohibit the use, deployment, production, transfer, and stockpiling of nuclear weapons and require their elimination, this would create universal legal and political obligations that could transform the nuclear options and decision making of potential proliferators as well as the nine nuclear armed states, whether or not they acceded to this treaty in the short term. Such a ban could be carried forward by a sufficient number of governments, whether or not they are or have ever been nuclear armed. For the NAM and Arab states this approach has the attraction of enabling them to have more influence on the process than under the NPT, which privileges the national interests of the nuclear-weapon states, lets non-NPT states off the hook, and marginalizes the interests of the nuclear-free majority. As the potential of the humanitarian disarmament approach draws support from a growing number of states, it is seen as a way of creating global obligations and norms and accelerating the pace and progress of eliminating existing arsenals. The Arab states see an added incentive, calculating that a non-discriminatory prohibition treaty on nuclear weapons could also help to ease the bottleneck and get their regional logs rolling in the direction of a WMD free zone in the Middle East.

If the Helsinki conference does not take place, this could have a very negative impact on the NPT Review Conference in 2015. If the Helsinki conference is convened, then much will depend on how it is conducted and whether the outcome contains commitments for further work, whether under the auspices of the facilitator or through the establishment of working groups or negotiations on specific aspects covered by the 2010 mandate and the 1995 resolution.

While it is likely that the humanitarian disarmament initiatives will have an important role to play in 2015, it is too early to assess how this might pan out. Although the P5 states claim that the humanitarian disarmament agenda undermines the NPT and CD, which has proved incapable of negotiating the mandated fissile materials production ban since 1996, those parties supporting the humanitarian disarmament initiatives emphasize that they are intended to strengthen, broaden, and implement the existing goals of the nonproliferation regime by creating universally applicable obligations under international law.

The humanitarian approach poses challenges both for nuclear-armed states (the P5 countries, Israel, India, Pakistan, and North Korea) and for NAM traditionalists. Over the years, both groups have mouthed platitudes

regarding their commitments to nuclear disarmament while suppressing or delaying significant progress. India and Pakistan have ensured that NAM positions are long on rhetoric and short on workable plans and strategies, while the UK and France try to do the same with their EU partners. It is too early to gauge whether the humanitarian approach will be the nuclear disarmament game changer that its advocates hope for, or another doomed effort like the Thirteen Steps that is sidelined instead of holding the nuclear-armed states accountable. But this approach is being taken more seriously, judging from the tone and content of a broader number of national and joint statements at various forums including the UN and NPT, the defensive statements from the P5, and the substantive level of interest from a growing number of governments participating in forums such as the UN Open-Ended Working Group and the High Level Meeting on Nuclear Disarmament. In demonstrating that nuclear weapons are inhumane and that a majority of governments can act to effect change in the legal and political status of these weapons, the humanitarian approach seeks to energize states and civil society representatives to move beyond the ineffective roles consigned to them by the CD and NPT regimes.

Whatever transpires at the NPT Review Conference, 2015 could prove a watershed for efforts to accelerate regional and international security agreements on nuclear disarmament, including a new international treaty that would ban nuclear weapons for all UN states, regardless of their status in relation to the NPT.

Notes

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2 1995 Resolution on the Middle East, 1995 NPT Review and Extension Conference.

3 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Part 1, Section IV, paragraphs 1-10.

4 Statement by Under-Secretary of State Jaakko Laajava, facilitator for the conference on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction, to the second session of the Preparatory Committee for the 2015 Nuclear Non-Proliferation Treaty Review Conference, Geneva, May 29, 2013; Jo Adamson, UK Ambassador, Statement, on behalf of the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, at the second session of the 2015 NPT Review Conference,

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5 Hisham Badr, statement to Cluster II special session on Regional Issues including the Middle East.

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7 It took nearly 18 months after the 2010 Review Conference for the UN Secretary-General and the NPT depositaries to announce in October 2011 that Finland would both host the conference and provide the facilitator. The original decision had neither assumed nor required that one country should provide both, and the long delay agreeing to these preparatory decisions undoubtedly contributed to Laajava's difficulties getting the meeting off the ground by the 2012 target date.

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12 Mikhail Ulyanov, Head of delegation of the Russian Federation, Statement to the Session on the Middle East, 2013 PrepCom, Geneva, 29 April, 2013, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom13/statements/29April_Russia.pdf.

13 "Implementation of the 1995 resolution on the Middle East," working paper submitted by Tunisia on behalf of the States members of the League of Arab States, NPT/CONF.2013/PC.II/WP.34.

14 Ibid.

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16 See note 9.

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28 Ibid.
29 See note 1 and Joint Statement on the Humanitarian Consequences of Nuclear Weapons, cosponsored by 125 states, delivered by Ambassador Dell Higgie to the 68th UN First Committee, October 21, 2013.
30 The concerns were expressed in various off the record conversations with the author. During one of the NPT 2013 PrepCom fringe meetings that discussed disarmament steps such as de-alerting and reducing the role of nuclear weapons, senior Washington analysts indicated that the Obama administration had been willing to reduce the role of nuclear weapons much further in its 2010 Nuclear Posture Review, but this was stymied by Japan and a few NATO allies, even as these governments pretended in public to support nuclear disarmament.
31 For background and copies of some of the documents and presentations to the UN Open-ended working group on nuclear disarmament, see http://www.reachingcriticalwill.org/disarmament-fora/others/oewg.
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34 There have been opportunity costs, including restrictions on Israel's access to nuclear technologies for energy and other civilian applications, which were no doubt weighed in nuclear policy decision making.

Don't Beat a Dead Horse: The Past, Present, and Future Failures of the NPT

Carlo Masala

Introduction

In the late eighteenth century, Wolfgang von Kempelen, a high level civil servant of the Habsburg Empire, constructed an automaton chess player. The machine consisted of a life-sized model of a human head and torso dressed in traditional Turkish clothing. The machine appeared to be able to play chess against human opponents. In fact "the Turk," as the machine was quickly dubbed, was a mechanical illusion that allowed a human chess master hiding inside to operate the machine.[1]

Since the discovery of this illusion, "building a Turk" has become a common saying in German, meaning that an effect is attributed to the wrong cause. In social science this phenomenon is nowadays called false causality.[2]

The phenomenon of false causality is very prominent today with regard to scholarly debates focused on the NPT.[3] The extremely powerful narrative that has been established by liberal arms control scholars goes something like this: the NPT has played, and continues to play, a direct and meaningful role in the decision of states to forgo the acquisition of nuclear weapons. Therefore, discussion regarding means to strengthen the treaty plays a prominent role in the debate over how to prevent further proliferation of nuclear weapons.[4] In other words, if one aims to put the genie of nuclear proliferation back into the bottle, the regime must be strengthened. Even skeptics of the NPT have over the past two decades tended to buy into this myth of regime effectiveness when they argue that "the regime is largely

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ineffectual when it comes to states that actively seek to acquire nuclear weapons."[5] There thus seems to be broad agreement among both the skeptics and the treaty's biggest fans that proliferation of nuclear weapons must be tackled primarily through the strengthening of the NPT. Some variation in opinion exists, but it remains largely within the intellectual boundaries of how best to do so.

Following a different logic, this essay argues that the NPT has at best a secondary effect on the decision of states to go nuclear or to abstain from the nuclear option. In other words, most of the positive effects that scholars of nonproliferation attribute to the NPT regime do not stem from the regime itself, and the reasons for these effects in fact lie elsewhere. Based on the fundamental realist logic that institutions or regimes do not influence states in their decisions,[6] the essay contends that the main problem of the NPT today, and potentially in the foreseeable future, is the lack of a shared vision for a nuclear order among the major powers in the international system. As long as the major powers do not share a common idea and common interest regarding the spread of nuclear weapons,[7] the tendency for proliferation will continue.

Debunking Myths about the NPT

From an analytical point of view, it is quite astonishing that liberal arms control scholars have been so successful in establishing the myth regarding the effectiveness of the NPT in limiting the spread of nuclear weapons. The three main arguments that, according to NPT advocates, speak in favor of maintaining and strengthening the treaty are: a) the treaty was successful in preventing states from going nuclear; b) the relevance of the NPT is demonstrated by the fact that it is the most universal international treaty; and c) the treaty has underscored the message that overall, nuclear weapons are "bad" and it is better to avoid them (with notable exceptions of course) than to embrace them.

These three arguments belong to the realm of political science fantasy and are by no means supported by empirical facts. While it is undoubtedly true that the NPT – with its more than 180 members as of July 2011 – is the most universal treaty in contemporary international relations, the mere number of member states tells us very little about their motivation to join the treaty. As David Yost has argued,[8] joining the NPT has no connection to states' motivations to acquire or refrain from acquiring nuclear weapons.

Most of the members of the NPT lacked and are still lacking the technical and financial capacity to obtain nuclear arms. In that case, the restraining effect of the NPT as such is non-existent. In other words, if the decision to refrain from acquiring nuclear capabilities is taken without incurring any costs, one can by no means argue that the NPT contributed to the decision. Signing on to the NPT without the capacity to go nuclear is known in international relations theory as symbolic politics.[9]

Even those states that joined the NPT with the necessary financial and technological capacity to go nuclear might still have refrained from doing so not because of the moral obligations and legal norms of the treaty, but rather because of their reliance on the nuclear protection of others: some form of nuclear umbrella. If nuclear protection was offered to them in a credible way, not going nuclear themselves would – in terms of transaction costs, according to a very rational understanding – be a cheaper option than producing their own nuclear devices.[10] A third group of countries might not even have seen the need for nuclear protection since their geostrategic environment did not arouse the need for such protection, or any desire to acquire nuclear weapons.[11]

Yet another group of countries simply joined the NPT for the purpose of (ab)using its cover in order to go nuclear. To paraphrase a famous article by Albert Wohlstetter, they got the bomb without breaking the rules.[12] Adhering to the NPT creates access to nuclear technology and facilitates – if so desired – the production of nuclear weapons. Moreover, being a member of the NPT means softer inspection rules by the IAEA, compared to not being a member of the treaty, as the Israeli example demonstrates.[13]

And even in those cases in which we know that states pursued the nuclear option but gave it up, the reason for the abolishment of existing nuclear programs, or even already existing nuclear weapons, has had nothing to do with the treaty and its direct or indirect moral effects, but rather with purely realpolitik reasoning. After the Cold War, Belarus and Ukraine were simply offered financial assistance in exchange for the abolishment of their nuclear stockpiles; Brazil was offered technical assistance in the 1970s; and South Africa lost US support for its status as a nuclear power. Libya was offered an end to its international isolation, and probably some kind of US security guarantees.[14] Hence, none of the known cases in which a country deliberately gave up its nuclear program or arsenal can be explained by the normative power of the treaty.

Overall, therefore, being a state party to the NPT does not tell us anything about state motivation to follow the treaty's rules and norms. A closer look at the treaty members reveals that various motives have led states to become members of the NPT, but not the socializing pressure of the nonproliferation norm as constructivists would argue.[15] Constructivists generally contend that acceptance of a new international institution comes following a change in state identities or socialization into existing norms. The weakness of this argument if applied to the NPT is that it focuses on the establishment of the regime. If, however, states had various motivations for joining the NPT and remained members of the treaty for those same reasons, then it is difficult to speak about the effect of socializing norms exerted by the regime itself. Those countries that joined the NPT in order to have some cover for their nuclear ambitions were clearly violating the obligations stemming from the treaty, and as with most member states, have not been socialized by the regime, but rather joined and remained members for purely instrumental calculations.

If the NPT as a regime cannot be shown to have direct causal effects on its members to abstain from the nuclear option, the question arises why the pace of nuclear proliferation over the past five decades has been relatively slow, and why there have been some non-coercive successes as far as convincing states not to go down the nuclear path. The explanation for nonproliferation must be found outside the treaty framework and the marginal effects of the norms generated by rules, laws, and practices of the nonproliferation regime. The argument to be presented is that nonproliferation in the past was successful because there was a nuclear order, or at least an idea about such an order that was shared by the two nuclear superpowers. It is the current absence of such an idea of nuclear order today that is the major problem faced in the realm of nonproliferation policy.

A System in Search of Nuclear Managers

There is little doubt that the nuclear nonproliferation regime worked well during the Cold War period not because the regime itself exerted some effects on its members but rather because the regime was created, maintained, and managed by two nuclear superpowers, which despite their differences had a shared idea on how the nuclear order should look. Despite all the differences between the US and the USSR, they were united in their vision that the number of nuclear states should be kept to a minimum. This was mainly

for two reasons: first, so that the nuclear supremacy of both would not be challenged by other countries, and second, because there was a common understanding that the management of a multipolar nuclear world would have been much more difficult and dangerous (in terms of the potential risk of inadvertent[16] nuclear escalation) than the management of a bipolar nuclear order.[17]

This concern is aptly captured in President Kennedy's address to the American people on the Nuclear Test Ban Treaty in 1963:

> I ask you to stop and think for a moment what it would mean to have nuclear weapons in so many hands, in the hands of countries large and small, stable and unstable, responsible and irresponsible, scattered throughout the world. There would be no rest for anyone then, no stability, no real security, and no chance of effective disarmament. There would only be the increased chance of accidental war, and an increased necessity for the great powers to involve themselves in what otherwise would be local conflicts.[18]

Apparently what united the US and the Soviet Union were concerns over their own status as nuclear powers as well as their common desire not to confront the other directly in a local/regional conflict. In this sense both superpowers took over the role of the managers of the first nuclear age, and were successful in slowing down the spread of nuclear weapons.

With the demise of the Soviet Union this management system collapsed entirely. Despite its still enormous nuclear arsenal, Russia, the successor state of the Soviet Union, was no longer able (and later on, willing) to breach the gap left by the Soviet Union.[19] The preeminent position the US acquired after the collapse of the USSR was the unchallenged number one in the system. As such, the maintenance of the previous Cold War nuclear order was left to the US alone. Although all US administrations have committed themselves to previous nonproliferation goals, they have been less successful as far as saving the old nuclear order. The unprecedented position – supported by a huge military advantage over other states in the system combined with a strong economy – hampered the US as far as its ability to pursue the role of a unipolar manager of the nuclear order. This is primarily because the unipolar position was perceived by others as a potential threat to their own decision making sovereignty. This was quite apparent in the final month of the Clinton

administration when Madeleine Albright introduced the concept of rogue states into US rhetoric;[20] those countries that were labeled as rogues feared US action against their political systems. Thus the incentive to proliferate actually increased under conditions of unipolarity.[21] This tendency was further underscored with action taken in the new millennium by the Bush administration, as well as by the rhetoric of high level officials.[22] Thus the US, although it intended to continue to play the role of manager of the new international nuclear order, failed partly due to its own mistakes, and partly due to the perceived danger of unipolarity on the part of other states. Since the so-called rogue states lacked a balancing power against what they perceived as hostile US intentions, the tendency to proliferate escalated. At the same time, the ability of the US to stop proliferation by means other than the threat of use of force decreased.

The nuclear order of the Cold War also collapsed due to the fact that other major nuclear powers, namely, China and Russia, do not share the US vision of containing the spread of nuclear weapons. For them the spread of these weapons could be a welcome tool to balance US unipolarity on a global and regional scale. As Charles Bartles rightly observed with regard to Russia,

> One can observe instances of the subordination of nonproliferation to economic considerations in Russian nuclear trade initiatives toward Iran, China and India. The latter case is particularly telling since it prompted Russia in 1996 to amend a domestic export control regulation that was at odds with the government's interpretation that the April 1992 Nuclear Suppliers Group guidelines were only applicable to contracts initiated after April 1992. The inconvenient regulation that might have legally precluded Russian Nuclear exports to India was Government Regulation No. 1005 (December 21, 1992), which specified that nuclear exports to non non-nuclear weapon states could only be made if all of the recipients country's nuclear activity were under IAEA safeguards. In contrast, Government Resolution No. 574 (May 8, 1996) conveniently amends Government Resolution No. 1005 and stipulates that so-called full-scope or comprehensive IAEA safeguards were only required under contracts before April 4, 1992. Under this grandfather clause, Russia has sought to argue that since an initial agreement to

> provide India with two VVER-1000 reactors was concluded in 1998 [sic], it was not subject to the 1992 full-scope safeguards requirement.[23]

Even positions of the Chinese leadership, despite the lip service officials regularly pay with regard to nonproliferation, raise skepticism. In a Congressional Research Service Report on China's nonproliferation policy, Shirley A. Kan writes:

> Supplies from China have aggravated trends that result in ambiguous technical aid, more indigenous capabilities, longer-range missiles, and secondary (retransferred) proliferation. According to unclassified intelligence reports submitted as required to Congress, China has been a "key supplier" of technology, particularly PRC entities providing nuclear and missile-related technology to Pakistan and missile-related technology to Iran.[24]

Both of these potential future nuclear order co-managers currently show only limited interest in stopping the trend of nuclear proliferation. This policy is driven by economic considerations as well as by political interest, mainly to balance US superiority in the nuclear realm on a regional level.

Thus the main problem nowadays is the lack of responsible managers of the second nuclear age.[25] Without great powers sharing some common ideas and interests on how to manage the nuclear question in the twenty-first century, the NPT will be unable to fulfill its task of preventing the spread of nuclear weapons. Thus the real problem for the NPT is not whether its rules and regulations are tightened or amended, but rather if global nuclear powers have an interest in making the treaty work. From this perspective, the NPT has at best a secondary effect on states' decisions regarding whether to go nuclear or not.

Conclusion

This article has attempted to debunk the myth that the nonproliferation regime – with the NPT as its centerpiece – has a direct causal effect on the decision of states to abstain from going down the nuclear route. Indeed, a quick glance at the existing literature does not support this claim. Rather, nonproliferation depends on the cooperation among nuclear great powers. An assessment of the two main arguments advanced by liberal arms control

scholars in favor of the NPT has demonstrated that they are empirically flawed. Most states that joined the treaty for a variety of reasons never had the intention of going nuclear. And the fact that these states until today have no desire to acquire nuclear weapons cannot be attributed to effects stemming from the regime itself. Quite to the contrary, existing empirical studies show that those states that have given up their nuclear programs (or nuclear arsenals) did so because great powers "convinced" them to do so.

The major problem of the contemporary nuclear order is that there is no shared vision about this order among the three main players: Russia, China, and the US. While the US still wants to limit the spread of nuclear weapons, China and Russia have become major proliferators of nuclear technology and material. This indicates that the main competitors of the US intend to contribute to a multipolar nuclear system that will upset the current nuclear advantage of the US.

With an absence of agreement on the nuclear order in the twenty-first century, it seems highly unlikely that the NPT can contribute to stopping proliferation. As long as the nuclear order is not maintained and managed by a nuclear major power concert, hopes that the strengthening of the treaty will do the job are illusionary.

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A "Bank Run" on the NPT: Preventing a Crisis of Confidence

Cameron S. Brown

Introduction

At face value, it is puzzling why banks – institutions whose sole purpose is to make money from money, and which have no shortage of MBAs and economists on staff – almost always spend disproportionate amounts of money on their large, extravagant buildings. Their imposing and often elaborate facades are frequently dominated by large Roman columns at the entrance, and the decor of their generally oversized lobbies is characterized by marble, granite, and gold. This phenomenon is surprisingly widespread, occurring in small towns and big cities alike.[1]

The question arises, then, as to why banks typically invest so much in real estate instead of utilizing these funds to provide either more generous salaries or larger dividends. The answer is that this investment is a key strategy for avoiding the biggest threat to a bank's entire business model – what is known as a "bank run." Banks do not keep all customer-deposited funds on their premises, but instead loan out or invest all but a tiny fraction. A bank can only function by working on the assumption that on any given day only a small fraction of depositors will ask to withdraw their funds. In a bank run, however, all customers decide to withdraw their deposits at the same time, and consequently, even a bank with the most impeccable balance sheet would go bust.

Historically, what catalyzed a bank run is the knowledge that being one of the last customers in line to withdraw would result in losing everything, while being among the first customers means recovering all one's savings.

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Indeed, this phenomenon is so powerful because banking relies so heavily on mutual expectations, and even a rumor that a bank *might* be in trouble can bring it down within hours. As a result, banks go to great expense to signal to their customers that their business is solid (hence the granite, marble, and gold trim, for example) and to reassure customers that their bank is unquestionably solvent. This "costly signal"[2] builds trust in customers, because a bank with few resources on the verge of bankruptcy could not possibly afford such a building.

What does all this have to do with arms control and the Non-Proliferation Treaty (NPT) regime? In the Middle East of 2005, from Morocco to Iran, only Israel was suspected of having nuclear weapons and Iran of having a nuclear weapons program (in 2007, the world learned that Syria was also engaged in a covert weapons program). In the course of 11 months in 2006-2007, however, 14 Middle East countries suddenly announced interest in "civilian" nuclear programs (figure 1). All of these announcements mentioned growing energy needs and economic and technological benefits as justification for their sudden interest in nuclear technology. Yet if that were truly the motivation, it is hard to understand why all 14 moved in the same direction at roughly the same time. Rather, the main motivating factor was likely the inability (or unwillingness) of the international community to end Iran's nuclear weapons program.

The main point of this essay is to argue that a key challenge for the future of the NPT is precisely this threat of a "bank run" on the institution, a situation in which many countries lose confidence in the regime's ability to prevent cheating, and thus begin to pursue an illicit program or, at a minimum, create civilian programs that bring them closer to breakout capacity.[3] Leveraging this metaphor, the article offers some suggestions for how the international community might prevent that outcome. Finally, it explores where this metaphor falls flat. In doing so it posits which countries are using these machinations about developing a civilian nuclear program in order to bluff (and thus press the international community into action by raising the stakes should they fail to stop Iran) as opposed to countries whose statements may represent a "hedge" in case the international community fails to stop Iran – in other words, statements that portend a true proliferation threat.[4]

Before proceeding, it is important to point out what is probably the best alternative hypothesis: that this sudden, simultaneous interest is part of a wider nuclear renaissance, whereby many countries worldwide, especially

those with growing energy needs, began reconsidering the merits of civilian nuclear reactors. This paper does not test hypotheses, and as such, it cannot entirely rule out this alternative explanation. However, a brief assessment casts grave doubt that this alternative can account for all of this sudden interest. For instance, if a nuclear renaissance were the driving factor, then other regions should have seen similar bursts of interest in civilian reactors. Yet of all 53 countries that have expressed interest recently in nuclear energy, 16 of them (i.e., 31 percent) are in the Middle East – more than in any other single region.[5] Likewise, the Middle East has a far higher percentage of such countries than any other region (only two countries, Iraq and Lebanon, have not expressed such interest). Finally, if the interest in nuclear energy were based on innocent intentions, we would anticipate that the Middle East countries with the largest energy surpluses would be the least likely to express interest in nuclear energy. However, interest in nuclear energy has no apparent correlation with energy resource possession, meaning that energy rich countries are just as interested in nuclear energy as energy poor ones.[6]

Figure 1. Countries declaring new interest in civilian nuclear programs, 2006-2007[7]

Learning from the Bank Run Phenomenon

In the 1920s and 1930s, bank runs in the United States, Germany, and elsewhere occurred frequently (figure 2). By the early 1930s, they came to threaten the entire financial system in the United States, prompting President Franklin D. Roosevelt to calm the American people with his famous line,

"The only thing we have to fear is fear itself." Today, on the other hand, bank runs have become extremely rare. Even when banks are known to be in poor financial health, depositors rarely mob their bank. Why?

The reason is that 80 years ago, in 1933, President Roosevelt created the Federal Deposit Insurance Corporation (FDIC), a government corporation independent of the banks that changes the calculus of depositors. The FDIC created a mechanism for insuring the savings of depositors so that they no longer had to live in fear of losing everything, even if all other depositors in the bank suddenly panicked and decided to withdraw their savings. In addition, the FDIC has the power to monitor the financial health of the banks, verify that their affairs are in good order, and intervene if they are not. Since its inception, the FDIC has been extraordinarily effective, seen most clearly by the degree to which it effectively ended the American banking crisis in 1934. Whereas over 4000 banks suspended operations in 1933, only 61 did so in 1934, and of those, only nine were insured (figure 2). Likewise, total US bank deposits increased by 22 percent within only one year.[8]

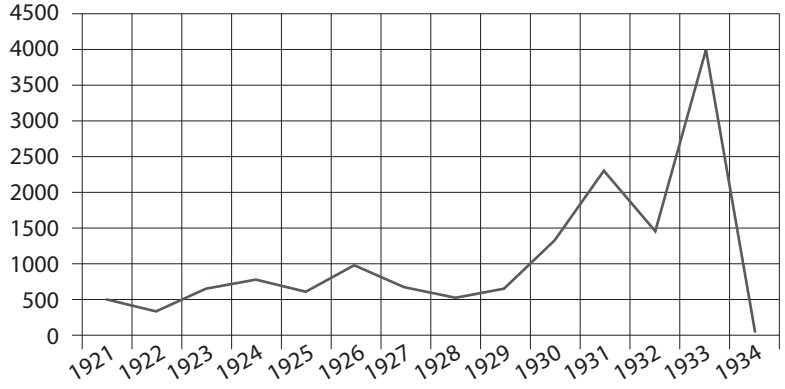

Figure 2. Number of US Bank Closures, 1921-1934[9]

It is worth taking a moment to consider how we might model the bank run phenomenon more generally. At the center is an institution that can only function if members anticipate that the vast majority of all other members will continue to cooperate with the institution. If all the members cooperate, then everyone gains. Yet if enough members leave the institution (or in game theory terms, "defect"), then those who leave first do much better than the

"dupes" who leave last. As a result, whenever actors have any reason to suspect others might defect en masse, they have a strong incentive not to wait and see how others will act, but avoid risk by being the first to defect, in effect, "beating the others to the punch." With all actors facing identical incentives and constraints, the result is that even with only little indication of a problem, most, if not all, actors will simultaneously defect. What is most remarkable about this phenomenon is that even if the given institution was in fact "solvent" before the bank run began, just the mass of actors defecting at the same time will result in the institution crashing.

Game theorists refer to this type of strategic interaction as a "stag hunt," a metaphor originating with Jean-Jacques Rousseau. The idea is that there are two hunters, each of whom must decide whether to hunt a hare on his own, which he is guaranteed to catch, or cooperate by hunting for a stag, without knowing the intention of the other. If they both decide to cooperate and hunt the stag, then they can be sure they will catch it and share it equally, each receiving more than if they had caught a hare. However, and herein lies the rub, if one decides to hunt a hare while the second hunts a stag, then the former gets his hare while the latter goes home hungry.[10] Using this metaphor, our "hunters" can be anything from bank depositors to countries mired in an arms race, and indeed this stag hunt metaphor has been applied to a myriad of settings. What is intriguing about the stag hunt is why people do not always choose to hunt the stag.[11] Why, if they know they will not do as well, would anyone choose not to cooperate, and opt for hunting hare? In this regard, the bank run phenomenon is perhaps the ultimate example of a stag hunt at work: all depositors would rather keep their money in the bank (and earn interest) than hide it under a mattress. So why do some depositors sometimes choose to stop cooperating, and instead "hunt hares"?

Actors in these situations fail to maintain cooperation for two main reasons. The first is that no actor can know for sure what the others will do on any given day, and worse still, by the time one learns that others have stopped cooperating, it is too late. The second (and arguably more important) reason for this behavior is that the last one left still wanting to cooperate in these situations pays a high price. If the last depositor to withdraw funds were to receive his money exactly as the first, then there would be no incentive to run to the bank if one heard a rumor that the bank was in poor financial health. Likewise, the catalyst for an arms race is the understanding that the country that violates an arms control agreement first has an advantage

over the country that violates it last. For instance, should Iran obtain a nuclear weapon, one could argue that it gains an advantage vis-à-vis its Arab neighbors, conceivably making all sorts of demands that could not be refused until years later when they finally obtain nuclear weapons of their own.[12]

With this in mind, the key to overcoming this stag hunt dilemma is to eliminate the cost of being the last one to defect by offering some sort of insurance policy. If everyone who goes to hunt stag knows that at minimum they will get a hare, then there really is no reason to stop cooperating. Ironically, because providing this sort of insurance is the best way to ensure cooperation, it also means that the better the insurance, the less likely it will be used. It is also possible to augment the effectiveness of the insurance by imposing some sort of fine on those who stop cooperating. In the case of banking, this could mean imposing high fees for withdrawals above a certain amount. In the realm of arms control, this can translate into imposing stiff sanctions for violating obligations to an international arms control convention. Finally, if uncertainty about what others are going to do is critical, then creating verification mechanisms to give actors early notice of potential defections can help overcome the false alarms that can sink otherwise healthy institutions. This can mean having governmental oversight of the banking industry or creating the International Atomic Energy Agency (IAEA) to make sure non-nuclear weapon states are not violating their obligations.

This said, measures meant to provide verification can prove to be a double-edged sword: when the institution is indeed in poor health, the information can induce the very bank run it was meant to avoid. In fact, one of the FDIC's precursors published regular lists of banks in poor financial health. The problem was that instead of preventing bank runs, these lists actually encouraged the very action for any bank appearing on the list. By the same token, IAEA reports on Iran over the past decade may be encouraging the bank run described above. IAEA reports released in 2004 and 2005 criticized Iran's backtracking on earlier commitments to limit uranium enrichment and reprocessing, and the start of the construction of a plutonium reactor at Arak with characteristics that did not match the needs of a peaceful research reactor.[13] Hence it is likely that these reports, combined with an impotent Western response to these Iranian moves, motivated almost every country in the region to suddenly begin discussing the possibility of starting a civilian nuclear program of its own.[14]

Iran's Proliferation and Preventing a "Bank Run" on the NPT

How relevant is this bank run metaphor to the NPT? In the case of Iran, it is highly relevant. As a dossier produced by the International Institute for Strategic Studies (IISS) in 2008 stated:

> If Tehran's nuclear programme is unchecked, there is reason for concern that it could in time prompt a regional cascade of proliferation among Iran's neighbours.... If any one of Iran's neighbours were to seek to acquire nuclear weapons in response, this would put additional pressure on others to do the same, because of these intra-regional security and status considerations. *The momentum in this direction could continue, even if the Iranian nuclear crisis were resolved*.[15]

In other words, even if the initial trigger is dealt with, once the dynamic begins, the mass exit of actors at the same time endangers the institution itself. Indeed, this dynamic finds a precedent in the area of missile development. During the course of the Iran-Iraq War (1980-1988), both belligerents deployed hundreds of ballistic missiles against each other. Saudi Arabia, out of concern that one day these weapons could be used to threaten it, decided to purchase CSS-2 intermediate range missiles from China as a strategic deterrent. After the Saudi purchase became public knowledge in March 1988, other countries followed suit, such as the UAE and Yemen, which both purchased missiles from North Korea.[16]

An FDIC for the GCC

Building on the previous discussion, the most critical task for countries that seek to preserve the NPT is to offer an "insurance policy" to those nations that stand to lose should Iran succeed in developing a nuclear weapon. In order to effectively persuade these states from pursuing a nuclear program of their own, such insurance must be both credible and offset any potential relative advantage Iran would gain from possessing a nuclear weapon.

What does this mean in practice? First, it means that the United States, as the only major power that can deploy massive firepower around the world, will have to guarantee the security of the other states in the region – particularly in the Persian Gulf. Such guarantees may be unilateral or multilateral in nature, but the bedrock must be an American commitment. Second, it means that extending a "nuclear umbrella," that is, a promise to

retaliate with nuclear weapons if a country is attacked with nuclear weapons, would be insufficient insurance. The utility of nuclear weapons is not just the ability to explicitly threaten their use, but the increased freedom to use conventional forces and support proxy or terrorist groups with greater impunity.[17] Instead, these Gulf states will require a much wider conventional military commitment to guarantee their security.

In this regard, simple statements by the American administration to the effect that they are "committed to the defense" of these countries are insufficiently credible. This will be particularly true if Iran gets a weapon without the US first attempting to use substantial military force to prevent that outcome. There have been so many repeated presidential statements committing the US to prevent Iran from obtaining a nuclear weapon, that if America fails to use all the tools at its disposal to do so, it will call into question the very credibility that underwrites this proposed insurance policy.[18] American resolve was in fact recently called into question when the Obama administration displayed great hesitancy to use force after Syrian government forces were shown to have used sarin nerve gas in that country's civil war – a move that violated President Obama's clear red line on the matter.[19]

A far more credible commitment than mere statements from the administration would be a defense pact against Iranian aggression. As of today, the US has no such defense pacts with any country in the region, a fact that stands in stark contrast to the various formal defense commitments the United States has in Europe and East Asia.[20] One might argue that presently the US has informal security commitments to these countries, and that what matters is not the level of formality but the degree of mutual interest two countries have in upholding their commitments. In support, such critics could point to both the Korean War and the 1991 Gulf War, as in both cases the United States led large international coalitions to reverse invasions from neighboring countries despite having no formal obligation to do so.

Why, then, might formal commitments be more valuable than the present informal commitments? The answer is twofold: first, American interests in the Gulf have been foremost on the minds of American foreign policymakers for decades, largely because the Gulf is the global oil market's linchpin supplier. However, the United States is quickly moving toward energy independence. Consequently, even if they will not be immune from global price fluctuations, American drivers will no longer fear having to wait in long lines at gas stations as they did following the Arab oil boycott of 1973.

Second, long term strategy planners have decided that the most important threats to American national interests lie in East Asia, and so have begun shifting resources accordingly (a strategy referred to as "the pivot").[21] Both of these trends suggest that America's strategic interests in the Persian Gulf are waning. Accordingly, why should Gulf countries feel that they can rely on America to protect them if Iran threatens to undermine their security, given the risk to American treasure and blood? This is particularly true if Iranian threats and actions fall short of outright invasion.

In this strategic context, the added value of a formal commitment to the security of these countries is that it alters the American future strategic calculus should it be forced to decide one day whether or not to intervene. Should the world's leading power fail to uphold a formal defense commitment, it would call into question America's reputation writ large, with ripple effects transcending the Gulf region. An impugned American reputation would make allies and adversaries alike around the globe, including in the Far East, wonder about whether America would have the resolve to intervene elsewhere.

Sans formal guarantees, until now the US has attempted to make its commitment to the security of Gulf countries credible by establishing large American bases on their soil. This includes several major air force bases, such as al-Udeid in Qatar and al-Dhafra in the UAE; naval ports in the UAE (Jebel Ali) and Bahrain; and the massive army depot at Camp Arifjan in Kuwait.[22] These bases have both advantages and disadvantages. Perhaps the biggest problem with these bases is that as the Khobar towers terrorist attack highlighted, they create vulnerabilities – especially when facing a weaker adversary that has no qualms about using such tactics. The strategy also raises questions about the degree of American commitment to countries that do not house US forces.

The value of these enormous bases, however, is that they function quite like the massive pillars of a bank: they are costly demonstrations of both capacity to act and resolve not to run away when clouds menace on the horizon. As Thomas Schelling pointed out in his classic work *Arms and Influence*, the Americans set up bases in Europe during the Cold War not to actually defend against a massive Soviet invasion, but "to leave the Soviet Union in no doubt that the United States would be automatically involved in the event of any attack on Europe." The 7,000 troops stationed in Berlin, regardless of their competence, would have been fully incapable of defending

against an actual Soviet onslaught. At best, they could have died "heroically, dramatically, and in a manner that guarantees that the action cannot stop there." Because that small regiment was inextricably linked to the honor and reputation of the entire United States of America, it managed to "hold the entire Red Army at bay."[23]

Withdrawal Fees

Another way to disincentivize a bank run is to impose stiff fees for major withdrawals. A clear analogy in this regard is the sanctions imposed upon North Korea (which still continued to face sanctions even after it withdrew from the NPT) and Iran for violating their obligations under the NPT.

Building on extensive literature that contends that economic sanctions are ineffective,[24] some, like former US Ambassador to the IAEA Gregory Schulte, have claimed that constantly tightening sanctions on these countries is futile:

> Another round of sanctions or talks is unlikely to change [Iran or North Korea's] calculus. Rather than fixating on the proliferation they are unable to prevent, concerned countries should pay more attention to preventing proliferation to states that have not yet decided to build nuclear weapons, particularly states in the Middle East.[25]

Even if one were to concede that sanctions on Iran and North Korea are unlikely to be effective at coercing those countries into abandoning their nuclear weapons programs,[26] Schulte's argument fails to appreciate that these sanctions are effective as a costly signal to all other future potential proliferators. For countries that have already decided to embark on a weapons program, it usually is too late: they have likely already factored the possibility of sanctions into their calculations and decided the gains of obtaining a weapon would more than offset the costs of sanctions.[27] In this case, only an unexpectedly harsh sanction is likely to change policy. Furthermore, countries that are already pursuing a weapons programs and then back down in the face of international sanctions pay additional "reputation" costs. In other words, backing down publicly on an issue of grave importance to the regime and national security hints to domestic and foreign adversaries alike that the regime in question is, in fact, susceptible to pressure on other matters as well.

Yet sanctions can tip the scales for countries that are still only considering whether to pursue a weapons program. In these cases, the more a country witnesses how international sanctions destroy a neighbor's economy and isolate it diplomatically, the less likely it is to pursue a weapon of its own. This is especially the case where a country's leadership is primarily interested in seeking a nuclear weapon out of a belief that it would increase its regional influence. When such leaderships witness the massive economic destruction sanctions can cause, they also understand that countries with weak economies have far less influence potential in their regions. At the same time, because these countries have not publicly embarked on a weapons program, they have little reputation at stake should they be convinced not to pursue the option in response to a threat of sanctions.

The same logic applies to any discussion about the effectiveness of military strikes. Beyond their ability to set back a nuclear weapons program, such strikes also bolster deterrence against those who would otherwise pursue a weapons program (or coerce those who have programs to abandon them). The classic case in this respect is Libya, which gave up its WMD programs in late 2003 after having witnessed the American attack on Iraq and fearing that they may be next.

It seems, then, that Schulte has it backwards in his claim that concerned countries should give up on trying to stop what appears to be unpreventable proliferation and instead focus on deterring potential proliferators. The international community cannot untie the Gordian knot of "paying more attention to preventing proliferation" in other states by paying less attention to Iran and North Korea. To the contrary, paying endless attention to these two regimes is precisely the *sine quo non* for how the international community can prevent future proliferation. Thus, the more pain the international community inflicts on Iran today, the less pain it will have to inflict on other states tomorrow.

Improve Verification

Institutions like the NPT must provide credible oversight that members are complying with their obligations in order for the institutions to survive. In this vein, it is hard to overstate the impact when potential proliferators succeed in secretly building infrastructure that escapes the detection of the IAEA and major global powers. Faith in the NPT was certainly lost following instances like the 2002 disclosure by a domestic Iranian opposition group that Iran had

constructed an illicit nuclear facility in Natanz, or when the world learned that Syria had secretly constructed a nuclear reactor with North Korean aid (the reactor was allegedly destroyed by Israel in a 2007 air raid).[28]

It is a platitude to say that the IAEA must be strengthened further, and several authors have already made clear, concrete proposals for action.[29] The problem, as is often the case with amending the status quo in a global organization like the IAEA, is that not every country has an interest in seeing the IAEA's capacity enhanced. To the greatest degree possible, the US and its partners should make their extension of security guarantees dependent on recipient countries accepting upon themselves strict transparency measures, like the Small Quantities Protocol (SQP), and helping to press forward on larger issues like including Wide-Area Environmental Sampling (WAES) in the IAEA toolkit.

Divulging Secrets: Where the Bank Run Metaphor Falls Flat

While seeing the potential for a nuclear cascade through the prism of bank runs can be useful, there is one vitally important strategic difference: in an actual bank run, no actors have an incentive to bluff or hide their intention to withdraw their deposits. The case of proliferation in the Middle East is different because there is a possibility that the United States could lead the international community to end Iran's program, either via sanctions or a military strike.[30] As a result, states in the region have an incentive to feign interest in nuclear programs in order to raise America's stakes for failing to prevent Iran from going nuclear, and thus increase American willingness to bear the costs involved in stopping it. This strategy is especially effective when the American commander-in-chief is known to be a strong believer in the importance of the NPT regime. Indeed, this fear of a nuclear cascade has figured prominently in the Obama administration's speeches and testimony whenever they mention the American national security interest in preventing Iran from going nuclear.[31]

At the same time that Middle East countries have motivation for threatening interest in starting nuclear programs of their own, there are several important factors pressing these regimes not to follow through with their threats. First, actually developing a nuclear program carries a price tag in the tens of billions of dollars and invites a confrontation with the West. At the same time, the price tag for regimes is very small for not following through or changing course, specifically if there has not been a great deal of investment and it

does not appear that the regime had truly invested in the project. This is probably why Kuwait, Bahrain, and Oman all backed away from pursuing civilian nuclear projects despite initial announcements to the contrary in 2006.

We therefore must distinguish between real proliferation threats and mere posturing. Because "talk is cheap," there is good reason to discount statements (especially those made in private)[32] or documents leaked about a state's internal deliberations as constituting real proof of intention.[33] Again, to invoke game theory, this is a classic game of costly signaling, whereby countries must undertake some policy – short of actually building a bomb – in order to signal their resolve to live up to their threat. The only circumstances where such private communications should appear sincere are those where leaks incurred substantial costs. For example, the knowledge that the Japanese Defense Agency had produced a discussion paper regarding potential pursuit of a nuclear weapon led to a massive domestic backlash.[34]

What can Saudi Arabia or other states do to prove that they are not bluffing and that they would actually seek a nuclear weapon should Iran succeed in obtaining one? Investing billions of dollars to actually build relevant infrastructure is one such costly signal. In this instance, however, Thomas Schelling's well-known notion that "in bargaining, weakness is often strength"[35] is turned on its head. Flush with easily divertible oil wealth, it is entirely feasible for Gulf states to invest several billion dollars on a project that they know will never come to fruition. Thus, paradoxically, their financial strength becomes a signaling weakness.

What weakness do these states possess that they could manipulate into a signaling strength?[36] Perhaps their strongest potential signal is to use their weakness in technology. In other words, if Saudi Arabia actually started investing in the development of a cadre of technically competent people in the nuclear field, this would serve as a credible signal about their intentions. Again, this means more than just founding institutes like King Abdullah City for Atomic and Renewable Energy (K. A. CARE)[37] – they need to obtain foreign expertise, and this is best done by sending hundreds of people abroad to study. Of course, as is often the case with costly signals, these policies also serve as a sort of hedge by reducing the cost if one would have to follow through with a threat.

There is an alternative to building a weapon: Saudi Arabia and others could buy a ready-made nuclear weapon, just as they purchased CSS-2 missiles from China.[38] Yet while technically feasible, such purchases are inherently

problematic. The core of this predicament is that the value of nuclear weapons rest in their ability to bolster a state's deterrence and coercive power, rather than in their use (nuclear weapons have not actually been used since World War II). In order to deter an adversary, however, that adversary must be aware that the weapons exist. As Peter Sellers says in the classic movie *Dr. Strangelove*, "Of course, the whole point of a Doomsday Machine is lost if you keep it a secret!" So if a country secretly purchases nuclear weapons, how will the adversary know in order to be deterred? Even if a purchasing country leaks news of the purchase, how can the adversary know for sure the purchasing country is not bluffing? Herein lies a clear advantage of a home-grown nuclear program: precisely because they are so big, costly, and slow, it is easier to convince its adversaries that it really has a nuclear weapon. Lacking this costly infrastructure, it might be that the only credible way for a purchased nuclear weapon to be a credible deterrent is to test one.[39]

Conclusion

The most important policy implication of this essay is that if Middle Eastern governments believe that the US is in fact resolute in its willingness to impose enormous costs on proliferators, and at the same time will steadfastly guarantee the security for those who do not proliferate, then it is highly unlikely we will witness a full-fledged "bank run" on the NPT. The problem is that as American resolve is questioned, we are more likely to see at least a partial "bank run." Specifically, we can expect to see many countries aiming for a nuclear profile like that of Japan, Germany, or maybe even Iran. In other words, they will seek enough know-how and material in order to maintain the option of a quick nuclear breakout. Such a policy would allow these states to maintain a nuclear option, while only paying minimal economic and diplomatic costs. Or as one might say, it allows these countries to "have their yellow cake and eat it too."

Notes

1 Though widespread, this is not necessarily a universal phenomenon. Perhaps the variation is due to countries whose banking systems came of age before the era of government insurance for depositors (and thus need costly signals) versus those who came later (and thus did not).

2 James Fearon, "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs," *Journal of Conflict Resolution* 41, no. 1 (1997): 68-90, defines this idea well in terms of crisis bargaining: "A threat may be rendered credible when the act

of sending it incurs or creates some cost that the sender would be disinclined to incur or create if he or she were in fact not willing to carry out the threat," p. 69. The idea of costly signaling is derived from game theory and has been used widely in many disciplines. See, in the field of economics, Michael Spence, "Job Market Signaling," *Quarterly Journal of Economics* 87, no. 3 (1973): 355-74; in the field of political science, Fearon; and in the field of biology Amotz Zahavi and Avishag Zahavi, *The Handicap Principle: A Missing Piece of Darwin's Puzzle* (New York: Oxford University Press, 1997).

3 There is much written about the question of a nuclear cascade. One of the most comprehensive discussion about the Iran question is Mark Fitzpatrick, ed., "Nuclear Programmes in the Middle East: In the Shadow of Iran," *IISS Strategic Dossier* (International Institute for Strategic Studies, 2008). INSS researchers who have written on this topic include Yoel Guzansky, Ephraim Asculai, and Gallia Lindenstrauss, "Civilian Nuclear Programs in the Middle East: Nuclear Spring or Nuclear Autumn?" *Strategic Assessment* 15, no. 1 (2012): 95-111; Amos Yadlin and Avner Golov, "A Nuclear Iran: The Spur to a Regional Arms Race?" *Strategic Assessment* 15, no. 3 (2012): 7-26; and Yair Evron, "They're Not Running to Acquire Nuclear Capabilities," *Haaretz*, August 18, 2012.

4 For a discussion about nuclear hedging, albeit in a different part of the world, see Llewelyn Hughes, "Why Japan Will Not Go Nuclear (Yet): International and Domestic Constraints on the Nuclearization of Japan," *International Security* 31, no. 4 (2007): 67-96.

5 World Nuclear Association, "Emerging Nuclear Energy Countries," updated November 2013, http://www.world-nuclear.org/info/Country-Profiles/Others/Emerging-Nuclear-Energy-Countries.

6 A combination of factors could support the nuclear renaissance thesis. One example is the particularly high birthrates of Middle Eastern countries, a factor that leads to higher energy consumption. Another is that this could be a "regression toward the mean" phenomenon, whereby the rate of interest in nuclear programs could be higher in the Middle East because the region has fewer civilian nuclear programs than any other region. Consequently, the Middle East's higher level of interest might just mean it is catching up to the global average. At the same time, unlike sub-Saharan Africa (the second sparsest region), many of these governments have the funds necessary to develop expensive nuclear programs. For more on nuclear programs by region and country, see International Atomic Energy Agency, *International Status and Prospects of Nuclear Power* (Vienna: IAEA, 2008), pp. 8, 10-11, Table B-3, http://www.iaea.org/Publications/Booklets/NuclearPower/np08.pdf. Again, one of the most persuasive counter-arguments to this thesis is the timetable of events: Middle East countries expressed their interest nearly simultaneously. If the merits of civilian energy were driving this interest, then such a sudden explosion of interest is quite odd. A thorough study could compare this timeline to those in other regions, which would most likely find that interest was expressed over a longer time span.

7 The map is based on Fitzpatrick, "Nuclear Programmes in the Middle East: In the Shadow of Iran," p. 11.

8 Federal Deposit Insurance Corporation, *The First Fifty Years: A History of the FDIC 1933-1983* (Washington, D.C.: FDIC, 1984). See chapter 3, http://www.fdic.gov/bank/analytical/firstfifty/chapter3.html.
9 Author's graph. Source for number of closures: FDIC, *The First Fifty Years*, chapter 3.
10 My gratitude to Branislav Slantchev for enlightening me on the origin of the game.
11 In the prisoner's dilemma, by way of contrast, the best outcome an actor could hope for is to tattle on one's friend and get off scot free because his friend refused to cooperate with the police. Of course, this would represent the worst outcome for the friend. The second best outcome for both is if both actors were to remain tight-lipped and get convicted of a minor crime. What is puzzling about the prisoner's dilemma is why both actors frequently end up at the third-best outcome for each – both ratting on their friend and thus facing a longer conviction instead of both remaining silent. In the stag hunt, the preferences are more aligned, as each would prefer to hunt stag, and only deviate from that if they suddenly have reason to believe the others are doing the same. Whether the stag hunt or prisoner's dilemma best represents an arms race is disputed (both have been used), and depends on what one believes is the essential dynamic behind an arms race.
12 For an argument why this threat is likely overstated, see Cameron S. Brown, "The Nuclear Hegemon Fallacy," (forthcoming). Although the likelihood of this outcome is dubious, other states presumably perceive otherwise (i.e., that Iran would gain more influence and power in such situations) and hence act accordingly.
13 All IAEA reports on Iran can be found at http://www.iaea.org/newscenter/focus/iaeairan/iaea_reports.shtml.
14 To some degree this assumes that IAEA reports provide information beyond what the intelligence agencies of relevant states can provide.
15 Fitzpatrick, "Nuclear Programmes in the Middle East," p. 9, emphasis added.
16 Joshua Pollack, "Ballistic Trajectory: The Evolution of North Korea's Ballistic Missile Market," *Nonproliferation Review* 18, no. 2 (2011): 411-29, see especially pp. 418-19. For a colorful account of the Saudi missile acquisition, see Khaled bin Sultan (with Patrick Seale), *Desert Warrior: A Personal View of the Gulf War by the Joint Forces Commander* (New York: HarperCollins, 1995), chapter 10; pp. 142-45 lay out the rationale, particularly regarding the perceived Iranian threat.
17 Consider Pakistan's support for brazen terrorist attacks against India post-1998, or North Korean military attacks on South Korean soil and the sinking of a South Korean vessel in 2010. The victims of these attacks did not retaliate due to fear of escalation against a nuclear weapon state. For more on this, see Emily B. Landau, "Can the US Contain a Nuclear Iran?" *INSS Insight* No. 171, March 24, 2010, http://www.inss.org.il/index.aspx?id=4538&articleid=2164.
18 Yair Evron. "Extended Deterrence in the Middle East," *Nonproliferation Review* 19, no. 3 (2012): 377-90; see p. 384.
19 Remarks by Itai Brun, head of Research at IDF Intelligence, at the INSS annual conference, April 23, 2013. See also "Kerry: Netanyahu Cannot Confirm Report of Syrian Chemical Arms Use," *Ynet*, April 23, 2013, http://www.ynetnews.com/articles/0,7340,L-4371577,00.html.
20 Evron, "Extended Deterrence in the Middle East," p. 378.

21 Two important administration statements regarding "the pivot" are President Obama's speech to the Australian parliament, http://www.whitehouse.gov/the-press-office/2011/11/17/remarks-president-obama-australian-parliament, and National Security Advisor Thomas Donilon's remarks at Asia Society New York, http://asiasociety.org/new-york/complete-transcript-thomas-donilon-asia-society-new-york.

22 John Reed, "All Hands on Deck: How the U.S. is Using the Gulf States to Deter Iran," *Foreign Policy*, July 19, 2012, http://www.foreignpolicy.com/articles/2012/07/19/all_hands_on_deck.

23 Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), p. 47.

24 There is much literature on this subject. Among the most prominent examples: David A. Baldwin, *Economic Statecraft* (Princeton: Princeton University Press, 1985); Gary C. Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered: History and Current Policy*, 2nd ed., 2 vols. (Washington: Institute for International Economics, 1990); Lisa L. Martin, *Coercive Cooperation: Explaining Multilateral Economic Sanctions* (Princeton: Princeton University Press, 1992); T. Clifton Morgan, "Issue Linkage in International Crisis Bargaining," *American Journal of Political Science* 34, no. 2 (1990): 311-33; T. Clifton Morgan, *Untying the Knot of War: A Bargaining Theory of International Crises* (Ann Arbor: University of Michigan Press, 1994); Robert A. Pape, "Why Economic Sanctions Do Not Work," *International Security* 22, no. 2 (1997): 90-136; and Robert A. Pape, "Why Economic Sanctions Still Do Not Work," *International Security* 23, no. 1 (1998): 66-77.

25 Gregory L. Schulte, "Stopping Proliferation Before It Starts: How to Prevent the Next Nuclear Wave," *Foreign Affairs* (July/August 2010).

26 Given that sanctions forced Iran to sign the interim agreement reached in Geneva 2013, such a concession may be unwarranted.

27 Here I owe a great intellectual debt to several authors who have made this point in the debate about the effectiveness of sanctions in general: Daniel Drezner, "The Hidden Hand of Economic Coercion," *International Organization* 57, no. 3 (2003): 643-59; and Emerson Niou and Dean Lacy, "A Theory of Economic Sanctions and Issue Linkage," *Journal of Politics* 66, no. 1 (2004): 25-42.

28 The best account to date is probably David Makovsky, "The Silent Strike: How Israel Bombed a Syrian Nuclear Installation and Kept it Secret," *The New Yorker*, September 17, 2012. Public statements by numerous Israeli leaders at the time, such as former Prime Minister Ehud Olmert, all but admit this was Israel's handiwork.

29 See Ephraim Asculai, "The Future of the IAEA Safeguards System," *Strategic Assessment* 11, no. 3 (2009): 77-83; and Fitzpatrick, "Nuclear Programmes in the Middle East," p. 154.

30 One theoretical difference that changes the strategic nature of the game is the speed at which proliferation moves (slow) versus the rate at which bank runs occur (very fast).

31 See, for instance, President Obama at the AIPAC Policy Conference: "Indeed, the entire world has an interest in preventing Iran from acquiring a nuclear weapon. A nuclear-armed Iran would thoroughly undermine the non-proliferation regime

that we've done so much to build. There are risks that an Iranian nuclear weapon could fall into the hands of a terrorist organization. It is almost certain that others in the region would feel compelled to get their own nuclear weapon, triggering an arms race in one of the world's most volatile regions." Source: "Remarks by President Obama at the AIPAC Policy Conference," Washington Convention Center, Washington, DC, March 4, 2012, http://www.whitehouse.gov/the-press-office/2012/03/04/remarks-president-aipac-policy-conference-0.

32 For example, some have cited Saudi remarks to Dennis Ross that "if they get nuclear weapons, we will get nuclear weapons" as evidence of intention, See Yadlin and Golov, "A Nuclear Iran," p. 8.

33 Analysts should take these sorts of declarations or documents seriously in cases like Japan, where due to the long standing taboo on the subject, policymakers have strong domestic disincentives to even discuss the option of developing a nuclear weapon.

34 Hughes, "Why Japan Will Not Go Nuclear (Yet)."

35 Thomas C. Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960/1980), p. 22.

36 One conceivable signal could be to pay a high political and diplomatic cost for refusing to give up the right, for instance, to enrich uranium. The problem is that to date, countries like Saudi Arabia and Jordan have yet to pay such a heavy price because, due to a variety of other important considerations, the West does not want to impose it.

37 For the city's website, see http://www.kacare.gov.sa/en.

38 For an in-depth discussion, see Yoel Guzansky, "Questioning Riyadh's Nuclear Rationale," *Middle East Quarterly* 20, no. 2 (2013): 59-64.

39 In Schelling's words, "The power to hurt is often communicated by some performance of it," *Arms and Influence*, p. 3.

PART II

The Nuclear Non-Proliferation Treaty: Will the NPT Survive?

The Nuclear Nonproliferation Regime: A Rethink?

Ephraim Asculai

No matter how you look at it, the nuclear nonproliferation regime is in dire straits. Even from a strict legal perspective, quite a few states have failed to comply with the provisions of the Nuclear Non-Proliferation Treaty (NPT). One state has withdrawn from the NPT and has since conducted a number of nuclear tests, several states have instituted clandestine nuclear weapons development projects, and one of these countries is currently subject to severe UN Security Council sanctions. There is also a long list of states that have assisted proliferators. Nonetheless, the international community continues with the pretense that all is well. This is no more apparent than in the five-year NPT Review Conferences, where serious attempts to confront the problem of proliferation and proliferators are conspicuously absent.

The memorandum *Rethinking the Nuclear Non-Proliferation Regime*, published in 2005, presented several ideas for resolving a bad situation.[1] The memorandum discussed the possible modification of the NPT, either through amendments or by agreement on a new text and a strengthening of the verification mechanism. However, since then the situation has taken a turn for the worse. The main issue is now starkly defined: does a comprehensive nuclear nonproliferation regime really exist? Is the NPT still tenable, and if not, what can be done to ensure that the nonproliferation regime is fit for purpose and can stop the proliferation of WMD? This article, which does not present a comprehensive review of the situation, offers some recommendations in a bid to address the very serious problems afflicting the NPT.

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The Current Situation

The following ten points survey the state of the nuclear nonproliferation regime as of early 2014:

1. *In the foreseeable future, there will be no universal nuclear disarmament, irrespective of international demands and the requirements of the NPT*. Most states agree with the principle of universal nuclear disarmament, but it cannot be applied, especially since not all the nuclear weapon states (NWS) will renounce their weapons, in view of the risk of cheating by one of the states or by a non-state organization. Regional arrangements would be possible if states were able to trust each other and peaceful conditions existed in the region.
2. *Many states view NPT membership as an end in itself, and not as a means to an end*. While the vast majority of NPT members joined the regime for purely altruistic reasons, there is a significant minority that did so for the significant benefits accruing from membership. Article IV of the NPT states that "all the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy." Thus many states developed nuclear programs, most of which were designated for peaceful purposes. Some states, however, used this "exchange" to proceed with clandestine nuclear weapons development programs, exploiting the benefits of NPT membership.
3. *Any state that is determined to acquire nuclear weapons will accomplish this, irrespective of its international obligations*. North Korea, Iraq, Iran, Libya, and Syria all hid behind the protective screen of the NPT and the inadequate IAEA verification system (the so called "full scope" or "comprehensive" system), rather than the Additional Protocol (AP), which was not applied in these cases. These states did not observe the requirements of the NPT and launched nuclear weapons programs. When the situation became too heated for North Korea, it simply withdrew from the NPT. When Libya was found in breach of its obligations, it simply surrendered its uranium enrichment project and received a pat on the back rather than a punishment for its non-compliance. Saudi Arabia simply signed the Small Quantities Protocol, which essentially eliminated the prospect of intrusive IAEA inspections on its territory.

4. *The international verification mechanisms are not strong enough to detect all cases of non-compliance with international treaty obligations*. The major flaw with the full scope verification system has been that inspectors cannot inspect undeclared facilities, even at declared nuclear sites, not to mention activities and materials at undeclared sites. Even with the advent of the Additional Protocol, which permits inspections of all facilities at declared sites, the access to undeclared sites has been limited. The major problem with the Additional Protocol, however, is that it is not automatically applied to all those with safeguards agreements with the IAEA. Naturally, those states that have something to lose by agreeing to Additional Protocol inspections do not adhere to it, and there are no legal remedies to address the problem. Moreover, the verification mechanism applies only to nuclear materials and activities. Other activities related to the development of nuclear explosive mechanisms are not included in the inspectors' mandate. Unclassified details, open source material, and commercially obtained data will rarely provide enough information. Furthermore, even if there is sufficient information, the verification organization will rarely be able to act on it. Only intelligence organizations can sometimes obtain reliable information, but their success is not always assured. Moreover, the international community will not always act on this information
5. *Commercial interests can overcome legal obligations, supplying the proliferators with the necessary equipment, materials, and know-how for their programs. Governments are at times reluctant to take action against these interests*. Consider the situation today: the success of proliferators in achieving their objectives is owing to producers who have sold them technical equipment and materials. Many of these producers are located in developed countries that have been only too happy to sell their equipment to anyone able to pay for it. A small number of these vendors were brought to trial, but the punishments in many cases were ludicrous.
6. *There is no enforcement mechanism that can stop proliferators on its own, and the resolve of the international community is not strong enough to do so*. There is no permanent organizational setup for the NPT.[2] There is no secretariat as such, and the only oversight work is conducted by the IAEA Department of Safeguards. The UN, and the Security Council in particular, can take action where necessary, but the system is not usually

quick to respond to crises. The five-year NPT Review Conference cycle cannot take action on its own against any member during the conference. In view of the strong position of the members, as noted in the procedural rules, no important decisions can be taken without consensus.

7. *Although it is technically possible to amend the NPT, this will not happen*. Were negotiations on the NPT to take place today, the outcome would be quite different. The differences would include a more equitable approach; a more clearly defined relationship between the present NPT membership and parties outside the NPT; a wider scope of the obligations of parties to the treaty, obligating the parties to adhere to a strengthened verification regime including the Additional Protocol and other stringent verification measures; and many other provisions. In view of the situation today, there is no possibility of amending or revising the treaty.
8. *A Fissile Material Cut-off Treaty (FMCT), although sensible, is not in the offing and is not verifiable*. This treaty suggestion has been debated for many years at the UN Conference on Disarmament (CD) without any success. It is not the treaty itself that is the point of contention, rather the many conditions that are attached to it. Arguably, the biggest obstacle to the realization of an FMCT is the demand for a verifiable treaty. The two pitfalls hindering progress are the need to search for undeclared fissile material production facilities and the demand for periodic inventories of fissile materials in certain states, in order to confirm that no undeclared material has been added to declared amounts. It is almost impossible to reach an agreement because of the security considerations of individual states. To use an example from the Chemical Weapons Convention (CWC), during all the years of the treaty's existence, not a single genuine "challenge inspection" has ever taken place. Without inspections of this kind, there can be no absolute assurances that the relevant treaty is observed. An agreement on a declarative treaty, without the need for verification, could achieve the same end result as a verifiable treaty without all the difficulties. This treaty could be a stepping stone toward reducing the number of nuclear arms, but would not constitute a final goal. For this reason, it is not a high priority objective for the international community and can be bypassed, if necessary.
9. *The leading powers are hesitant to confront proliferators*. The international community does not view confronting the problem of nuclear proliferators as a high priority. With the exception of Israel (in the case of Iraq in

1981, and reportedly in the case of Syria in 2007), the international community has not put forward red lines in regard to existing proliferation cases. No significant action was taken against India, Pakistan, and North Korea. While sanctions were applied against the three countries, they were ineffective in every case. In the case of Pakistan, the sanctions were abandoned because of political expediency, and in the case of North Korea, they achieved nothing except additional hardship for an oppressed people. Most of the states that have renounced their military nuclear programs have done so for political reasons, and not because of the threat of strong military action against them.

10. *It is a grave mistake to attempt to compel states to join the NPT, instead of trying to reach an understanding with them*. Since 1995, the NPT Review Conferences have been held to ransom by Egypt, whose sole interest in the proceedings is to try to force Israel to become a member of the NPT. Not only is this against the spirit and the letter of the Vienna Convention on the Law of Treaties (which notes that "the principles of free consent and of good faith… are universally recognized"), but it seeks to force Israel to act against what it considers to be its best interests.[3] Without the aforementioned "free consent," no agreement can be expected to hold for a reasonable time.

These ten points do not constitute a comprehensive list. However, taken together, they are indicative of the sorry state of the nuclear nonproliferation regime.

What Can be Done?

Past experience has shown that political persuasion, military action, and the Proliferation Security Initiative (PSI) have been effective in stemming proliferation. In addition, the Nuclear Suppliers Group (NSG) has played a very constructive role. It is counterproductive, however, to demand that one must be party to the NPT in order to become a member of the NSG.

The question is, what do we want from a nonproliferation regime and how is this achieved. The overall objective must be to prevent states from developing WMD. Furthermore, states that do possess WMD must stop using them, and the stockpiles must be reduced considerably. States should also be able to utilize nuclear energy for peaceful purposes without the attendant risk of proliferation. Can this be accomplished within the framework of the NPT? This will depend to a large extent on whether there is a positive

outcome to the Iranian nuclear challenge. In the event that Iran is stopped and its extensive nuclear weapons program is dismantled, there is a glimmer of hope for the NPT. If this does not occur, the NPT could well become obsolete. Four states are already not parties to the NPT, and will probably not be cajoled into joining it. Were Iran to withdraw from the NPT, many others will likely do so.

What can be done to at least ameliorate the situation? It is unrealistic to expect non-NPT members to join the regime. There is no single remedy, and a wish list such as the 2000 NPT Review Conference "Thirteen Steps" will not succeed in bringing about total compliance with the nonproliferation regime.[4] Some of the steps recommended here, however, could advance the cause of nonproliferation:

1. *Draft and ratify a general memorandum of understanding of no first use that includes the NWS and the four non-NPT states*. This has already been recommended as a first step in lowering tensions in the Middle East.[5] If this could be applied in a more general way to the above nine states, it could be a very positive step.
2. *Accept the four non-NPT states into the NSG, on the condition that they accept its terms, without requiring them to join the NPT*. Pakistan and North Korea, two of the non-NPT states, have been active proliferators. Pakistan, with the involvement of A. Q. Khan, provided Iran with invaluable assistance in the development of its nuclear weapons program. It also provided Libya with both uranium enrichment technology and the blueprints for an enriched uranium nuclear explosive device. North Korea provided Syria with a natural uranium reactor, a clone of its own facility, intended for the production of military grade plutonium. Since these states were not bound by any document prohibiting such activity, they concluded that there was nothing to stop them providing assistance to other proliferators. It is possible that by joining the NSG, such states would have a disincentive to provide assistance to other proliferators.
3. *Launch an economically viable regulated internationalized fuel cycle, covering both the front and back ends*. The idea of an international nuclear "fuel bank" is not new,[6] nor are the benefits of this idea purely related to the issue of nonproliferation. By creating an international nuclear fuel bank, there would be a significant reduction in fuel costs, especially for enriched uranium fuel, which constitutes the bulk of power-reactor fuel around the globe. However, this only deals with half of the problem. If

a centralized system of storage or reprocessing governing spent nuclear fuel were established, two problems could be solved simultaneously: the issue of fuel costs would be addressed together with the environmental risks arising from the treatment of spent fuel. The second issue here relates to the stewardship of the plutonium, and the possible use of this safeguarded material for refueling nuclear reactors.

4. *Institute a system of punitive political and economic sanctions against proliferators, including both producer countries and vendor countries*. In the event that a state is deemed to be in violation of its safeguards obligations and its NPT undertakings, these measures should be applied automatically. Moreover, in the event that the IAEA presents evidence that vendor countries have sold equipment and materials to other countries, thereby contravening their NPT or NSG obligations, the vendors should face automatic sanctions, obviating the need for the usually ineffective Security Council responses.
5. *Institute the Additional Protocol as a mandatory obligation of the parties to the NPT and begin discussions on an augmented verification system, based on the lessons learned from the application of the AP*. The 1991 Gulf War proved that the "full scope" safeguards that were the norm at the time were ineffective, since they concerned only facilities, activities, and materials that were declared by the inspected state. In 1993, the IAEA launched its "93+2" project that resulted in the formulation of the Additional Protocol. The AP constituted a significant advancement for the verification process, but it has a major flaw: it is not mandatory. Those wishing to cheat and conceal illicit activities are able to bypass the AP. When proliferators such as Iran and Syria do not regard themselves bound by the AP, there is ample scope for cheating and carrying out undeclared activities. Furthermore, the IAEA is currently powerless in the face of this undeclared activity. In order to remedy this situation, the NPT Review Conferences should declare that member countries are bound by the AP. Moreover, the IAEA should launch a review to monitor the AP's application over the last fifteen years, in order to improve its effectiveness and strengthen the verification process.
6. *Abolish the Small Quantities Protocol*. Several dozen NPT members have signed the Small Quantities Protocol (SQP), intended for states with little or no nuclear material and no nuclear material in installations. However, once the SQP was signed, the state in question could go and

conduct activities without IAEA oversight. When Saudi Arabia signed the SQP with the IAEA, many eyebrows were raised, since there were ongoing suspicions that the country had established extensive nuclear cooperation with Pakistan. The IAEA did modify its SQP, but few states agreed to the modification. It was suggested that even an amended protocol was inadequate to assure the IAEA that the state in question was in full compliance with its obligations.[7] It is recommended here that the SQP be abolished and replaced by the AP, which will be applied if and when the IAEA deems it necessary to do so.

The above recommendations do not comprise a comprehensive list, and it is unlikely that they will be implemented. However, if at least some of these recommendations were implemented, they would strengthen the nonproliferation regime. By persevering with the regime in its current state, there is a higher risk of proliferation. If we take the example of proliferators such as Iraq, Pakistan, North Korea, Iran, Libya, and Syria (four of which are still members of the NPT), not only were these countries not hindered by the requirements of the international nonproliferation regime, but the international community as a whole did little to encourage them to comply with their obligations. Moreover, the lack of unanimity among the leading state actors on the need to act forcefully against proliferators undermines united action. Therefore, given the absence of external factors that could persuade a country to give up its military nuclear ambitions, direct action is probably the only option that will work.

A discussion of the NPT should also include reference to the Comprehensive Test Ban Treaty (CTBT). The treaty has much to commend it. However, it will not hinder those states seeking to make a statement by exploding a nuclear device. Therefore, the on-site inspection mechanism (OSI) will probably never be utilized since the states in question are likely to take pride in their nuclear tests. Nevertheless, the centralized monitoring system will always remain a useful tool for the international community. There are, of course, many difficulties for the CTBT. One of them is the "no lower limit" to the nuclear yield of any explosive test. The lower yields are not detectable by the International Monitoring System (IMS), and this has, in fact, turned the CTBT into a declarative treaty for these low yields, since they cannot be verified.

Conclusion

The fate of the nonproliferation regime in general and the NPT in particular will be determined by whether Iran is persuaded to renounce its nuclear ambitions. If Iran is persuaded to give up its military nuclear ambitions, the regime could get a life extension. In the event that Tehran succeeds in producing a nuclear explosive device, or at least produces a substantial amount of military fissile material while continuing to buy time, the nonproliferation regime is doomed. Unless the Review Conferences are able to emerge with resolutions that are both practicable and attainable, they will eventually fizzle out. If there is a serious discussion of the issues without the need for a consensus (which requires the acquiescence of transgressors), the forums could have a practical purpose. Unfortunately, it is unlikely that this will occur.

Notes

1 Ephraim Asculai, *Rethinking the Nuclear Non-Proliferation Regime*, Memorandum No. 70 (Tel Aviv: Jaffee Center for Strategic Studies at Tel Aviv University, 2004), http://www.inss.org.il/index.aspx?id=4463.

2 Rule 28 of the 2010 NPT Review Conference Rules of Procedures states: "Every effort should be made to reach agreement on substantive matters by means of consensus. There should be no voting on such matters until all efforts to achieve consensus have been exhausted." See http://www.un.org/en/conf/npt/2010/pdf/draft_rules.pdf.

3 Vienna Convention on the Law of Treaties**,** https://treaties.un.org/doc/Publication/UNTS/Volume%201155/volume-1155-I-18232-English.pdf.

4 Final Document, 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/revcon2000/docs/2000FD.pdf.

5 David Friedman, Emily B. Landau, Ephraim Asculai, Tamar Malz-Ginzburg, and Yair Evron, "WMD No-First-Use in the Middle East: A Way to Move forward in 2012?" *Bulletin of the Atomic Scientists* No. 66, February 7, 2011.

6 See, e.g., Ephraim Asculai, "What Nuclear States Should and Should not Do to Staunch Proliferation," in Conference on Nuclear Proliferation, Athens, Greece, May 30-31, 2003, Center for Policy Analysis and Planning, Ministry of Foreign Affairs, Athens, Greece.

7 For a detailed discussion see the Australian Government document: Russell Leslie, John Carlson, and Annette Berriman, "Ensuring Effective Safeguards Coverage of States with Small Quantities Protocols," no date, http://www.dfat.gov.au/asno/publications/ensuring_effective_safeguards_coverage_state_small_quantities_protocols.pdf.

Too Early to Eulogize the Nuclear Nonproliferation Regime

Tamar Malz-Ginzburg

Since the end of the Cold War, the nuclear nonproliferation regime has been criticized for its inability to monitor and enforce prevention of nuclear proliferation, the main purpose for which it was established. This criticism has been directed primarily at the central component of the regime, the Nuclear Non-Proliferation Treaty (NPT), and has included three major issues: the nuclear programs of states that are (or were) members of the treaty under the status of non-nuclear states, especially Iran and North Korea; the unwillingness of the nuclear powers that are NPT members to honor their commitment under the treaty and dismantle their nuclear weapons; and the international community's silence about the existence of three nuclear states that were never NPT members: India, Pakistan, and reportedly Israel as well. [1]

The seeming dysfunction of the regime has been explained as a function of the end of the Cold War, when the international system ceased to be governed by two superpowers that to a large extent dictated the relationships within it.[2] The regime, created within the bipolar system, was perforce weakened once this system itself was undermined. In a different vein, there is a dispute among scholars as to how much the international norms that are included in the regime influence actual decisions taken by the states on matters relating to nuclear weapons, especially the norm that bans the spread or proliferation of nuclear weapons.[3] Some argue that these decisions by states stem from considerations of realpolitik and are not affected by norms at all.

This article examines whether the Nuclear Non-Proliferation Treaty can still fulfill the main purpose for which it was established – preventing further

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proliferation of nuclear weapons to additional states. This examination will be conducted in context of the contention that the regime is inextricably linked to Western culture, which gave rise to the liberal world order that has governed the international system since the twentieth century. The article posits the connection between the norm that bans the proliferation of nuclear weapons and a key norm for maintaining the liberal world order: preservation of global security even at the price of international intervention in other countries.[4]

The Tradition of Western Political Thought and the Nuclear Nonproliferation Regime

Nuclear weapons, developed in the United States as tools to be used in war, were intended to be used as part of aerial bombing campaigns. In the summer of 1945, only a few individuals – primarily scientists from the Manhattan Project, which developed the nuclear bomb in the United States – realized the ramifications of nuclear weapons development for the international system. They expected that the knowledge and development of nuclear weapons would not remain the exclusive preserve of the United States, and that if an international inspection and enforcement regime were not established, the world would witness a race to obtain nuclear weapons, which could lead to a nuclear catastrophe. [5]

Gradually, the significance of these weapons seeped into the thought and theory of international relations, followed by strategic-political action. During the Cold War years, the fear of proliferation of nuclear weapons and an uncontrolled nuclear arms race led to the development of the nuclear nonproliferation regime. The guiding principle of this regime is that wide scale proliferation of nuclear weapons endangers international peace and security.[6] Thus if the threat is defined as the proliferation of nuclear weapons, the solution is defined as a regime to prevent such proliferation.[7]

Today the regime includes various norms, including norms that ban the spread or proliferation of nuclear weapons, the norm prohibiting the use of nuclear weapons, and the norm that bans nuclear tests. It also includes international institutions and multilateral or bilateral agreements that were established over the years to grapple with nuclear weapons proliferation. Heading the list are:

1. International and multilateral agreements and institutions, such as the Nuclear Non-Proliferation Treaty, the International Atomic Energy Agency (IAEA), and the Comprehensive Test Ban Treaty (CTBT).
2. Regimes that monitor the suppliers, such as the Nuclear Suppliers Group (NSG) and the Zangger Coalition.
3. Monitoring and control of particular suppliers through an export monitoring system on a national level.
4. Treaties that affect the regime, such as those that ban the positioning of nuclear weapons in particular geographic regions.[8]
5. Bilateral arms control agreements between states.[9]

The evolution of the regime can be seen as a natural product of statesmanship that recognized the danger inherent in uncontrolled proliferation of nuclear weapons and the need to deal with this threat. However, the norms and methods to meet the danger that created the regime relied on a much broader ideological system – on Western culture as a whole, and on the tradition of Western political thought that is embedded in it. This tradition, which was dominant in the international system after the end of the Second World War, contributed to shaping the institutions, agreements, and norms in the Western liberal bloc. Elements of this culture that influenced the creation of the regime include the desire to reject the use of force to resolve conflicts (between states or people); a commitment to the rule of law and government; and a scientific-rational approach to problem solving. [10]

Western thought influenced nuclear arms control agreements signed by the two superpowers during the Cold War in several ways, including: [11]

1. An understanding that there is a need for rational nuclear deterrence, based on recognition of the futility of another world war. The starting point was the assumption that deterrence is possible only if a clear balance of terror is created with the enemy, with both sides aware of the strength of the mutual destruction that would be caused by a nuclear war.
2. A commitment by the parties to protracted negotiating processes based on templates that are a product of American political and diplomatic culture.
3. An emphasis on formal negotiations, the signing of arms control agreements, and a commitment to these agreements.
4. A need for transparency in the military operations of the other party and for establishing means of verification. This need, which ostensibly contradicts any strategic thought that underscores the primacy of secrecy and the element of surprise, conforms with the European political culture

associated with the subordination of the military establishment to the parliament, an open and democratic society, and the like.

5. A willingness to adopt confidence and security building measures (CSBMs), with the goal of changing threat perceptions and improving relations between the parties.

Are We Witnessing the Death Throes of the Nonproliferation Regime?

The nonproliferation regime has come under intense criticism from various quarters in the post-Cold War period. The criticism is primarily a result of changes among NPT member states and former member states. The treaty was a formal expression of the norm that prohibits the spread or proliferation of nuclear weapons, and it is also a basic element of the regime. Accordingly, the discussion below focuses on two violations of this treaty: 1) nuclear weapons development programs in NPT member states (or former member states) with the status of non-nuclear states, such as Iraq, Syria, Libya, Iran, and North Korea; and 2) the civil nuclear trade agreement between the United States and India, signed in 2008.

The two violations are very different in nature. The first involves states that were members of the NPT and violated their commitment to it. These are countries whose regimes are dictatorships and often make aggressive threats toward other countries (for example, Iran toward Israel and North Korea toward South Korea, the United States, and Japan). In the second example, it was the United States that violated its commitment to the treaty, even though it is one of the main supporters of the regime as well as a member of the NPT. It created a loophole in the regime by contravening the NSG rules forbidding the five nuclear NPT member states from selling trade in civilian nuclear goods with nuclear states that are not NPT members, and allowed India to become the first non-NPT nuclear state to trade in nuclear goods for civilian purposes.[12] Another fundamental difference between the two violations is that in the first example, the violator was a minor participant in the regime, while in the second case, the violator was the United States, which is a main participant in the regime in general and the treaty in particular.

According to critics of the regime, these violations indicate that in practice, the NPT has failed to achieve one of its main objectives: preventing the proliferation and spread of nuclear weapons to additional countries. Admittedly, these violations indicate that the regime in general and the treaty in particular

cannot prevent certain countries from attempting to fulfill their goal. At the same time, the strong powers demand a high price of these violators. In other words, the dam has not burst, and there will likely not be a considerable increase in the number of countries possessing nuclear weapons – meeting the primary objective for which the regime was created. Indeed, the regime was established and remains part of an entire complex called "a liberal world order." This world order is still dominant, and controls the international system because the strong powers in the system – and especially the United States – are parties to it.

Two major changes that occurred in the world order following the Cold War helped create precedents for dealing with the proliferation and spread of nuclear weapons, and thereby contributed to enforcement of the NPT and prevention of the collapse of the regime.

The Liberal World Order after the Cold War: Implications for the Nonproliferation Regime

The rebuilding of the countries of Western Europe after the Second World War relied on a common Western culture. The major international institutions that were established, including those connected to the nuclear nonproliferation regime, relied primarily on the American political tradition. In other words, they were not only the creation of the American hegemon, but a result of its very existence. The American political system, with its tradition of thought, its local markets, its technology, and the dollar, were "disseminated" to the international arena, and thus led to the establishment of a liberal world order throughout the Cold War.[13]

One key element of the world order during the Cold War was the definition of the threat. The United States saw the Soviet Union and the spread of communism as a threat to the liberal order, and the fear that a nuclear war would erupt between the two superpowers was the primary practical threat the international system confronted during the Cold War. A second element concerned preservation of a very central norm, namely, the independence of the state, that is, state sovereignty and non-intervention in states' domestic affairs.[14]

When the Cold War ended, not only did the United States lose its exclusivity and its dominance in shaping the world order, but the characteristics of this order changed. The Soviet Union collapsed and with it the communist bloc, and the major threat the West had confronted during these years

disappeared. New threats that could harm the world order were defined by the United States and the other Western states, including radical Islamic terror and proliferation of nuclear weapons to terrorist operatives. Another fundamental change occurred in the normative element, namely, the violation of state sovereignty. The process of change in this area took place after a norm was established permitting intervention in states' domestic affairs to preserve two norms that were given preferential status and became a kind of "super norm": global security and human rights. In other words, today the international community not only permits intervention by major powers in the domestic affairs of weak states, but also expects the strong powers, primarily the United States, to enforce these norms if there is a threat to global security and the stability of the liberal world order, or when human rights are violated.[15]

The change in the threat definition and the normative change were important factors in implementation of methods to contend with nuclear weapons proliferation to other states, since they played a significant role in the international community's permission to the strong powers to organize and use military or economic measures against countries defined as endangering global security.

Let us return to the discussion of the two types of NPT violations mentioned above. With the first type of violation, the United States defined Iraq, Iran, North Korea, and later, Libya, Syria, and Cuba as part of "the axis of evil," rogue states that endanger global security and thus the liberal world order, because of their attempt to obtain nuclear weapons or other weapons of mass destruction. These countries were not defined as endangering global security only because they were suspected of developing or possessing nuclear weapons, or in other words, because they violated their commitment to the NPT, and in so doing, the norm prohibiting the spread or proliferation of nuclear weapons. They were defined as such primarily because they were suspected of support for terror and because of the hostility they showed to Western countries. This is an important distinction, since it raises questions about whether violation of the NPT is in and of itself interpreted by Western countries as harming global security, or whether it depends on the identity of the violator. The second example of NPT violation mentioned above, the agreement between the United States and India, sharpens this distinction, since the United States is responsible for a breach of the nonproliferation regime. This move engendered a negative reaction from the international

community, as well as criticism and an internal discussion in the United States, but not with such intensity that the United States annulled the agreement.[16] Beyond the agreement's economic advantages for other NSG member states, the international community accepted it because of the identity of the two parties involved: the United States, the dominant power in a liberal world order in general and the regime in particular, and India, a rising power that has long been a nuclear state (that is, not a new nuclear state) and did not threaten this liberal order.

Thus, since the regime is part of the global order that Western countries are attempting to protect, the super norms of this order influence the major powers' response to those who attempt to attack it. With the first type of violation, the states involved were not parties to this order and they challenged it, and therefore, the strong powers responded. This was not the case with the second violation, where the countries violating the treaty – the United States and India – are parties to the liberal world order, and the United States is one of its main leaders.

The intervention of the strong powers created precedents: violation of the NPT will lead to a response (economic or military) by the strong powers.

And What Does the Future Hold?

Can we then assume that given the changes in the threat definition, the normative basis, and the precedents of international organizing against NPT member states that attempt to "go nuclear," few countries will choose to do so?

This question is especially important regarding Iran's nuclearization. Statesmen and other policymakers frequently emphasize that Iranian nuclearization could lead Iran's neighbors, such as Saudi Arabia, Turkey, or Egypt, to follow in its wake, and thereby spark a nuclear arms race in the Middle East. An examination of the strategic interests, the economic basis (when Saudi Arabia and Turkey are involved), and the great hostility toward Iran indicates that there is a high probability that these countries will attempt to develop military nuclear capability.[17] If they decide to do so, will they be defined as dangers to global security, and will the international community force them to pay a political and economic price? The answer is not unequivocal. On the one hand, when the international community imposed sanctions on an NPT member that violated the treaty, a connection was created between two norms, maintaining global security and preventing

the spread or proliferation of nuclear weapons. Yet these efforts were made because the countries prompting concerted organized action by the international community were defined as constituting a danger to global security as a result of their hostility to the liberal world order. This is not the case with Saudi Arabia, Turkey, or Egypt, which are considered to be Western allies. Furthermore, some argue that Iran's nuclearization could reduce US opposition to the nuclearization of American allies in the region,[18] which would make it difficult for the international community to organize to impose sanctions on them. However, the United States and the international community could take a different approach to each of the three countries, and especially toward Egypt if radical Islamists return to power there.

On the other hand, the precedents of Western intervention against treaty violators have themselves created a commitment by the international community to act in a similar manner toward other countries that violate their treaty commitments. Turkey, Saudi Arabia, and Egypt are members of the NPT, and therefore, they could see these precedents as a threat to themselves if they decide to violate their treaty commitments. If that is the case, then the political and economic price the international community could demand of these three countries may well serve as a warning to them not to initiate a military nuclear program.[19]

Conclusion

This article challenges the belief in the imminent demise of the nuclear nonproliferation regime. It contends that the regime cannot be examined without addressing its ideological basis, Western culture and the liberal world order, which govern the shaping and conduct of the international system. Elements of Western culture have influenced the creation of the norms and practices of the regime, but more than that, since the end of the Cold War, they have created the normative and practical basis for preserving its continued existence.[20] This is because changes that took place after the end of the Cold War, including a change in the definitions of factors threatening the liberal global order, together with normative changes, have led to a situation in which preservation of global security and the right of the international community to organize to protect this security are at the heart of this consensus. As long as they are dominant in the international community, it will likely be required to take military or economic action against any state defined as a danger to global security.

The international community has taken military or economic measures against countries that violated their commitment to the Nuclear Non-Proliferation Treaty. It did so mainly because these states supported terrorism and challenged the liberal global order. Nevertheless, these international efforts have created a precedent: violation of the Nuclear Non-Proliferation Treaty constitutes a danger to global security and to the liberal world order. Therefore, this precedent will likely deter other NPT member states that are considering violating their treaty commitments, and hence, no significant increase in the number of nuclear states is expected. The regime, therefore, is not likely to collapse in the near future.

Notes

1 For a discussion of this issue, see Rebecca Johnson, "Rethinking the NPT's Role in Security: 2010 and Beyond," *International Affairs* 86, no. 2 (2010): 429. For criticism of US policy on this issue, see Emily Landau and Tamar Malz-Ginsburg, eds., *The Obama Vision and Nuclear Disarmament*, Memorandum 107 (Tel Aviv: Institute for National Security Studies, 2011).

2 See Carlo Masala, "'Don't Beat a Dead Horse': Why the NPT Failed, Is Failing, and Will Fail," presentation at the INSS conference "The Nuclear Nonproliferation Regime at a Crossroads," February 11-12, 2013.

3 Ibid.

4 This article adopts the definition of norm used in international relations, namely, an expectation of certain behavior common to a group of actors. Among theoreticians and those in the field of international relations and strategy, there is no consensus concerning the influence of norms on the conduct of the actors in the international system. Some see norms as rules regulating the behavior of states in the international system (regulative rules), while others argue that norms have an additional function – to be a dominant factor in shaping the identity of the actor, and thus in shaping its interests and its methods of implementing these interests. Both approaches to the role of norms include a moral element, that is, setting criteria for appropriate behavior by the actor and a directive that teaches what is desirable (the "good"). A broad discussion of international norms can be found in Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," p. 891; Peter J. Katzenstein, "Introduction: Alternative Perspectives on National Security," in *The Culture of National Security*, ed. Peter J. Katzenstein (New York: Columbia University Press, 1996), p. 5; and Ann Florini, "The Evolution of International Norms," *International Studies Quarterly* 40, no. 3 (1996): 364.

5 In the framework of these efforts, it is worth mentioning the report to the Secretary of War given on June 12, 1945 to an assistant to US Secretary of War Henry Stimson, who accompanied the Manhattan Project from its inception. The document was intended to change the atomic energy preparatory committee's decision to use the bomb at the earliest possible time and without prior warning against a military-civilian target in Japan. It also stated that the first use of the bomb must be a non-

military, demonstrative use, and that nuclear weapons could not remain secret and exclusive to one nation for more than several years. The scientific facts on which the bomb was built were well known to scientists from other countries. Without an effective international inspection mechanism for nuclear weapons, a nuclear arms race would take place that would come to the surface immediately upon the first revelation of the bomb. It could be anticipated that within ten years, other nations would obtain their own nuclear weapons. See Avner Cohen, *The Nuclear Age as Moral History* (Tel Aviv: Ministry of Defense Press, 1989), pp. 39-40. In early 1946, the question of oversight of the bomb arose once again in the Baruch Plan, the American proposal for international oversight of nuclear weapons that was submitted to the United Nations. The source of this plan is the Acheson-Lilienthal Report, named for the two officials who headed the committee that dealt with the question of the "nuclear secret." This committee released a report that emphasized the elements of control of nuclear energy and international cooperation on the issue.

6 Roger K. Smith, "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory," *International Organization* 41, no. 2 (1987): 257.

7 In the 1990s, the international community broadened its approach to the subject, and there was discussion not only of proliferation of nuclear weapons, but of weapons of mass destruction in general, which today also includes technologies connected to production of biological weapons, chemical weapons, and long range missiles. In January 1992, at a UN Security Council meeting, it was declared that proliferation of all weapons of mass destruction is a threat to the peace and security of the world.

8 For example, the Antarctic Treaty, 1959; Outer Space Treaty, 1967; Treaty of Tlatelolco, 1967; Seabed Arms Control Treaty, 1972; Treaty of Rarotonga, 1986; ASEAN, 1997; Mongolian Nuclear Weapon Free Zone, 2000; Central Asian Nuclear Weapon Free Zone, 2009; African Nuclear Weapon Free Zone Treaty, 2009.

9 For example, the Anti-Ballistic Missile Treaty (1972) or Strategic Arms Reduction Treaty (START I) (1991) between the United States and the Soviet Union, or the 2011 subsequent New Start treaty between the United States and Russia.

10 Keith Krause, *Cross-Cultural Dimensions of Multilateral Non-Proliferation and Arms Control Dialogues*, Research Report Prepared for the Non-Proliferation, Arms Control, and Disarmament Division, Department of Foreign Affairs and International Trade, Ottawa, Canada, December 1997, p. 19.

11 Ibid., pp. 20; 24-32.

12 In 2006, the United States passed the Hyde Act, which allows it to engage in atomic energy cooperation with India for civilian purposes. This law created the framework enabling the United States to trade in civilian nuclear goods with India, even though the latter is a nuclear power that is not a member of the NPT.

13 G. John Ikenberry, "Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order," *Perspective on Politics* 7, no. 1 (2009): 72. Anne-Marie Burley points to the similarity between the general characteristics of the multilateral international institutions that have emerged since the Second World War and the characteristics of legal institutions in the liberal United States. She argues that the United States exported the New Deal to the international arena. Anne-Marie Burley,

"Regulating the World: Multilateralism, International Law, and the Projection of the New Deal Regulatory State," in *Multilateralism Matters: The Theory and Praxis of an Institutional Form*, ed. John Gerard Ruggie (New York: Columbia University Press, 1993), p. 146, and John Gerard Ruggie, "Multilateralism: The Anatomy of an Institution," in *Multilateralism Matters: The Theory and Praxis of an Institutional Form*, p. 31.

14 Ikenberry, "Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order," p. 71.

15 In spite of the expectation that the international community will uphold these norms, there is no precise definition of the power that will enforce them. Ibid., pp. 79-80.

16 On the advantages of this agreement for the nuclear nonproliferation regime, see T. V. Paul and Mahesh Shankar, "Why the US-India Nuclear Accord is a Good Deal," *Survival* 49, no. 4 (2007). For a critical discussion of this agreement and its ramifications, see George Perkovich, "Global Implications of the U.S.-India Deal," *Daedalus* 139, no. 1 (2010): 27.

17 Amos Yadlin and Avner Golov, "A Nuclear Iran: The Spur to a Regional Arms Race," *Strategic Assessment* 15, no. 3 (2012): 7-26.

18 Ibid., pp. 14-15.

19 Yoel Guzansky and Gallia Lindenstrauss, "Toward a Nuclear Middle East," in *Strategic Survey for Israel 2012-2013*, eds. Anat Kurz and Shlomo Brom (Tel Aviv: Institute for National Security Studies, 2013), pp. 60-63.

20 This article does not address other factors connected to the nature of the state – the type of government, national culture, and political tradition – that contribute to strengthening the nonproliferation regime. For example, beyond the fact that a country that identifies itself as liberal will find it difficult to oppose norms belonging to this world of values – as the agreement between the United States and India gave rise to a debate within the United States – there are other factors that affect the shaping of the interests of a liberal state, as opposed to a dictatorship. The boundaries of state sovereignty have been breached, and international organizations, media, and commercial companies influence citizens. Thus, for example, various green organizations persuade citizens to oppose construction of nuclear reactors, even if they are intended for peaceful purposes, because of the fear of accidents that could lead to catastrophes, such as those that occurred in Chernobyl and Fukushima.

Whither the International Nuclear Order?

Emmanuelle Blanc

The NPT is at a crossroads, facing multiple challenges of different kinds: new threats are appearing and voices of discontent are on the rise. Indeed, the nonproliferation regime overall is experiencing a serious period of turbulence, perhaps a profound if not irremediable crisis. Taking this broader perspective, one should ask, what is actually happening to the very edifice of the nonproliferation regime, with the NPT as its cornerstone? Are the regime's foundations cracking? Or are these only insignificant fissures in the exterior facade? Put differently, what are the causes and the nature of the current crisis?

This article seeks to characterize the nuclear order according to the three main mechanisms of state compliance with rules mandated by the international order: coercion, self-interest, and legitimacy. The strength of these mechanisms, which ensure the stability of the international nuclear order, will be compared through an examination of two periods: during the Cold War at the time of the ratification of the NPT, and today. This attempt to analyze the nuclear order through a depiction of its supporting elements suggests that the three main mechanisms of compliance have been relatively weakened over the years, which explains the current loss of order. Nevertheless, what we are witnessing today is more a "crisis of efficiency," i.e., problems that are not adequately managed, than a profound crisis of legitimacy – leaving some hope for improvement in the future.

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Theoretical Background: The Components of a Stable International (Nuclear) Order

In the fundamental and often anarchical environment in which international relations unfold, a certain degree of order is necessary to ensure stability and a pursuit of basic common goals. Broadly defined, order refers to a certain configuration of the relationship among states that is based primarily on the distribution of power. However, institutions, in the form of regimes, constitute an additional important element shaping any international order: by enacting clear rules and norms of behavior, regimes help determine what is allowed and what is not permitted in a specific policy area.

A specific international order will be defined as stable if most of the states behave in a way that maintains and preserves it; that is, if they act according to its prescriptions. In other words, the stability of the international order will depend on the degree of compliance of the states comprising the international system. Several "ordering mechanisms" of the international systems have been identified in international relations literature. Drawing on Max Weber, Ian Hurd presents three ideal types of mechanisms of social control that are at work in all social settings, including international society: coercion, self-interest, and legitimacy.[1]

Coercion

The first mechanism of compliance relies on coercion and relates directly to realist approaches in international relations theory, whereby states abide by rules because they are motivated by the fear of punishment from a stronger power. This mechanism, based on power asymmetries among actors, puts the emphasis on threats and actual use of force in generating compliance, at the expense of attention to either the normative content of rules or more complicated calculations of self-interest by actors. Most of the time, coercion does not provoke voluntary compliance and instead generates resentment. As a result, few social complexes are solely based on coercion, and when they are, they tend not to persist over time.[2] Without enforcement, states that can and wish to cheat will do so. This mechanism is reminiscent of the notion of "coercive leadership" and the presence of a hegemon willing and capable of imposing by force its preferences upon the others.[3]

Self-Interest

Another motivation for compliance with rules (or way to explain the stability of a given order) is the belief that compliance promotes one's own self-interest. This view suggests that actors follow rules as a result of an instrumental and calculated assessment of the net benefits of compliance versus non-compliance. The task of the governing agent – or the aim of the proposed order – becomes to structure incentives such that community members find compliance the most rationally attractive option. In this perspective, "social interaction is modelled as an exchange and social obligations as contracts: actors' decisions are calculated to maximise returns, and organizations are pillars of accumulated principal-agent contract relationships."[4] In such a society where compliance is achieved through self-interested actors, loyalty to its rules is contingent on the system providing a positive stream of benefits. Actors are constantly assessing and recalculating the expected payoff for remaining in the system, and stand ready to abandon it immediately should some alternative promise greater utility.[5] As a result, such a system will remain stable only as long as the payoff structure is in equilibrium.

In this framework, the system corresponds mainly to an instrumental attitude toward other actors and rules. Since states do not value the existence of the rules themselves, if interests change, states will depart from the rules.[6] According to this perspective, the international order is maintained because most of the states perceive the system of rules as serving their own interests. The system provides them with sufficient incentives that affect their cost/benefit assessment in the direction of upholding the order. A parallel could be drawn here again with the notion of "benevolent leadership," whereby a hegemon bears disproportionate cost in providing collective public goods.[7]

Legitimacy

The third mechanism for maintaining order corresponds to the concept of legitimacy, understood as the normative belief by an actor that a rule or institution *ought* to be obeyed. Legitimacy contributes to compliance by providing an internal reason for an actor to follow a rule. When an actor believes a rule (or an order) is legitimate, compliance is no longer motivated by the simple fear of retribution or by a calculation of self-interest, but rather by an internal sense of moral obligation. Actors accept and support the rules because they perceive them "as desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and

definitions."[8] In contrast to the previous cases, the actor takes for granted the existing structure of relations and institutions and will seek to improve its position within the established system rather than constantly reassessing the cost and benefit of compliance.

A few comments are in order regarding the notion of legitimacy. First, two components (or dimensions) of legitimacy are commonly distinguished. Substantive legitimacy applies to the outcome, content, and product of deliberations, while procedural legitimacy pertains to the process by which agreement was reached. Outcomes and processes are regarded as legitimate if the states involved believe they are right and correct or just and fair.[9] This article proposes another way of tackling the notion of legitimacy, by differentiating between the raison d'être (the ultimate goal) of a regime and its structure (or institutional arrangements) in the context of nonproliferation.

Second, legitimacy may translate into different degrees of internalization. At one end of the spectrum, legitimacy involves the complete internalization of the rules of the regime as desirable in their own right. Such a perception profoundly affects behavior because the rule's content is internalized by actors and it helps them recalibrate their interests according to the rule.[10] Indeed, the internalization of the rule entails a new definition of interests. At the other end of the spectrum, one can find a more superficial form of legitimacy, whereby what is considered as "proper and appropriate" is not always considered "desirable."[11] The ramification of this distinction is that "if an action, a regime or an order is merely appropriate (and not desirable), an actor will tolerate it, but will look for opportunities to reverse it through the appropriate channels."[12]

In short, according to this third account, the maintenance of social order depends on the existence of a set of overarching rules of the game that are to a certain degree internalized, or considered to be legitimate by most actors.[13] An underlining assumption is that as unitary actors, states have the capacity to "feel" the pull of a legitimate rule/order.[14] Legitimacy is a subjective quality, existing between actor and institution, and defined by the actor's perception of the institution. In this regard, focusing on narratives of nonproliferation might provide some useful insights because they explicitly depict the perception of specific actors toward a particular international order.

Methodological Note

In the following sections, the presence and influence of each of these mechanisms of compliance, essential to the stability of the international (nuclear) order, will be assessed at two points of time: in the 1970s with the ratification of the NPT, and today, with the nonproliferation regime in the midst of a severe crisis. The comparison across time highlights the variation in strength of each mechanism.

A few methodological remarks are in order. First, although each mechanism of compliance can be analytically separated from the others, in practice rarely are they found in isolation: every system relies on a varying mixture of all three.[15] Thus in comparing these two different periods of time, the goal is to estimate roughly whether one mechanism has been more dominant than the others, i.e., to determine the relative importance of each of these factors of stability.

A second methodological challenge is how one determines why a particular rule is followed by actors, i.e., how we can know whether compliance is due to a sense of its legitimacy, fear of repercussions, or coincidence between the rule and the actor's own self-interest. According to Hurd,[16] relying only on the rates of compliance does not provide any indication as to which mechanism is at play, and he therefore recommends adopting a methodology that goes beyond the simple measurement of compliance and allows grasping the motives for a specific behavior. In this respect, the close examination of the reasons given by policymakers to justify a state's compliance as well as non-compliance might be particularly insightful. Acknowledging the importance of discourses, this article focuses on narratives of nonproliferation.

The Cold War Period: Stability of the "Nuclear Order"

A global nuclear order was founded in the 1960s and 1970s and culminated with the ratification of the NPT. The nuclear nonproliferation regime developed in response to the perceived threat posed by nuclear weapons, and hence its main goal has been and continues to be to reduce the likelihood of a devastating nuclear war. More precisely, the NPT embodies a "grand bargain" and rests on three pillars: (a) the nonproliferation of nuclear weapons to states not already possessing them by January 1, 1967; (b) promotion of the development of peaceful uses of nuclear energy; and (c) the ultimate elimination of all nuclear weapons. The challenge was, and still is today, to find the appropriate way to institutionalize restraint and to address the

presence of nuclear weapons in the international arena in a manner that upholds "the existing structure of obligations" and that can "translate the transformation of this order into acceptance."[17]

Coercion

The international nuclear order enjoyed a fair degree of stability during the Cold War because of the bipolar configuration that allowed the two great powers to impose their preferences upon others. Indeed, recognizing the destructive power inherent in nuclear capabilities, the two superpowers constituted a united front as they shared the basic understanding that nuclear proliferation was a destabilizing factor, and therefore strove to prevent this development. This represented a shift in the superpowers' beliefs: before the creation of the NPT, each superpower saw tactical advantage in some clients' possession of nuclear weapons, and hence was willing to assist their road toward acquisition of these weapons. After the mid-1960s, the superpowers began to perceive the significant geostrategic risks and political costs associated with the proliferation of other states. Because of their convergence of interest in limiting proliferation, they could pressure their respective clients to join the NPT, and if it was necessary, even use coercive measures to halt any proliferation attempt.[18] A few studies point to the fact that many states joined the NPT because of the persuasive powers of the US and the USSR.[19] Clearly, the two superpowers took the responsibility to manage the risks of the nuclear order they had created, which also entailed the informal duty to punish states that would not abide by the agreed upon rules.

Self-Interest

Drawing on the second mechanism of compliance, one can argue that the international nuclear order was particularly stable during the Cold War because it provided attractive incentives for self-interested states to comply with the rules. According to this theory, the majority of the states decided to join the NPT and respect their commitments out of purely instrumental considerations. Even though the three pillars of the NPT were not of high interest for all states, they agreed to accept them because they came to the conclusion that the nonproliferation treaty and the nonproliferation regime as a whole would best serve their basic interest, namely the reduction of the risks posed by nuclear weapons.[20] In addition, if nuclear protection was offered in a credible way, many states would not only benefit from greater

security within their own regions, but also gain economically in terms of transaction costs since the nuclear umbrella would constitute a cheaper option than producing one's own nuclear devices.[21]

In the same vein, many researchers argue that the regime merely monitors and ratifies what state interests would have ensured in any case. Joining the NPT had no connection to states' motivations to acquire or refrain from acquiring nuclear weapons. Most of the members of the NPT lacked the technical and financial capacity to obtain nuclear arms,[22] so joining the NPT was to them completely beneficial – a kind of win-win situation, emanating from the collective security system put in place. Their security would be assured by the nuclear weapon states (NWS), and they would preserve their right to develop nuclear materials for peaceful use, enjoying the benefits of cooperation in this field – without making any real sacrifice.

Another line of thought points to a malicious form of adherence to the NPT behind which lies the long term intention to exploit the regime's loopholes, and eventually develop nuclear weapons.[23] This position corresponds to the self-interested pursuit of national security advantages devoid of any nonproliferation ideals.

Legitimacy

Profound questions of legitimacy had to be addressed before an effective nuclear order could be instituted. Why would certain states, and only those states, have rights to defend themselves with nuclear weapons and the potential to inflict final destruction? Should any state and any political leader be entrusted with those rights? How could possession of nuclear weapons by the few be squared with the egalitarian principles enshrined in the UN Charter?[24] The difficulty in gaining legitimacy for the nuclear international order was reflected in the refusal of many important states, including China and France, to initially join the NPT, and India's refusal to join while subsequently becoming a nuclear state outside the regime.[25]

However, there was a broad consensus among states that the final goal of the regime – namely, the end of nuclear proliferation and complete disarmament – was desirable and right for its own sake. Even though criticism was voiced as to the procedural legitimacy of the NPT and its discriminatory nature, its essential legitimacy has never been called into question. In addition, the fact that the NPT rested upon mutual obligation and reciprocity enhanced the legitimacy of the regime significantly: the disarmament pillar diluted

the discriminatory effects of the nonproliferation pillar and created the expectation that the special rights of the nuclear weapon states would end at some point in the future.[26] In return for their renunciation of the right to develop nuclear weapons, three solemn pledges were made by the nuclear weapon states parties to compensate for the sacrifice of the non-nuclear weapon states (NNWS): (a) they would help the NNWS parties acquire nuclear capabilities for peaceful purposes; (b) they would not use nuclear weapons to attack or coerce states that renounced them, unless those states attacked them in alliance with other nuclear powers; and (c) they would work to bring the nuclear arms race to an end and pursue complete nuclear disarmament.[27]

In sum, the nuclear order legitimacy rested heavily upon the notion that the possession of nuclear weapons by the five acknowledged powers was a temporary trust, and a trust that could be extended to no other nation states. The political settlement that underpinned the nuclear order implied that only one of its pillars – the ultimate elimination of all nuclear weapons – possessed true and lasting legitimacy.[28]

The Current Crisis: Loss of Order, not Complete Disorder

Over the years, the NPT became the "center and the foundation of an interlocking network of international agreements and organizations." Among the successes that are commonly attributed to the regime are the institutionalization of the nuclear taboo, the near universal adherence to the treaty, and the very limited number of states that went nuclear after 1968.[29]

Since the end of the Cold War, however, an unstable world has emerged, characterized by an uncertain security environment. In many aspects, the world is fundamentally different from that in which the NPT-based nuclear nonproliferation regime first appeared. Today's evolving threat landscape is much more complex, with blatant cases of non-compliance, growing access to sensitive materials and technologies, concerns about the activities of non-state actors, and tensions between reemerging commercial interest in the civil nuclear fuel cycle and nonproliferation aims. These are all challenges that throw the nuclear nonproliferation regime into disarray. Against this backdrop, the following sections analyze the three main mechanisms of compliance in this new empirical setting, in order to highlight the main differences.

Coercion: Shift in the Geostrategic Environment

Compared to the Cold War years, coercion as a mechanism of compliance seems to have been weakened for several reasons. First, the dramatic change in the distribution of global power has created uncertainty and instability at the international level. In the immediate aftermath of the Cold War, with the demise of the Soviet Union, the US was left alone to manage the international order. Even though some researchers have argued in favor of the "unipolar moment" in terms of stability,[30] others emphasize rather the fact that America's actions in the 1990s and particularly during the Bush administration have called into question the entire nonproliferation order that the US itself so painstakingly constructed.[31] The vehemence of America's reactions was driven in part by the realization of the vulnerability of American power to the proliferation of weapons of mass destruction and ballistic missiles. Today, nonproliferation (rather than counter-proliferation) is again on the agenda, and the US still perceives itself as the custodian of the international nuclear system. Yet deep uncertainties over US capacities to deliver protection and enforcement remain. Faced with blatant violations of NPT and IAEA safeguard commitments by determined proliferators, such as Iran and North Korea, the US has taken coercive measures (including heavy sanctions and the threat of the use of force), but it has not yet succeeded in efficiently putting an end to this major proliferation challenge – raising serious concerns as to the effectiveness of the present nuclear order whose centerpiece is the NPT. This weakness does not go unnoticed by other states, and as a result the perception of a faltering hegemon makes the fear of punishment by coercion less credible, and hence less relevant.

Moreover, today it is widely acknowledged that the world is entering a new phase with emerging global powers, which give the international order a multipolar character and a more complex nature. In this new configuration, the simple fact that Russia and China do not hesitate to subordinate nonproliferation matters to economic considerations,[32] reflects a weak commitment to the previous international nuclear order, and this inevitably gives some leeway to other states in the system: they do have alternatives and do not feel the threat of coercion as acutely as before because the great powers no longer constitute a united front.

Self-Interest: A Growing Gap

Another factor of instability is that the nonproliferation regime is increasingly perceived as failing to provide tangible gains for states. Indeed, many states have expressed their general discontent with the current international nuclear order because they feel that the NPT regime no longer meets their interests. In this regard, the challenge of non-compliance posed by states that deliberately, overtly, and repeatedly abuse nonproliferation norms is of prime importance since this undermines the first pillar of the NPT (i.e., the commitment to nonproliferation). The very violation of the rules of the game in the first place, coupled with the inability of the regime to enforce them, broadly threatens international peace and security. More particularly, it greatly enhances the sense of danger felt by states in the immediate environment of the proliferators (in the Middle East and Asia), making the prospect of a renewed arms race both plausible and worrisome. Moreover, the discontent regarding the effectiveness of the nonproliferation regime is not restricted to the compliance challenge. Indeed, the two other pillars of the NPT (the complete elimination of nuclear weapons and access to nuclear energy) are also increasingly perceived as failing to deliver upon their promises. In this context, consider the main claims embedded in the narratives of the Non-Aligned Movement (NAM) states.

The first point of contention revolves around the claim of "security erosion": the majority of states that have abided by their nonproliferation obligations have seen their security eroded as new states have acquired nuclear weapons while the Cold War powers have continued to refine and modernize their arsenals, even as some have cut their stockpile numbers. For example, a Brazilian official who reflected on the issue expressed a clear and growing sense of frustration.[33] According to this official, the lack of results of the NPT RevCons in 2000 and 2005, and the long paralysis of multilateral disarmament initiatives, reinforced the conviction held in many circles in Brazil that the nuclear powers had not lived up to their pledges to promote meaningful negotiations. More broadly, many Brazilians believe that the policy of the NWS is to impose more constraints and extract further concessions from the NNWS while failing to accomplish – or even trying to fulfill – what was expected from them when the NPT bargain was struck. In short, many of the developing countries feel let down by what they view as the failure of the nuclear weapon states to live up to their side of the bargain.[34]

An additional claim that is frequently voiced by the NNWS is that the West refuses to give the South the benefits of peaceful nuclear technology, referring to the second pillar of the NPT. Such claims, advanced in part by Iran,[35] have resonated more widely. In turn, this perception entails additional risks for the stability of the regime since self-interested actors are unlikely to further comply if the cost/benefit trade-off is not in their favor.

It is not just that the "old nuclear threats" have not been reduced, but new security threats specific to a large number of states have not been properly tackled either. An additional claim voiced by the NAM states is that traditional nonproliferation and arms control approaches fail to address their specific security problems, and that the nonproliferation regime does not ensure them any public good anymore. Indeed, the threats to which many of the NAM states are confronted today do not rank high on the security agenda of the Western powers[36] and consequently the security concerns of developing states are sidelined. Notable among the issues of concern that are relatively new to the arms control and nonproliferation agenda are the small arms and light weapons (SALW) and the Cluster Munitions Ban. An underlying claim is that the norms of arms control mainly reflect the Western strategic culture, thereby explaining why non-Western states are not necessarily benefiting from it.[37]

However, this discontent does not mean that states are constantly recalculating the costs and benefits of any course of action as far as nonproliferation issues are concerned. They continue to share the common interest of ending nuclear proliferation and pursuing disarmament – which is at the very core of the regime – but at the same time, they will not accept restraint in their pursuit of other vital interests by the nuclear states. In the words of the Brazilian representative Marcos Azambuja, "Brazil and Latin America will not develop nuclear weapons and will remain active and constructive partners in the establishment of a world safe from WMD. But Brazil is equally unlikely to give up its goal of being a key player in the important nuclear fuel market. In fact, Brazil joined the NPT with the explicit understanding that nuclear activities allowed under the treaty would be pursued. Many in Brazil assume that sooner or later, Brazil will emerge as a major power and that nothing should be done that limits or jeopardizes its expectations or hinders its access to that status."[38]

The absence of ongoing reminders of the benefits that accrue by being a member of the NPT constitutes strong evidence against the proposition

that states maintain the nuclear order solely for reasons of self-interest. This point leads us to the third mechanism of compliance, namely legitimacy.

Legitimacy

Broadly speaking, one can say that today the international nuclear order is still considered legitimate by the majority of states. The near universality of the NPT is often referred to as testimony to the fact that its guiding principles have been embraced by almost all states, and that they are still valid today. Fueling this argument, one can highlight that the norms of nonproliferation have largely been integrated within states' security debates. Yet a more nuanced picture emerges when one breaks down the different aspects of legitimacy mentioned above, and ponders the true degree of internalization that the nonproliferation regime enjoys today.

Considering "legitimacy" in broad terms, the close examination of Iran's nuclear narrative actually provides strong evidence of the legitimacy that the nonproliferation regime has gained over time. Indeed, even Iran, which is a clear challenger of this nuclear order, understands this fact and strategically adopts the discourse of the NPT to better pursue its interest. As George Perkovich pointed out, whatever the aims of its nuclear program, Iran is determined to convince the international community that it is acting within the framework of existing laws and rules. Iranian leaders have undoubtedly broken many nuclear rules. But by denying any wrongdoing or claiming to have a different understanding of the rules, they show the importance they ascribe to being perceived as within the law. More precisely, from 2003 onward, following the discovery of Iranian nonproliferation rule violations, the challenge for the Iranian leadership was to persuade the rest of the world to forget its earlier violations and allow it to move forward under existing rules. After 2005, Ahmadinjehad reflected this strategy in declaring that Iran will exercise without interruption of its "rights" to all nuclear technologies and activities under IAEA safeguards.[39] The government insisted on being righteous and just.[40] Since then, Iran has accelerated its uranium enrichment program and appears to be well on the way to developing an independent fuel cycle and missile technologies, all the while claiming that its nuclear program is solely for energy and other "peaceful purposes" consistent with Article IV of the NPT. The bottom line is that even while breaking the rules, Iran has felt the need to justify its actions as being within the limits of what is permitted. This clearly reflects the understanding that the NPT

and its rules have become the norm – although in this specific case, Iran is blatantly undermining the regime.

Likewise, the nuclear narratives of the other NAMs, which are truly committed to nonproliferation, are replete with references to their "inalienable right" to nuclear energy[41] stipulated by the NPT, and most of all, to the "obligations" of the NWS that are not being upheld. This means that they have clearly internalized the rules of the nonproliferation regime, but have in parallel become increasingly frustrated, and now demand the complete fulfillment of the pledges that were previously made. Lakhdar Brahimi, a former Algerian diplomat and signatory of the Global Zero declaration, summarized the NAM position as follows: "For us in the Non-Aligned Movement, the NPT was a historic bargain whereby the nuclear club members would progressively get rid of their nuclear arsenals, while the rest of us committed to not acquiring nuclear weapons. For all these years, alarmingly, there was no nuclear disarmament and far too much proliferation. Powerful voices are at long last rising from all corners of the world to revive and work for such an objective."[42] Brahimi refers here to the Global Zero movement that calls for the complete elimination of all nuclear weapons by 2030.

In order to reach this goal, the NAMs go a step further and attempt to reframe their demand for nuclear disarmament with references to the humanitarian consequences of the use of nuclear weapons, international law, and international humanitarian law.[43] By the same token, they attack core concepts of traditional arms control. For instance, they insist that nuclear deterrence is a dangerous misguided belief system. By doing so, they try to delegitimize the possession of nuclear weapons by any state. They put greater emphasis on accelerating nuclear disarmament because it is perceived as fundamental to the sustainability of nonproliferation.[44] Even the recent debate on "Global Zero" in the US, triggered by former influential US officials, makes the argument in favor of nuclear abolition a legitimate item on the Western security agenda.

In any case, the NNWS change of discourse does *not* intend to call into question the entire nonproliferation order, whose final goal of nonproliferation and complete disarmament remains highly desired. Rather, it reflects the NAM and NNWS discontent over the institutional arrangements that have not delivered their promises over time. Therefore it is the time factor that is crucial in the loss of legitimacy of this specific aspect of the nonproliferation regime. From the very beginning, as an organization dedicated to promoting

the needs of the developing world, the NAM states have traditionally devoted their energy to ensuring that the inequalities of the international political order are addressed. Yet today, time has passed and the compromise on which the NPT is based is not satisfying anymore. The inequitable deal is rendered less and less acceptable to the rest of the international community. As a result, the claims of discrimination and double standards resonate more widely. The discrimination between the "haves" and the "have nots" in the nuclear realm has always been a major factor reducing the legitimacy of the treaty, and today, after a few decades, it is becoming more acute. This type of discrimination is all the more unbearable for the "have nots," as it cannot be justified as promoting another important principle, as, for example, the exceptions from Most Favored Nation requirements for developing countries in the WTO. They are the result of power differentials rather than principle.[45] In other words, not enough progress has been made regarding the disarmament pillar that was supposed to dilute the discriminatory effects of the nonproliferation pillar and strengthen the legitimacy of the regime. The expectation that the special rights of the nuclear weapon states would end at some point in the future has not been fulfilled and it provoked a crisis.[46] Lastly, the above-mentioned perception that the West refuses to give the South the benefits of peaceful nuclear technology (the third pillar of the NPT) might further weaken the legitimacy of the regime.

In sum, it can be argued that we are not witnessing the disappearance of the normative value of the treaty and the associated regime. The norms of nonproliferation and disarmament have been institutionalized and the international community realizes that the nuclear proliferation threat is an issue of international peace and security and not merely a parochial US interest.[47] But the experience with the current institutional arrangement has been disappointing and is viewed by many states as lacking ongoing credibility.

Conclusion: From a Crisis of Efficiency to a Crisis of Legitimacy?

The period-based comparison of the three main mechanisms of compliance – coercion, self-interest, and legitimacy – ensuring the stability of the international nuclear order reveals that each of them has weakened. The new distribution of global power has made coercion less threatening, the NPT regime is increasingly perceived as failing to meet state interests particularly in light of serious non-compliance cases, and the high expectations regarding

disarmament that enhanced the legitimacy of the regime have not been satisfied.

For the time being, it seems that the nonproliferation regime is undergoing a "crisis of efficiency," but not yet a profound crisis of legitimacy. In fact, even though the structure of incentives on which the regime lies has become less attractive, the majority of states still perceive nonproliferation and complete disarmament as a desirable goal that should be resolutely pursued. The final document of the 2000 NPT RevCon can be read as a consensual declaration that the NPT is the only nuclear order in which the bulk of the nations believe, and in which they were ready to invest. Thus, according to William Walker, although the current order needs to be strengthened and reformed, the understandings and practices embedded in it should not and cannot be replaced. The only alternative is a highly conflict-based and destructive "disorder."[48]

The key problem to be tackled now concerns mainly the difficulty of managing the defiant behavior of some determined proliferators, as well as the discriminatory nature of the NPT that has become less acceptable over time. As the regime is still considered to be legitimate, its total collapse is unlikely, but what may well occur is a gradual decline, if nothing is done to make the regime more efficient and to compensate for the growing legitimacy gap. To tackle the crisis of efficiency, efforts must be made in order to triumph over the states challenging the nonproliferation rules and further discourage the cost-effectiveness of going nuclear for self-interested actors. Indeed, the blatant violations of nonproliferation norms and the difficulty to cope with them constitute a serious blow to the present nuclear order – which partly fails to deliver on its promises, namely, providing enhanced international security. As to the legitimacy problem, if the current situation persists, the claims of double standards formulated by proliferators and others will most likely continue, thereby further undermining the nonproliferation regime. In fact, the issue of double standards has been advanced in explaining why the NAMs occasionally downplay the significance of third party non-compliance crises,[49] making the maintenance of the order more difficult to ensure. Another empirical illustration of the detrimental effects that the lack of legitimacy has on the enforcement of the regime could be the case of Brazil, that has displayed serious reluctance to take more intrusive steps (signing of the Additional Protocol) if no meaningful concessions from the NWS were made.[50] These examples bring additional evidence that there is a

strong need to take into account the emerging narratives of nonproliferation, to find ways of reconciling contending agendas, and to engage seriously in disarmament. Doing so will be critical to managing this "loss of order" and to avoid the dreaded complete "nuclear disorder."

Notes

1 Ian Hurd, "Legitimacy and Authority in International Politics," *International Organization* 53, no. 2 (1999): 379-408.
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4 Hurd, "Legitimacy and Authority in International Politics," p. 385.
5 Ibid., p. 387.
6 Ibid., p. 386.
7 Lake, "Leadership, Hegemony, and the International Economy," p. 467.
8 R. A. Dahl and C. G. Lindblom, *Politics, Economics and Welfare*, 2nd ed. (New Brunswick, NJ: Transaction, 1992), p. 114.
9 Nina Srinivasan Rathbun, "The Role of Legitimacy in Strengthening the Nuclear Non-proliferation Regime," *Nonproliferation Review* 13, no. 2 (2006): 227-52; see p. 229.
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13 Michael Hechter, *Principles of Group Solidarity* (Berkeley: University of California Press, 1987).
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15 Ibid., p. 383.
16 Ibid., p. 391.
17 Henry Kissinger, *A World Restored: Metternich, Castlereagh and the Problems of Peace, 1812-22* (Boston: Houghton Mifflin, 1957).
18 Andrew Coe and Jane Vaynman, "Superpower Collusion and the NPT – Presentation given at the 2011 PONI Capstone Conference, December 6, 2011," http://csis.org/images/stories/poni/111123_Vaynman.pdf.
19 William Walker, "Nuclear Order and Disorder," *International Affairs* 76, no. 4 (2000): 703-24; see p. 708.
20 Ibid., p. 707.
21 See the article in this volume by Carlo Masala, "Don't Beat a Dead Horse: The Past, Present, and Future Failures of the NPT," especially p. 47, above.
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23 Albert Wohlstetter, "Spreading the Bomb without Quite Breaking the Rules," *Foreign Policy* 25 (1976/77): 88-179.
24 Walker, "Nuclear Order and Disorder," p. 706.
25 Ibid., p. 708.
26 Rathbun, "The Role of Legitimacy in Strengthening the Nuclear Non-proliferation Regime," p. 233.
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29 Roland Timerbaev, "What Next for the NPT? Facing the Moment of Truth." *IAEA Bulletin* 46, no. 2 (2005), http://www.iaea.org/Publications/Magazines/Bulletin/Bull462/what_next.pdf.
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31 Walker, "Nuclear Order and Disorder," p. 713.
32 The nonproliferation diplomacy of China and Russia has been a source of frustration for policymakers in the US with respect to the nuclear Iranian standoff. Contrarily to the Western NWS, China and Russia have displayed reluctance to take steps that could be construed as coercive or overbearing. See Tanya Ogilvie-White, "International Response to Iranian Nuclear Defiance: the Non-Aligned Movement and the Issue of Non-Compliance," *European Journal of International Law* 18, no. 3 (2007): 453-76, especially p. 456.
33 Marcos C. Azambuja, "A Brazilian Perspective on Nuclear Disarmament," in *Pragmatic Steps for Global Security*, ed. Barry M. Blechman (Washington: Stimson Center, 2009), p. 8.
34 A. Moodie and M. Moodie, "Alternative Narratives for Arms Control," *Nonroliferation Review* 17, no. 2 (2010): 301-21; see p. 305.
35 Iran goes a step further and claims that its legitimate activities were "driven underground" by a hostile international environment and a Western conspiracy of technological denial. Statement by H. E. Dr. M. Javad Zarif, Permanent Representative of the Islamic Republic of Iran before the Security Council, New York, July 31, 2006.
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37 Ibid.; and Keith Krause and Andrew Latham, "Constructing Non-proliferation and Arms Control: The Norms of Western Practice," *Contemporary Security Policy* 19, no. 1 (1998): 23-54.
38 It entails an uranium enrichment program, a program to master the complete nuclear fuel cycle, plans to build several more nuclear power plants, and plans to develop nuclear-powered naval turbines. See Azabumja, "A Brazilian Perspective on Nuclear Disarmament," pp. 10, 14.
39 George Perkovich, "Dealing with Iran: the Power of Legitimacy," *Policy Outlook*, Carnegie Endowment for International Peace, 2009, http://carnegieendowment.org/2009/10/07/dealing-with-iran-power-of-legitimacy/35c, see especially p. 2.
40 The efforts to be perceived as just and righteous were probably also conducted in order to gain legitimacy at the domestic level. It had two different functions – at the international level: ease the pressure and create ambiguity, and at the local level: gain legitimacy.

41 The issue of the "inalienable right" of NNWS to nuclear energy, which is set out in Article IV of the NPT, goes right to the heart of the NPT bargain: the NNWS agreed to forgo the development of nuclear weapons but retained an inalienable right to develop nuclear energy for peaceful purposes.
42 Global Zero, Signatories: Lakhdar Brahimi. www.globalzero.org/en/who/lakhdar-brahimi. The International Global Zero movement was launched in 2008. It includes hundreds of political, military, business, faith, and civic leaders, as well as hundreds of thousands of citizens who share the same goal, namely to make the elimination of nuclear weapons an urgent global imperative and to bring all the nuclear weapon states to negotiate the phased reduction of arsenals to zero. For more information, see http://www.globalzero.org/.
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44 Ibid., p. 30.
45 Rathbun, "The Role of Legitimacy in Strengthening the Nuclear Non-proliferation Regime," p. 223.
46 Ibid., p. 233.
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48 Walker, "Nuclear Order and Disorder," p. 704.
49 Ogilvie-White, "International Response to Iranian Nuclear Defiance," p. 462.
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PART III

Confronting Proliferation at the Global Level

Recalibrating President Obama's Global Zero Vision

Michael Nacht

A central feature of President Obama's national security strategy has been to implement policies toward ridding the world of all nuclear weapons. The purpose of this paper is to assess the status of the effort and to consider some possible policy modifications.[1]

Background

It is not widely recalled that Barack Obama first devoted attention to the idea of a world free of nuclear weapons in 1983, when he was completing his undergraduate degree at Columbia University.[2] In a seminar paper, he speculated on a world without nuclear weapons but did not offer any path toward fulfillment of this vision. Much later, in 2007 and again in 2008, four distinguished former US national security officials – former Secretaries of State Henry Kissinger and George Shultz, former Secretary of Defense William Perry, and former Chairman of the Senate Armed Services Committee Sam Nunn – co-authored two widely noted opinion pieces in the *Wall Street Journal* endorsing the goal and offering several steps toward its realization.[3] These statements, at least in the eyes of many, legitimized the goal of a nuclear weapons-free world for the first time in the nuclear age.

As a presidential candidate, Senator Obama again endorsed the idea in a sweeping summary of his proposed approach to American foreign policy.[4] Thus to those attentive to his thinking and writing, it came as no surprise when once elected president, Obama delivered a major address in Prague

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in April 2009 laying out his vision once again, but now with the force as the chief executive of the United States.[5]

The President has since followed up with two major addresses on nuclear weapons policy. In April 2010, he spoke again in Prague, this time on the New START treaty, and announced the issuance of the Nuclear Posture Review (NPR), which modified official US nuclear weapons policy in conformity with his vision. Subsequently, in a speech in Berlin in June 2013, he specifically called for a one-third reduction in US and Russian deployed strategic nuclear weapons.[6]

Common features of these speeches include the President's acknowledgement that the transition to a nuclear free world would be a long, arduous process perhaps not achieved in his lifetime, and that as long as nuclear weapons existed in the world, the United States was committed to maintaining a "safe, secure and effective deterrent." In short, unilateral nuclear disarmament was not likely to be part of the process. The NPR codified these positions and went on further to specify that the principal threats to US national security were now nuclear terrorism and nuclear weapons proliferation, the latter leading to regional nuclear conflict as well as the promotion of nuclear terrorism.[7]

In the evolution of Obama's nuclear policy implementation, there were four initial pillars:

1. Complete the New START treaty as part of the US-Russia "reset" policy.
2. Issue the NPR and emphasize the nuclear terrorism/nuclear proliferation threat.
3. Initiate a set of nuclear security summits and associated activities intended to "lock up" as much of the world's vulnerable nuclear materials as possible within four years.
4. Achieve a successful 2010 Nuclear Non-Proliferation Treaty (NPT) Review Conference in which measures could be adopted to make it more difficult to withdraw from the NPT (as North Korea had done) and strengthen the safeguards regime of the International Atomic Energy Agency, in part through additional US funding.

The Russia "reset" policy was fundamental to the President's overall strategy. It was argued that US-Russia relations reached a dangerous low point after the Russian invasion of Georgia in the summer of 2008. The relationship had to be rebuilt for multiple reasons: to regain momentum in furthering deeper cuts in deployed strategic nuclear weapons, to forge closer bilateral strategic cooperation to enhance Russian support for US

nonproliferation measures toward Iran, and to enlist Russian support for countering nuclear terrorism.

The NPR intended to emphasize the post-Cold War realities of the nuclear terrorism and nuclear proliferation threats, to downplay the US-Soviet nuclear arms competition, and to emphasize the need for US-Russia and US-China "strategic stability talks" that would increase transparency and promote cooperative measures. At the same time, it stressed the need to work closely with allies to ensure that "extended deterrence," i.e., the commitment of the US nuclear umbrella protecting the national security of key allies, especially the NATO alliance members plus Japan and South Korea, remained credible and persuasive to the elites of these countries.

The April 2010 Washington Nuclear Security Summit, which brought together more heads of state in the US than at any time since the founding of the United Nations in San Francisco in 1946, along with subsequent associated activities, was intended to put the spotlight on the need for broad international cooperation to "lock up" the vast amounts of fissile material (especially highly enriched quantities of Uranium-235, and separated Plutonium-239) that can be used to fabricate nuclear weapons.[8] At the first summit, Chile and Ukraine pledged to turn over their fissile material to the United States. The central point behind these commitments was to deny terrorist groups access to the fissile material they needed for their own nuclear weapons goals.[9]

Finally, the 2010 NPT Review Conference was intended to showcase a strengthened NPT regime by promoting adherence to the Additional Protocol (AP) and Comprehensive Safeguards Agreement, which are intended to provide assurances about both declared and possibly undeclared activities. Under the AP, the International Atomic Energy Agency (IAEA) is granted expanded rights of access to information and sites.[10]

Although four years is a very small amount of time to judge a set of initiatives that may require decades for full implementation, it is nonetheless instructive to offer a preliminary assessment to determine strengths, weaknesses, and aspects that require alteration or recalibration.

A Preliminary Assessment

Some Positive Outcomes

In the period since the President announced his vision, he has mobilized considerable support, especially in the United States and among selected elites in different parts of the world. First, senior members of his administration,

including from the Departments of Defense, Energy, and State, as well as select groups within the military and intelligence community have dedicated countless hours to implementation of policies in support of this vision, aided by allies on Capitol Hill and in the media and think tanks.

The signing and ratification of New START in December 2009 and December 2010, respectively, renewed the US-Russia strategic arms reduction process, limiting each side to 1550 deployed strategic nuclear weapons. Though a modest further reduction from previous agreements, it was nonetheless a very demanding treaty to achieve, with each element laboriously negotiated with the Russian negotiating team. It set the stage for the possibility of more comprehensive reductions involving non-strategic and non-deployed weapons.

The NPR was greeted by many as a necessary refresher of US nuclear strategy and policy beyond its Cold War moorings, and a document highlighting the pressing threats of nuclear terrorism and nuclear proliferation. It triggered the start of strategic stability discussions with the Chinese leadership and a host of activities to shore up allied confidence in the US nuclear guarantee. It also succeeded in securing important financial support for the upgrade of the aging US nuclear weapons complex, in support of the goal to retain a "safe, secure, and effective" nuclear deterrent, as long as nuclear weapons continue to exist.

The Nuclear Security Summits continued in Seoul in 2012, with another planned in Europe for 2014. Many nations have joined in the venture to lock up fissile material.

The NPT continues to be the principal legal means of restricting nuclear weapons proliferation, and the IAEA has received some additional support to strengthen its safeguards and verification capabilities, remaining the internationally recognized body for conducting sensitive inspections of nuclear facilities.

Moreover, the Obama vision has spawned the "Global Zero" movement, endorsed by many notable figures, from former Vice Chairman of the Joint Chiefs of Staff James Cartwright to Mikhail Gorbachev, and including both Democrats and Republicans. The movement has raised funds to sponsor meetings, issue publications, and establish the goal of achieving Obama's vision by 2030.

There is no doubt that nuclear weapons can deliver destruction of unparalleled scope: even one modern weapon detonated in a populated

area could result in hundreds of thousands of "prompt fatalities," not to mention enormous environmental damage affecting many tens of thousands for generations to come. In the complex contemporary world, there are many American policymakers who now doubt that nuclear weapons are the answer to today's national security threats.

A Series of Disappointments

Russia

One of the major disappointments since the Obama vision was unveiled has been the Russian obstructionism over the President's arms control initiatives. Some might say that it was highly naive of the Obama administration to believe that a Putin-led government, (even when he was Prime Minister before once again assuming the presidency), would be interested in cooperating with the tenets of American foreign policy. Be that as it may, the President and his team have worked assiduously to enlist Russian support on a host of issues, with very little success.

First, with respect to the Russian nuclear force itself, there is no evidence, other than Russian ratification of New START, that Moscow is interested in diminishing the role of nuclear weapons in its national security policy. Indeed, just the opposite. Russia is embarking on a well-funded nuclear weapons and delivery vehicle modernization program and has announced its intent to replace the huge SS-18 Intercontinental Ballistic Missile (ICBM) fleet with new, very large, liquid-fueled missiles that will carry a large number of multiple, independently targetable reentry vehicles (MIRVs).[11] This news is especially disturbing because large, liquid-fueled, land-based missiles armed with multiple warheads are considered "high value targets" that would be among the top priorities to destroy in the event of a nuclear exchange. In the parlance of strategic thought, these are "destabilizing weapons" because this means the Russian leadership would be forced to "use them or lose them" in the event of a crisis.

In addition to this development, Russia is thought to be carrying out an aggressive nuclear weapons research and development program at its modern facilities in Novya Zemlya. It continues to deploy a large arsenal of tactical or shorter range systems west of the Urals, and it shows little sign of accepting the Obama position that the world would be a much safer place if nuclear weapons were deeply reduced or eliminated altogether.[12] Since New START was ratified the Obama administration has tried on numerous

occasions and at multiple levels to engage Russia in a dialogue to outline the terms of the next phase of arms reduction negotiations including tactical and non-deployed weapons, yet no apparent progress has been made.

It is highly plausible that one reason for this stalemate is the fundamental asymmetry in which Washington and Moscow view the political and psychological utility of nuclear weapons. For the United States, with a defense budget larger than that of the next twenty biggest spending countries, nuclear weapons play a vital role to deter a nuclear attack on the United States while reassuring its allies that the US security guarantees pledged decades ago (especially for the NATO countries, Japan, and South Korea) remain credible. These forces supplement a very large and sophisticated conventional force posture based on land, at sea, under the sea, in the air, in space, and in cyberspace. Indeed, proponents of "going to zero" often note that US conventional military superiority is so pronounced that a world without nuclear weapons would be to the US strategic advantage.

For Russia, however, the reverse is true. Putin and his colleagues are still searching for ways to reclaim the superpower status that was lost when the Soviet Union collapsed more than twenty years ago. Russia's weak economic condition has precluded spending huge sums to rebuild its once feared conventional forces. For Russia, its nuclear arsenal is the principal source of its geostrategic authority. The Russian Federation has many unresolved security issues, including finding itself with the NATO alliance right on its border in Poland and elsewhere. It seeks to sustain and enhance its influence over other states of the former Soviet Union, including Ukraine, Georgia, Moldova, and others. It sees an emerging Chinese juggernaut to the south with a gigantic disparity in border populations against which, it might reason, tactical nuclear weapons are a necessary safeguard. According to polling data, the maintenance of a large, modern nuclear force is well supported by the Russian people.

Another key bone of contention in the bilateral relationship concerns US ballistic missile defense (BMD) plans. When the Obama administration took office, it inherited a Bush administration plan to deploy ten large missile interceptors in Poland and a sophisticated radar system in the Czech Republic. After an extensive inter-agency review culminating in the issuance of the Ballistic Missile Defense Review in the fall of 2009, the US adopted what has been termed the "European Phased Adaptive Approach." This approach calls for the deployment of a mix of interceptors and sensors both on land

and at sea, in Eastern Europe, the Eastern Mediterranean, Northeast Asia, and perhaps elsewhere by 2020 that would meet regional missile threats from Iran and North Korea but would not be capable of retarding the nuclear deterrent force of Russia or China.

However, neither Moscow nor Beijing has accepted this rationale. The military leadership of both countries appears to be convinced that these BMD plans are part of a long term US strategy to provide the capacity to inflict a disarming first strike on the nuclear retaliatory forces of Russia and China, and then to utilize BMD systems to minimize the likelihood of effective retaliation. They reason that once these systems are in place, both Russia and China would be forced to acquiesce to US policy demands in the face of almost certain strategic defeat. To counter these views, the United States has on numerous occasions briefed their Russian counterparts on the actual performance capabilities of the planned BMD systems, to convince them that the US would not in fact possess the capabilities ascribed to them under these scenarios, and such efforts have also been conducted on a smaller scale with the Chinese – but to no avail. Russia instead has insisted on data exchanges and a virtual joint operation of the US systems to assuage their concerns. However, the US has placed severe limits on the amount of BMD information it is willing to provide for fear of compromising its effectiveness, in the event of a serious deterioration in the relationship between Washington and Moscow. The net result of this deadlock to date is the pronouncements of Russian leaders that the failure to resolve the BMD problem could be the basis for a Russian withdrawal from New START (much as the US under President George W. Bush in 2002 withdrew from the 1972 Anti-Ballistic Missile Treaty).

As if these differences were not sufficient, the United States and the Russian Federation are on opposite sides over a variety of regional and other issues. Russia, only with the greatest reluctance, finally acceded to some of the UN-sponsored economic sanctions against Iran over its unwillingness to comply with the NPT. For many years, it has provided vital technical assistance in the building of key Iranian nuclear facilities. In contrast to the American perspective, Russia apparently does not see a nuclear Iran as a threat to its core national interests. In the Syrian civil war, Russia has blocked UN Security Council resolutions to tighten sanctions against the Assad regime, and has seemingly turned a blind eye to the massive atrocities committed by the regime. Here again, however, Russia has its

own strategic objectives that do not conform to American interests. Syria is the last foothold of Russian influence in the Arab world with important Russian naval forces utilizing Syrian facilities. Moscow, facing its own Islamist insurgency in Chechnya and Dagestan, is determined to support a Baathist, Alawite regime in its struggles against a mix of Sunni forces that include al-Qaeda and other jihadist elements.

More recently, the Snowden Affair has implanted a further wedge in bilateral relations. Moscow has granted a one-year (perhaps renewable) asylum status to the American who leaked large amounts of information about US National Security Agency (NSA) data mining and electronic surveillance operations. This status was granted almost certainly with the explicit approval of President Putin over the repeated objections of the most senior Obama administration officials.

While all these differences do not yet amount to a return to a Cold War relationship, they have collectively soured Congressional and elite public attitudes toward Russia's intentions. These shifts in opinion will make it that much more difficult for the US to sustain a nuclear weapons reduction policy predicated upon a "reset."

Despite these daunting challenges, the President has continued to pursue the dream "of a world without nuclear weapons – no matter how distant that dream may be."[13] He endorsed a further cut of US deployed strategic nuclear warheads by up to one third, reductions of US and Russian tactical weapons in Europe, and the hosting of a nuclear security summit in 2016 to continue the goal of securing nuclear materials. He also expressed support for an effort to build Congressional support to ratify the Comprehensive Test Ban Treaty (which the US Senate failed to ratify in 1999) and sought to overcome opposition to the international Fissile Material Cutoff Treaty (Pakistan has been a principal obstacle to such an agreement).[14]

Other Nuclear Powers

Russia is not the only country that has seemingly failed to join the Obama nuclear reduction and elimination movement. Consider the other nuclear weapon states in three categories: recognized nuclear weapon states under the NPT regime; nuclear weapon states outside the NPT regime; and incipient nuclear weapon states.

In the first category are Great Britain, France, and China. Great Britain, it appears, has moved to a minimum deterrence posture, with about 225

deployed nuclear warheads. Indeed, its senior officials endorsed the precepts of the Nuclear Posture Review in 2010, and its government seems to be searching for the smallest number it can have while convincing itself that such an arsenal would deter any rational adversary from attacking the British homeland with nuclear weapons.[15] There has long been a small but active anti-nuclear movement in Britain, although its influence has waned in recent years.[16]

The French situation, however, is markedly different. Although France claims to have about 300 deliverable nuclear warheads, its nuclear status is much more central to its body politic. There is no anti-nuclear movement to speak of, and conservatives and socialists agree on the need for the French arsenal. Perhaps they share the view that French nuclear weapons must compensate for conventional weakness against determined adversaries.[17] The French government was extremely displeased with the NPR in 2010, perhaps fearing it could ignite an anti-nuclear movement in France that would undercut support for the arsenal. French officials also thought that the United States was very naive in thinking that US nuclear reductions would influence other key states such as Pakistan, Iran, and North Korea. It would thus appear that the nuclear stockpile landscape would have to change drastically for France to alter its position.

China, moreover, has continued to add to its nuclear arsenal since 2010. While some estimate China to possess about 300 nuclear weapons, these estimates are shrouded in uncertainty because of China's inherent opaque policies concerning its military capabilities. This lack of transparency has deep roots in China's strategic thought, dating back centuries to Sun Tzu, who argued that opaqueness is essential to conceal both China's strengths and its weaknesses. China has now agreed to participate in "strategic stability talks" that have centered on the North Korean nuclear problem and most recently on cyber issues. It steadfastly maintains an unwillingness to engage in nuclear arms reduction talks until the US and Russia reduce to its levels. China has further invested in deployment of ICBMs that could reach at least the western portions of the United States. Chinese experts in Track II dialogues assert that in the event of a crisis in East Asia, China must have this capability to prevent potential intervention by the US. Indeed, this is part of what Washington sees as Beijing's strategy of "anti-access/area denial" or A2/AD. In anticipation of a possible US surge in naval and air forces in the region during a crisis, China is investing in anti-ship missiles, anti-

satellite weapons, cyber capabilities, and other means to deny the US the ability to carry out its strategic objectives. The US, in turn, is formulating an "Air-Sea Battle" that is intended to use advanced technologies and inter-operative capabilities on land, in and under the sea, in the air, in space, and in cyberspace to thwart this strategy.[18] China will certainly not be a leader in the Global Zero movement.

The non-NPT nuclear weapon states, India, Pakistan, and Israel, show even less enthusiasm for Obama's policies. India has now built up an arsenal approximating 100 deliverable warheads; the estimate for Pakistan is between 90-110 warheads; and the Israeli program, shrouded in secrecy from the outset, is estimated to have between 75 and 200 warheads.[19] The India-Pakistan strategic rivalry is well known and dates back to the founding of Pakistan in 1947. After several wars, crises, and threats of war, the rivalry continues unabated in its seventh decade: a Hindu dominant state (with a Muslim minority greater than the Pakistani population) against a Muslim dominant state with the territory of Kashmir an unresolved source of dispute. Not only are both countries adding to their arsenals, but there are some worrisome scenarios on the horizon. An attack by Pakistani terrorists against Indian civilians in Mumbai in 2008 failed to elicit an Indian military response, requiring enormous self-restraint by the government. A current concern is that a replay of such events would make Indian retaliation a certainty, using conventional forces in a limited attack to destroy the perpetrators. Indian forces would be met by Pakistani conventional forces that could utilize short range tactical nuclear weapons against them on Pakistani territory, out of fear that they would be defeated on the battlefield as in the three previous Indo-Pakistani wars. This use would trigger an Indian nuclear response, and the resulting escalation ladder would be catastrophic for both societies. The intensity of the rivalry is not waning, and Indian and Pakistani nuclear forces also command enormous domestic prestige. The motivation for Indian forces likewise reflects the Sino-Indian rivalry (China defeated India in a previous border war). All these considerations suggest that a continued nuclear arms competition on the South Asian continent is far more likely than any embrace of Obama's policies.

Israel is unique among nuclear weapon states in neither acknowledging nor denying its nuclear capability. This purposefully opaque posture seems to have produced an effective nuclear deterrent that has been sustained for more than forty years. Given recent regional trends since the start of the

Arab Spring in 2011, especially the slaughter in the Syrian civil war and the pronounced instability in post-Mubarak Egypt, coupled with the intensity of Islamic jihadists in the region and the prospect of an Iranian nuclear weapons program (as well as the unresolved Palestinian conflict), Israel faces national security threats from every direction. There is no evidence whatsoever that Israel would embrace the Obama movement even if significant progress were made with the declared nuclear weapon states.

The incipient states, North Korea and Iran, are in a different category. North Korea withdrew from the NPT in January 2003. After more than two decades of development, North Korea is thought to have amassed between four and eight nuclear weapons through both uranium enrichment and plutonium reprocessing paths to nuclear development, having violated a string of NPT requirements while still a party to the NPT. The North Korean case is important for several reasons: the nature of its closed, isolated society; the lack of resolution of the Korean War since 1953; the acts of aggression that the Pyongyang regime has periodically committed; and the consequent persistent threat that North Korea poses to both South Korea and Japan. If its intercontinental range missiles, long under development, reach deployment, they will pose a direct threat to the US mainland as well. North Korean weapons and launch vehicle tests and deployments have simply been unaffected by the Obama policy. More importantly, North Korea is the quintessential example of a state that uses its nuclear weapons to gain international attention, and, in the minds of its leadership, to deter US military intervention. In January 2002, North Korea was termed by then-President George W. Bush as part of the "axis of evil," together with Iraq and Iran, which were accused of supporting terrorism and seeking weapons of mass destruction. After the US invasion of Iraq in March 2003, Pyongyang had to believe that it too was a candidate for US intervention. By deploying credible threats to destroy Seoul (roughly 50 percent of the South Korean economy) and Tokyo, North Korea has validated the view of many in key countries that nuclear weapons possession is essential to deter the United States. Iraq, for example, was invaded before it had a deployed capability and its leadership was overthrown. Libya's leadership suffered the same fate with the assistance of the US-led NATO no fly zone, but only after it surrendered its WMD capabilities.

This is a fundamental shift in the role of nuclear weapons for the United States since the Cold War. During the decades of the superpower confrontation,

the primary US objective was to use its nuclear arsenal to deter a Soviet conventional or nuclear attack on the American homeland or its allies' territory. Nuclear weapons are now used to deter United States intervention. In short, the United States is judged by potential adversaries less in terms of deterring aggression and more as being deterred from committing aggression.

This reasoning seems to underlie the Iranian nuclear program. Iran has been an intense US adversary since the revolution of 1979, supporting terrorist organizations, including Hamas and Hizbollah; calling for the destruction of Israel; and promoting its aim to be a regional hegemonic power in the Middle East and Persian Gulf region. While Iran continues to be a party to the NPT, it has violated its commitments on numerous occasions by preventing thorough inspections of suspected nuclear weapons development facilities. According to recently published analyses, Iran may be able to produce a nuclear device in 2014.[20] This forecast led to the P5+1 Geneva Interim Agreement, signed in April 2013, which consists of a short term freeze of portions of Iran's nuclear program in exchange for the lifting of some economic sanctions.[21] Whether this agreement will lead to a tangible cessation or reversal of the program is highly uncertain at this time, leaving a US or Israel military response still on the table.

An added unwanted complication has been the potential weakening of US extended deterrence guarantees, especially to Japan and South Korea in the shadow of the North Korean nuclear program. In recent times, parliamentarians in both countries have called for independent nuclear forces out of concern that US security guarantees are losing their credibility.

The Kissinger Shift

A notable consequence of these actions by nuclear weapon states and aspirants has been a significant shift in former Secretary of State Kissinger's position on the goal of Global Zero. In an important statement co-authored with former US national security advisor Brent Scowcroft, Kissinger asserted that "nuclear weapons will continue to influence the international landscape as part of strategy and an aspect of negotiation."[22] They noted that "the global nonproliferation regime has been weakened to a point where some of the proliferating countries are reported have arsenals of more than 100 weapons. And these arsenals are growing."[23] Kissinger and Scowcroft reiterated that work toward elimination of nuclear weapons must be accompanied by "a series of intermediate steps that maintain stability [i.e., no incentive to strike

first] and that every stage of the process be fully transparent and verifiable… The precondition of the next phase of U.S. nuclear weapons policy must be to enhance and enshrine the strategic stability that has preserved global peace and prevented the use of nuclear weapons for two generations."[24] The authors argued that the interrelationship between missile defense, tactical nuclear weapons, and precision guided large conventional warheads on long range delivery vehicles "must be taken into account in future negotiations."[25] Moreover, they asserted that "other countries need to be brought into the discussion when substantial reductions from existing START levels are on the international agenda."[26]

In the real world of real governments with the multiplicity of objectives described above, the Kissinger formula is a de facto rejection of the Obama approach, if not of the President's vision. There is simply no evidence that the numerous criteria proposed by Kissinger and Scowcroft, all of which are sensible in this author's view from a strategic perspective, would be met by the full range of nuclear weapon states and nuclear aspirants. Since Kissinger and Scowcroft are held in very high esteem by many serious students of these issues both within and outside government, their ideas underscore the enormity of the tasks to achieve greatly reduced reductions, not to mention a world free of these weapons (which would require exacting verification measures, since at very low numbers, even modest cheating could be highly significant).

Chasing Fissile Material Lock-up

Another major area of disappointment has been the inability to make meaningful progress with those countries that house vast amounts of potentially vulnerable fissile material. Pakistan is particularly important. With a very active nuclear weapons program, Pakistan has large stocks of fissile material, with perhaps 100 nuclear weapons in its possession, and it is working to acquire more. Domestically, it has a nominal democratic system but with a strong military leadership that appears to dominate foreign and defense policy. It is battling its own domestic terrorist groups led, among others, by the Pakistani Taliban, while simultaneously supporting the Afghan Taliban. Note that Osama Bin Laden lived in Abbottabad, in the shadow of Pakistan's West Point, for more than five years. Which is worse: the possibility that senior officials harbored the world's most notorious terrorist, or that the government was completely ignorant of his presence? Either possibility is

a very damning statement on Pakistan's domestic security processes and its trustworthiness as a US ally.[27] Pakistan consistently claims that all of its nuclear material is safe and secure, yet it is the home of A. Q. Khan who spent fifteen years providing nuclear weapons technical assistance, equipment, and materials to North Korea, Libya, and Iran. It is the country where military headquarters were attacked for 22 hours by Pakistani Taliban in November 2009, and nuclear weapons personnel were attacked in a bus by a suicide bomber in July 2009.[28] Is it believable that all its fissile material is secure, especially when considering the prospect of "insider threats" among its nuclear weapons community, the Pakistan Army, and the ISI (Pakistan's Inter-Services Intelligence Agency)?

To these concerns must be added the fissile material in Iran and North Korea, two states whose facilities are cordoned off from the President's Nuclear Security Summit initiatives by their own national policies. Yet these countries are the most likely to provide fissile materials willingly to other countries or terrorist groups, for political or financial reasons.[29] Thus while it is admirable that a large number of countries are cooperating fully with the Obama initiative, the most important and vulnerable sources of fissile material are not on the list. Russia and China have also been very slow to cooperate. Accordingly, there is little basis to conclude that the lock-up of the world's vulnerable fissile material will be achieved any time soon. The comprehensive implementation of the initiative, though well intentioned as a means to combat nuclear terrorism, is presently unfeasible.

Strengthening the NPT

The fourth pillar of strengthening the NPT, the 2010 Review Conference, also fell short of US expectations. The United States was required to endorse a future meeting on a Middle East Nuclear Weapons Free Zone conference in order to gain concessions in the wording of the final document (the conference, originally scheduled for 2012, was postponed). The Additional Protocol was approved by the IAEA in 1997 to rectify deficits in IAEA inspections and verification by improving its ability to detect undeclared nuclear material and activities. But NPT parties were unable to reach a consensus that the protocol should be an essential component of the Comprehensive Safeguards Agreement.[30] The IAEA has received less additional financial support than was expected, and the "teeth" of implementing challenge inspections are not as sharp as the US hoped they would be.

How Then to Proceed

The challenges to the Obama nuclear-free world vision and its implementation plan are severe. It is probably too much to expect the President to reverse course, given the nobility of the ultimate objective and the priority the President has placed on his policies. But it is reasonable to conclude that a recalibration is very much in order. Key elements of this recalibration should include the following:

1. There must be an explicit recognition that nuclear weapons are valued differently in national capitals, are part of national strategies, and resonate positively with many domestic audiences.
2. The United States must work on narrowing wide differences with Russia outside the nuclear realm (Syria, Snowden, missile defenses) before it can expect further progress on nuclear arms reductions. None of this will be easy and may not be achievable in the balance of the President's second term.
3. The United States must come to grips with the Iranian nuclear program. If further economic sanctions and good faith negotiations fail with the new Iranian government elected in 2013, the United States must take decisive action to prevent a full scale deployed Iranian nuclear arsenal. The President is on record as supporting the "prevention," not the "containment," of an Iranian nuclear weapons force. Failure to achieve this goal could greatly stimulate further nuclear weapons proliferation: Saudi Arabia? Turkey? Japan? South Korea? Taiwan? Such a proliferation chain would pose a fundamental threat to the vitality of the NPT regime.
4. Further work on nuclear material lockdown should continue with the aim of isolating Pakistan, North Korea, and Iran as the only outliers. Continued efforts must be made to repair US-Pakistan relations, including perhaps the suspension of drone attacks, in order to enlist Islamabad support for assistance to secure its fissile material.
5. The US should resume direct dialogue with the government in Pyongyang unconditionally to determine if, over time, acceptable conditions can be identified that would provide a compelling incentive for relinquishment of the North Korean arsenal. Simultaneously, a package of reassurance measures must be designed for both South Korea and Japan to reinforce their non-nuclear status.
6. Strategic stability talks with China should address the Chinese nuclear arsenal, not with the aim of reaching arms control agreements but to

establish a common vocabulary and more intimate familiarity on how each side sees the key strategic issues. This condition took years to develop in US-Soviet relations, but ultimately bore fruit.

7. A redoubling of the effort is required to win broader international support for IAEA challenge inspections and other more intrusive measures. These capabilities are essential to match the growingly sophisticated measures adopted by aspiring nuclear proliferators to avoid detection.

It is unrealistic to believe that nuclear weapons can be "un-invented." They serve too many useful purposes for too many governments. US strategy must be recalibrated, away from the ideal of what is best to the realm of what is important and achievable.

Notes

1 I had the privilege of participating in the early stages of policy formulation, with respect to both nuclear weapons and missile defense.
2 "Obama's Youth Shaped a Nuclear-free Vision," *New York Times*, July 4, 2009.
3 George P. Shultz et al., "A World Free of Nuclear Weapons," *Wall Street Journal*, July 4, 2007; George P. Shultz et al., "Toward a Nuclear-Free World," *Wall Street Journal*," January 15, 2008.
4 Barack Obama, "Renewing American Leadership," *Foreign Affairs*, July/August 2007.
5 Statement by President Obama in Prague, Czech Republic, April 5, 2009, http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.
6 See "Obama's Speech in Prague on New START Treaty, April 8, 2010, Council on Foreign Relations, www.cfr.org. Also, "Transcript of Obama's Speech in Berlin," June 19, 2013, blogs.wsj.com.
7 See Nuclear Posture Review Report, April 2010, pp. 9-22, http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf.
8 Note the distinction between "fissile" and "fissionable" material. The former is material with nuclei that can sustain a chain reaction with low energy neutrons. The latter, such as Uranium-238, cannot sustain a chain reaction.
9 From the outset, some doubted the efficacy of this approach, arguing that terrorist groups had neither the knowledge nor capability to manufacture their own weapons, and would instead resort to purchase (perhaps from North Korea) or theft.
10 See IAEA Factsheets and FAQs, September 20, 2012, www.iaea.org.
11 "Russia to Start Building Prototype of New Heavy ICBM in 2014," *Novosti*, June 18, 2013, en.rian.ru/military.news,RIA.
12 Note that the distinction between "strategic" and "tactical" is predicated on the ranges of the delivery vehicles. New START limits the number of warheads on deployed strategic delivery vehicles. But it may be possible to remove warheads on short range systems and redeploy them on long range systems. Thus, the very

large Russian "tactical" force could in part be a reserve strategic force, giving Russia a major numerical advantage despite the limits of the treaty.

13 See "Remarks by President Obama at the Brandenburg Gate – Berlin, Germany," June 19, 2013, http://www.whitehouse.gov/the-press-office/2013/06/19/remarks-president-obama-brandenburg-gate-berlin-germany.

14 The speech received decidedly mixed reviews in Germany and elsewhere. A conservative British critic termed it a "weak, underwhelming speech." Even the pro-disarmament Stockholm International Peace Research Institute (SIPRI) offered that "given Russia's skepticism towards Obama's position… the likelihood of Russian-US alignment on reductions is slim." See "SIPRI Statement on President Obama's Speech in Berlin," June 19, 2013.

15 For unclassified estimates of the deployed numbers of nuclear weapon state arsenals, see "Nuclear Weapons: Who Has What at a Glance," Arms Control Association, April 2013, drawing on estimates of the Federation of American Scientists, the International Panel on Fissile Material, the US Department of Defense, and the US Department of State.

16 If one visits the British Atomic Weapons Establishment (AWE), a few anti-nuclear demonstrators seem permanently encamped but do nothing to impede activities inside the facility.

17 More than three decades ago, I met with General Pierre Gallois, one of the intellectual fathers of the Force de Frappe. Gallois noted that France had fought many wars since 1870 – the Franco-German War, World War I, World War II, the Indo-China War, and the Algerian War – and had lost them all. For this reason, Gallois argued, nuclear weapons were essential to preserve the French state.

18 For some outlines of the Air-Sea Battle approach, see "Anti-Access/Area Denial: Washington's Response," *The Military Balance 2013* (London: International Institute for Strategic Studies, 2013), pp. 29-31.

19 See "Nuclear Weapons: Who Has What at a Glance," Ibid.

20 See "Analysts Predict Iran Able to Produce Atom Bomb by mid-2014," *Washington Post*, July 31, 2013, citing an analysis by the Washington-based Institute for Science and International Security.

21 See the White House, "Summary of Technical Understandings Related to the Implementation of the Joint Plan of Action on the Islamic Republic of Iran's Nuclear Program," January 16, 2014.

22 Henry A. Kissinger and Brent Scowcroft, "Nuclear Weapon Reductions Must Be Part of Strategic Analysis," *Washington Post*, April 22, 2012.

23 Ibid.

24 Ibid.

25 Ibid.

26 Ibid.

27 Note that the Pakistani medical doctor, Dr. Shakil Afridi, who assisted US intelligence officials in locating Bin Laden, was convicted of treason and sentenced to 33 years in prison, which he is appealing. See www.foxnews.com/pakistani-doctor.

28 On this last incident, see "Attack Pakistani Garrison City Raises Anxiety about Safety of Nuclear Labs and Staff," *New York Times*, July 4, 2009.

29 North Korea has demonstrated its willingness to sell missile parts and nuclear technology on several occasions, and Pyongyang and Islamabad have collaborated in the past in sharing nuclear and missile technology. Moreover, China provided important assistance in the development of Pakistan's nuclear program, although it is alleged that this support was before China became a party to the NPT.

30 See "The Unspectacular Future of the IAEA Additional Protocol," Carnegie Endowment for International Peace, April 26, 2012.

Changes in the International System and their Impact on Proliferation

Yair Evron

The Structure of the International System and Nuclear Proliferation

Since the beginning of the nuclear age, the international system has evolved first, from a bipolar to a unipolar structure, and then to the current more complex structure that contains unipolar and multipolar elements. However, it would be simplistic to claim that a wholly bipolar system existed, and the same caveat applies to the other two configurations of international power suggested here, unipolarity and multipolarity. Bipolarity has always comprised elements of multipolarity. Furthermore, notwithstanding the impact that the superpower rivalry had upon diverse regions such as East Asia, South Asia, the Middle East, and Latin America, the regions have always contained their own inter-state dynamics. This regional element has been very important in the context of nuclear proliferation.

To a large extent the current phase represents a gradual evolution from the unipolar phase. The United States remains the preeminent power in the international system, and the world is still characterized by many of the features of unipolarity. The gradual emergence of other global and regional powers has left US predominance largely untouched. Therefore, the shift from a unipolar structure to a more complex international structure is significantly less dramatic than the move from a bipolar to a unipolar system that occurred with the collapse of the Soviet Union.

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This paper focuses on how changes in the international system have affected proliferation and decisions to roll back from the nuclear threshold. It then considers the impact of proliferation, specifically Israel's nuclear capability, on stability in the Middle East. Thus, this paper both analyzes how the global international system has affected proliferation, and how proliferation has influenced a specific regional system.

Phases of Nuclearization

While what ultimately matters is the actual nuclear capability of the state in question, an analysis of the role of motivations and the effects of the structure of the international system on proliferation must take into account the various significant stages on the way to acquisition of a nuclear capability. These four stages are: (1) serious intention and early development; (2) development of an advanced technological infrastructure; (3) the actual assembly of weapons without declaration ("bomb in the basement" or "undeclared" status); and (4) a declaration or test.

From a theoretical perspective, an explanation of proliferation based upon the structure of power in the international system may be described as a "realist" or "neorealist" perspective. This article is primarily informed by the neorealist perspective. However, elements of "legitimization" or "non-legitimization" regarding the possession of nuclear weapons, as well as the influence of the Non-Proliferation Treaty (NPT) regime, have played a role in the decisions of states regarding proliferation. Such decisions are better explained by other theoretical perspectives that also inform this article.

The Bipolar System

During the 1950s, there were increased efforts by states to acquire a nuclear capability, caused by the growing concern of states in the West regarding the military intentions of the Soviet bloc, as well as fears of regional threats. The first cause was directly linked to the dynamics of bipolarity, whereas the second cause was related to regional sources of conflict. In both cases, states were motivated by the notion that nuclear weapons were essential to their security and were regarded as legitimate instruments of power. Moreover, there was a widespread belief that the nuclear era that began in 1945 would herald the proliferation of nuclear weapons. This would explain the decision taken by more than twenty states back in the 1950s and 1960s to commence planning for a nuclear weapons capability. Indeed, when

President Kennedy suggested in the early 1960s that 10-20 states would acquire nuclear weapons within ten years, his prediction was based upon developments that had already taken place in many states.

However, in the course of the 1960s and 1970s, most of these states decided to suspend the development of their nuclear programs. There were three main factors behind this process: first, the establishment of defensive alliances by the two superpowers, primarily the United States, with many states around the globe (this development was directly related to the nature of the bipolar system); second, the entry into force of the NPT; and third, the gradual understanding of aspiring nuclear powers that nuclear weapons are a unique category of armaments to be distinguished from other instruments of military power.

This understanding had several consequences: policymakers realized that the utility of nuclear weapons lay not in their launch against adversaries, but rather in the threat to use them. Thus, policymakers eventually recognized that the utility of nuclear weapons lay in their value as a deterrent, and therefore the possession of nuclear weapons had limited benefit and appeal. Moreover, it became a common assumption that the possession of nuclear weapons by one party would only encourage the other party to arm itself with the same weapons, thereby undercutting the assumed advantage of the possession of a nuclear capability.

With the onset of the nuclear era, numerous states were motivated to develop their independent nuclear capabilities. However, the bipolar system eventually helped bring about the emergence of several mechanisms designed to halt proliferation. In other words, while the bipolar system was characterized by fierce competition and even sporadic violence on the fringes of the global system of defense alliances, it also contained the seed of some limited cooperation in the efforts to contain proliferation. Both superpowers took steps within their respective spheres of influence to halt proliferation. Furthermore, the establishment of the NPT and its impact on the international system was a direct result of this superpower cooperation. During the bipolar era, and in the wake of the adoption of the NPT, no new declared nuclear power emerged. At the same time, two states, Israel and South Africa, became undeclared nuclear powers, while India and Pakistan were presumably on the threshold of acquiring a nuclear capability.

It appears that the bipolar system, then, helped to contain proliferation. Since a relatively large number of states had initially tried to develop their

own capabilities during the 1950s and 1960s before the superpowers worked to halt proliferation, the bipolar system must therefore be judged only by its later efforts to halt proliferation. From this perspective, it performed quite well. With the establishment of defensive alliances and the adoption of the NPT, the proliferation process was partly halted. From this perspective, the bipolar system could be viewed as an effective means to manage the "nuclear world order."

The Unipolar System

By the early 1990s, with the collapse of the Soviet Union and the end of the Cold War, a new situation emerged. Moscow was no longer in a position to constrain the United States in its efforts to exercise military and political power in order to affect international developments. Yet while the collapse of the Soviet Union enabled the United States to claim the position of the lone superpower, it would be misleading to cast it as a global hegemon, as there were a number of regional powers with significant influence in the international system. Furthermore, there was uncertainty regarding the readiness and ability of the United States to exercise political and military power in order to secure a stable international system. These caveats aside, however, for roughly two decades the United States did indeed project its power internationally with limited constraints. Thus, the Gulf War of 1991 was not only an expression of American military might, but also a demonstration of the lack of any significant international opposition to the projection of American military power. In a similar vein, in 2001 and 2003, the United States once again demonstrated its ability to use military force in the invasions of Iraq and Afghanistan, with limited international opposition. Thus, the 1990s and early 2000s witnessed American power at its height.

What impact did the unipolar system have on proliferation? One school of thought[1] maintains that with the decline of the bipolar system, certain states would be relieved of the constraints imposed by the two superpowers, and would be freer to pursue a nuclear capability. A second school of thought[2] has tended to overlook the regional causes of proliferation and focused primarily on the bipolar competition as the main source of global conflicts. In accordance with this view, it was thought that a more benign international system would emerge, with a consequent decline in proliferation.

However, the reality was more complex. On the one hand, three states with a nuclear weapons capability – South Africa, Ukraine, and Kazakhstan

– rolled back and disarmed during the unipolar era. There were significant differences between the case of South Africa and those of Ukraine and Kazakhstan. In South Africa, domestic developments were the major reason for the rollback. In the cases of Ukraine and Kazakhstan, the collapse of the Soviet Union was the main reason for disarmament, although US policies were also a factor in this process. Thus, the decline of the bipolar system and the emergence of the unipolar system were factors in this nuclear disarmament.

On the other hand, three regional powers became declared nuclear powers: India, Pakistan, and North Korea. Furthermore, Iraq and Iran developed an advanced nuclear infrastructure for the production of nuclear weapons, while Syria too began developing such an infrastructure. There were likewise strong suspicions that a fourth state, Libya, was pursuing a nuclear capability. This proliferation was met with international action: Israel destroyed Iraq's nuclear reactor in 1981; following the Gulf War of 1991, the International Atomic Energy Agency (IAEA) undertook intrusive inspections of Iraq's nuclear program and its eventual dismantlement; Syria's nuclear reactor was destroyed in 2007 in what was reportedly an Israeli military operation; and Libya gave up its nuclear infrastructure as part of a diplomatic bargain with the United States and Britain.

While most of the actors seeking a nuclear capability were motivated by regional concerns, there were also global considerations at work. It has been argued that certain regional actors sought a deterrent against the United States, out of concern for American ambitions for regime change in those states opposed to American hegemony. Thus, under the bipolar system, states challenging Washington could often count on Soviet power (even if they did not have a formal alliance with Moscow) to deter the United States from attacking them directly with the intention of overthrowing their regime. In the unipolar system, no international actor has been capable of countering US power. Whether a strategy of minimum nuclear deterrence would be effective against the United States is an open question.

Under unipolar conditions several changes in proliferation patterns emerged. First, diplomatic efforts including the utilization of carrots and sticks have been less effective in confronting the problem of proliferation than they were during the bipolar era. The United States, however, has found itself in a stronger position to use military power against potential proliferators. Second, all the cases of advanced proliferation have taken place outside the formal boundaries of the bipolar system, and with the exception

of North Korea, were motivated primarily by regional considerations. Third, while the unipolar system enabled the United States to use its military power without facing significant international opposition, it was precisely this situation that arguably strengthened the motivation of certain regional powers to acquire a nuclear capability in order to deter American power. Finally, it is likely that the emergence of globalization, the spread of liberal democracies, and the enhanced interdependence of states around the world convinced policymakers worldwide to respect international norms, including regimes such as the NPT.

The Current System

While American military and economic power remains unchallenged, the rise of new global powers constrains the ability of the United States to exert influence and impose its will worldwide. Furthermore, the costly and damaging wars in Iraq and Afghanistan, together with the subsequent financial crisis, have reduced the willingness of the American public to support protracted military operations involving the deployment of ground forces.

At present, it is hard to discern a clear difference between proliferation developments during the unipolar era and the situation today. The cases of Iran and North Korea appear to demonstrate the similarities between the two phases, as opposed to the differences. On the one hand, the ability of the United States and the West to halt the Iranian nuclear program through non-military means is dependent to some degree on Russian and Chinese cooperation. On the other hand, these two powers would be unable to prevent the United States from exercising its military power in order to achieve this objective. Whether or not the United States decides to use military power depends more on other considerations. However, this was the case during the unipolar era as well.

The ability of other international actors to stem American power likewise depends on the region in question. In the Middle East, Russia is the only other external power with influence. However, Russia's ability to advance its interests in the region is limited. Moscow has little or no influence in most Arab countries, and its relationship with Iran has internal contradictions as far as Russian interests in the region are concerned. Russia appears to have achieved some gains in Syria, but it perceives its actions in the region in terms of defensive moves. This also reflects its position vis-à-vis the nuclear crisis with Iran.

In East Asia and the Pacific, China possesses greater relative power than Russia's power in the Middle East. This gives China a strong position in the negotiations over North Korea's nuclear program. However, even in the case of North Korea, Pyongyang's main objective is to secure the continuation of economic aid and to prevent regime change by the United States.

Could one argue that the current global system has produced a different outcome regarding proliferation than the outcome under the unipolar system? In one important sense there is no discernible difference: if the United States were to use military force against the Iranian nuclear program, it would probably not encounter real opposition from other major centers of power in the international system. At the same time, an understanding between the United States, Russia, and possibly China to coordinate policies on Iran could contribute to a diplomatic solution of the nuclear crisis. This would signify a renewed attempt to "manage" the international nuclear system, mirroring developments in this sphere during the bipolar era. However, it is unlikely that this strategy will apply in every case. For example, were Brazil to pursue a nuclear weapons capability, it is far from certain that the United States and other regional powers would be able to halt the project or roll it back. This is an indication of the enhanced power of other regional states in the international system.

The Impact of Israel's Undeclared Capability on Regional Stability

Israel's undeclared nuclear capability remains one of the elements in its overall deterrence posture, in which its conventional superiority and its close strategic cooperation with the United States are more important factors. Since reportedly becoming an undeclared nuclear power in the late 1960s/early 1970s, Israel has been involved in one major war with the Arab states, the 1973 Yom Kippur War, and several limited military confrontations, primarily the First Lebanon War in 1982. In addition, some observers[3] have suggested that Israel's emerging nuclear capability during the 1967 Six Day War also had an impact on events. What was the role of the nuclear factor in these wars?

It has been argued that the nuclear dimension impacted on the 1967 war in two ways. First, given its concerns over Israel's emerging nuclear capability, Egypt triggered a military crisis as a prelude to an attempt to destroy Israel's capability. Second, the Soviet Union decided to destroy

Israel's nascent capability, and this was the background to its involvement in the crisis. However, both these arguments ignore the main cause of the crisis: the interaction between the leadership struggle within the Arab world (primarily between Egypt and Syria), which led to escalation with Israel, and Egypt's desire to avenge its defeat to Israel in the 1956 campaign. While the Soviet Union contributed to the escalating crisis in its initial phases, it stepped back from the brink when the threat of military confrontation became very real. Moreover, Nasser was very wary regarding a war with Israel, and ultimately decided not to move to the full military phase and to instead use the crisis to advance Egypt's political objectives. Indeed, Nasser never raised the nuclear issue as one that required a solution during the frantic crisis negotiations with the United States. The nuclear issue was not a cause of the crisis.

The 1973 war clearly demonstrated that Egypt and Syria were not deterred by Israel's nuclear capability in launching their offensive. This was arguably a clear failure of nuclear deterrence. Nevertheless, Israeli observers[4] have argued that nuclear deterrence did work, since it curtailed the scope of the Egyptian and Syrian attack and that the war was a limited one due to the Egyptian and Syrian fear of nuclear retaliation. However, a close examination of the Egyptian war plans demonstrates that the Egyptian leadership limited the objectives of the offensive to crossing the Suez Canal and capturing a narrow strip of land on the other side, not because of Israel's nuclear capability but as a result of concerns over Israel's superior conventional forces. In fact, nuclear deterrence was irrelevant in the case of the 1973 war, while conventional deterrence forced Arab strategic planners to pursue limited objectives.[5] Sadat planned a limited campaign whose main objective was to change the political status quo and force the superpowers to bring about an Israeli withdrawal from Sinai.

An overview of all the military campaigns involving Israel shows clearly that Israel enjoyed conventional superiority all along. The fear of annihilation by overwhelming conventional forces was the main reason for Israel's decision to acquire a nuclear capability, but this existential threat never materialized. Since the signing of the Israeli-Egyptian peace treaty, the conventional balance has tipped even more in Israel's favor. By the time Israel invaded Lebanon in 1982, it enjoyed clear conventional superiority over any potential Arab coalition. Nuclear deterrence clearly played no role in this state of affairs.

Finally, it is clear that nuclear deterrence is not relevant to Israel's campaigns against terrorists, guerillas, and non-state combatants. Thus, nuclear deterrence has not been a significant factor in deterring wars in the Arab-Israeli realm, and has not contributed to stability.

It has also been argued[6] that the peace treaty between Israel and Egypt was a result of Israel's nuclear capability. This is highly debatable. In the wake of the 1967 War, Egypt's top policy priority was the return of Sinai to Egyptian sovereignty. Once it became clear that it could achieve this objective through a peace treaty with Israel, Cairo opted for this solution. Were Israel (with a nuclear capability) to refuse to return Sinai, Egypt would definitely have rejected a peace treaty. Similarly, Syria was aware of Israel's nuclear capability, yet it refused to sign a peace agreement with Israel unless the latter agreed to return the Golan Heights to Syria. Thus, Israel's nuclear capability has not played a role in the achievement of formal peace agreements with Arab countries.

Israel's undeclared capability has not advanced regional stability, but there is no definitive evidence to demonstrate that it has provoked greater instability. This tentative conclusion may appear surprising in view of the role of nuclear weapons in the superpower relationship (the enhancement of stable mutual deterrence). Israel's nascent capability has not resulted in the outbreak of wars or lower level violence. An open question is the extent to which Israel's capability has encouraged nuclear proliferation in the region. The evidence suggests that in the cases of Iraq and Iran, the main causes of their decision to develop a nuclear capability was the conflict between them, as well as deterrence against a range of other nuclear powers, including the United States and Israel. In the case of Syria, Israel's capability appears to have been a stronger factor in Damascus's decision to develop a nuclear project. However, in all these cases, it is very difficult to establish a clear cause and effect in relation to Israel's undeclared nuclear capability since there are multiple factors behind a state's decision to pursue a nuclear option.

The case of India and Pakistan is open to conflicting interpretations as to the effect of nuclear weapons on regional stability. In the Middle East, proliferation has been limited to one state, and the proliferation was undeclared, perhaps limiting the influence of Israel's nuclear capability. Another possible explanation for the absence of its influence on political developments (securing peace agreements) is due to the nature of nuclear weapons in general. They are powerful instruments of deterrence against

existential threats, but have little or no impact as coercive political instruments: this is a lesson learned from the Cold War. However, considerably more research is required in order to reach definitive conclusions on the impact of proliferation on different regional systems.

Notes

1 See, for example, Benjamin Frankel, "An Anxious Decade: Nuclear Proliferation in the 1990s," in *Opaque Nuclear Proliferation: Methodological and Policy Implications,* ed. Benjamin Frankel (London: Frank Cass, 1991).
2 A sophisticated interpretation of how nuclear disarmament by the superpowers that followed the end of the Cold War contributed to the readiness of regional powers to forgo the nuclear option appears in testimony by Rose Goettemoeller on the New Start treaty before the Armed Services Committee, July 29, 2010.
3 See Isabella Ginor and Gideon Remez, *Foxbats over Dimona: The Soviets' Nuclear Gamble in the Six-Day War* (New Haven: Yale University Press, 2008).
4 See primarily Shlomo Aronson, *Nuclear Weapons in the Middle East 1948-2013* (Jerusalem: Akademon, 2014).
5 For a detailed analysis of the 1973 war from the nuclear perspective see Yair Evron, *Israel's Nuclear Dilemma* (Ithaca: Cornell University Press, 1994).
6 See Aronson, *Nuclear Weapons in the Middle East 1948-2013*. For the counter argument, see Evron, *Israel's Nuclear Dilemma.*

Russia's Nonproliferation Policy

Anton Khlopkov

Russia is one of the depositary states of the Nuclear Non-Proliferation Treaty (NPT), and advocates a consistent and balanced implementation of the treaty. Strengthening the NPT and the nuclear nonproliferation regime is one of Russia's foreign policy priorities. The Russian policy is founded on the notion that progress on nuclear nonproliferation is impossible without progress in all three areas described as the pillars of the nonproliferation regime: nuclear nonproliferation, disarmament, and peaceful use of nuclear energy. This article will first briefly review Russian policy in the latter two areas, and then focus on challenges in the area of nuclear nonproliferation and Russia's interests in that regard.

Russia and Nuclear Disarmament

Nuclear arms reduction and their complete elimination is a noble goal. Russia has repeatedly declared its commitment to the idea of a "nuclear zero." Efforts undertaken by Moscow and Washington in the 1990s and 2000s as part of the START I treaty and the 2002 SORT treaty (Moscow Treaty), as well as unilateral steps on non-strategic nuclear weapons (NSNW) reductions, have enabled Russia to cut the nuclear arsenal stockpiled during the Soviet period by 80 percent.[1] The NSNW arsenal has been reduced by more than 75 percent since 1991.[2]

Russia and the United States are now implementing the New START treaty, signed on April 8, 2010.[3] As of April 3, 2013, Russia already completed its commitments on two out of the three main categories covered by the treaty (the number of deployed ICBMs, deployed SLBMs, and deployed heavy

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bombers; and the number of warheads on deployed ICBMs, warheads on deployed SLBMs, and warheads counted as deployed on heavy bombers). Under the terms of the treaty, the United States and Russia were given seven years, until February 5, 2018, to downsize their arsenals to the new limits.[4]

However, a nuclear zero cannot be achieved overnight and requires that several conditions be put in place. The issue of nuclear arms reductions cannot be divorced from the broader national security context. That is why progress on nuclear disarmament demands that it be considered in a wider format that takes into account the close interrelationship between the various aspects of military security, including the role of conventional weapons, space weapons, and the entire complex of offensive and defensive weaponry. Article VI of the NPT requires the state parties to conduct negotiations on nuclear disarmament measures in the context of universal and complete disarmament.

After the entry into force of the New START treaty, Russian President Vladimir Putin said that Russia was open to new joint initiatives with the United States in the area of disarmament. He stressed, however, that such initiatives could be implemented only on a fair and equitable basis, taking into account all the factors that affect international security and strategic stability.[5] The Russian foreign policy concept approved by presidential decree on February 12, 2013 emphasizes that "negotiations on further strategic offensive arms reductions will be possible only if the parties take into account the entire range of factors that affect global strategic stability."[6] The official Russian position is that further steps on nuclear disarmament can be considered only if the parties adopt a comprehensive approach, abide by the principle of equal and shared security for all, and put in place a number of necessary conditions within the international arena.[7] These conditions include:

1. Adherence by all states possessing a nuclear potential to the process of nuclear disarmament.
2. Prevention of the deployment of weapons in outer space.
3. Commitment to refrain from the unilateral development of strategic missile defense systems that threaten to erode strategic stability and the regime of checks and balances that help to maintain a global equilibrium.
4. Elimination of imbalances in conventional weapons alongside the resolution of other international problems, including the settlement of regional conflicts.
5. Entry into force of the Nuclear Test Ban Treaty.

Peaceful Uses of Nuclear Energy

Russia regards the peaceful use of nuclear energy within the NPT framework as an inalienable right of every country. It is a staunch advocate of the global development of the nuclear energy industry, provided that countries abide by their commitment not to divert nuclear materials and technology to weapons programs. The Russian nuclear industry provides significant assistance to various countries in the implementation of nuclear energy projects. It is a world leader in terms of nuclear power plant (NPP) export projects. It has signed framework agreements on peaceful nuclear energy cooperation with over thirty countries. It has NPP projects at various stages of development in Belarus, Vietnam, India, Iran, China, and Turkey, while work on a similar project is shortly expected to commence in Bangladesh. The Russian portfolio of NPP export projects includes a total of nineteen reactors.

Russia offers the fledgling nuclear countries not only turnkey NPP projects, but also the full cycle of nuclear fuel services, including deliveries of fresh fuel throughout the life of the NPP and the transfer of spent fuel back to Russia. This model of bilateral cooperation appears in the intergovernmental documents regulating Russia's nuclear projects in Bangladesh, Belarus, Iran, Turkey, and Vietnam. Such an approach fully addresses concerns over possible proliferation at the nuclear facilities built as part of the joint projects.

In order to create an additional mechanism of guaranteed supplies of uranium enrichment (which is one of the most sensitive and vulnerable parts of nuclear energy projects), Russia has initiated the establishment of the International Uranium Enrichment Center (IUEC), which now operates on Russian territory. The center, designed as an instrument of guaranteed access to uranium enrichment services, is primarily a political initiative that aims to strengthen the nonproliferation regime. The IUEC ideology is focused on the interests of the fledgling nuclear countries whose demand for enrichment services remains fairly limited at this early stage. Under the terms of agreement of the center's establishment, its main objective is "to provide guaranteed access to uranium enrichment…primarily to the participating organizations from countries which are not pursuing uranium enrichment on their own territory." At the same time, the countries wishing to join the center are not under any obligation to pledge not to develop enrichment technologies on their own territory. At present, the list of participating states includes Russia, Armenia, Kazakhstan, and Ukraine.[8]

Russia has also implemented a project to create a guaranteed reserve of nuclear fuel in the form of low enriched uranium (LEU). The idea behind the creation of this fuel bank is to have a backup mechanism, under IAEA auspices, that countries can utilize if they are unable to buy LEU on the open market for political reasons. Thus, a country can buy LEU from the established LEU reserve at market prices to ensure that its nuclear power plants can operate without interruption. The accumulation of the guaranteed reserve of 120 tonnes of LEU was completed in November 2010. The agreement between Russia and the IAEA on the creation of the guaranteed stockpile entered into force on February 4, 2011.[9] Russia has agreed to bear all the costs, including maintenance, accumulation of the stockpile, and the cost of shipping the LEU if a decision is made to use uranium from the stockpile. The market value of the stockpile is about $300 million.[10]

Nuclear Nonproliferation

On the whole, the NPT has long played, and continues to play, a key role in preventing the acquisition of nuclear weapons by new countries. At the same time, the regime is facing a growing number of challenges. These include:

1. Unresolved and dangerous crises related to the fulfillment of nonproliferation commitments by NPT members.
2. Growing global instability and unpredictability, which encourage some countries to review their stance on nuclear nonproliferation.
3. The existence of the black market, which to a certain extent caters to the illicit demand for nuclear technologies, equipment, and materials.
4. A growing gap between the declarations of governments on nuclear nonproliferation and the actual steps taken; the inability of the international community and certain countries to implement their own decisions and abide by their own commitments.

Unfulfilled Nonproliferation Commitments by NPT Members

Russia is particularly concerned by the existing and potential signs of crisis of the nuclear nonproliferation regime developing in close proximity to its national borders. The two areas of particular concern are the Iranian and North Korean nuclear programs. In addition, the unresolved and frequently escalating nuclear crises in North Korea and Iran, including the crisis triggered by the third North Korean nuclear test on February 12, 2013, have a negative and destabilizing influence on the NPT review process and the

nuclear nonproliferation regime as a whole. These crises also have many other serious side effects.

North Korea's withdrawal from the NPT, along with its nuclear tests, has encouraged South Korean and Japanese interest in a nuclear option. Polls in South Korea indicate that about 70 percent of the people favor the idea of the country developing its own nuclear arsenal. Speaking at a conference in Washington in March 2013, Chung Mong-joon, an influential member of the South Korean parliament, said, "Facing an extraordinary threat to national security, South Korea may exercise the right to withdraw from the NPT as stipulated in Article X of the treaty. South Korea would then match North Korea's nuclear program step by step, while committing to stop if North Korea stops."[11] Meanwhile, as part of ongoing work to amend the constitution, Japan is considering the possibility of adopting a new interpretation in regard to the role of a nuclear element in its national security strategy. These trends in both countries are clearly cause for alarm, given that in two separate periods over the past forty years South Korea has conducted undeclared applied nuclear research that can be used for military purposes, while Japan has the technological capability to acquire nuclear weapons in a matter of months if a political decision is made to do so.

Russia advocates a resolution of the nuclear nonproliferation challenges on the basis of the NPT, with an emphasis on the inviolability of the treaty's provisions, while taking into account the security and development needs of all states. Given that North Korea has already conducted three nuclear tests, it appears that the first goal of the dialogue and contacts with Pyongyang should be to prevent the spread of nuclear technologies, materials, and know-how to third countries, especially to states in the Middle East that have cooperated with North Korea in the past on missile technologies, in some cases as far back as the 1980s.

In regard to the Iranian nuclear crisis, the demands put forward by the international community to Tehran must be realistic. In particular, it is unrealistic to attempt to restrict Iran's right to enrich uranium. Arguably, the most effective way of resolving the crisis would be a simultaneous two-track dialogue between the P5+1 and Iran, as well as between Washington and Tehran. The first track can be made more effective by greater coordination and harmonization of efforts among the P5+1. It is also necessary for all six countries to demonstrate that every measure being applied now is aimed

only at preventing the acquisition of nuclear weapons by Iran, as opposed to advancing some hidden agenda, including regime change in that country.[12]

Furthermore, as part of the efforts to resolve the crisis over the Iranian nuclear program, the P5+1 and other relevant countries must be more selective in their choice of measures adopted. In a number of cases, some of the tools ostensibly aimed at resolving the Iranian nuclear crisis actually pose an even greater threat to the dialogue with Iran and to international security in the long term – a threat that outweighs any positive effects such measures might bring. A case in point is the campaign to stoke up fears over the safety of the Bushehr NPP in the wake of the nuclear accident at the Fukushima nuclear power plant in 2011 and the earthquake in southern Iran in 2013. The campaign has had a negligible effect among the Iranians, most of whom still strongly support the country's pursuit of the development of nuclear technologies. However, it represents a potential challenge for effective coordination of efforts by Russia and the Western countries within the framework of the P5+1, because the Russian nuclear industry is the main contractor in the Bushehr project.

Furthermore, the attempts to damage Iran's nuclear infrastructure (including the Bushehr NPP) through the use of malicious software have opened a Pandora's Box of cyber warfare. Attacks on sensitive facilities with cyber weapons are unprecedented. In the longer term, the problem of cyber weapons is a far more serious challenge for developed countries than for nations such as Iran, because their critical infrastructure is far more reliant on IT than that of developing countries.

The Effect of Growing Global Instability on Nuclear Nonproliferation

The changing situation in several regions, especially in the Middle East and the Korean peninsula, has prompted certain states to review their stances on nuclear nonproliferation. Governments worry about the use of force in international affairs, and are afraid of possible foreign intervention. As a result, they begin to look for potential allies, as well as for the means to protect themselves from possible attack. Finding allies is difficult for those countries that are in a state of bitter political confrontation with the West. Consequently, such countries are tempted to review their commitments under the NPT (although Article X of the treaty does in fact allow countries to withdraw from the NPT, under certain conditions). Some researchers in

the Middle East and South Asia have drawn conclusions that are highly disturbing for the nuclear nonproliferation regime. They believe that the Third World nations must acquire nuclear weapons in order to safeguard their national sovereignty, while those states that already have nuclear arsenals should not give them up. They argue that nuclear weapons are the only reliable guarantee of non-interference by foreign powers.[13]

Proponents of this school of thought point to Libya as a powerful example. Colonel Muammar Qaddafi relinquished Libya's WMD programs (which were in a nascent state in any case), but was then deposed by forces that had direct support from several Western nations. Pyongyang has certainly drawn very clear conclusions from that affair. Speaking at a plenary session of the Central Committee of the Workers Party of Korea in March 2013, North Korean leader Kim Jong-un said, "Without acquiring strong military capability, it is impossible to protect national sovereignty." He added, "We should not forget the bitter lesson of the countries…in the Middle East, which…failed to develop a powerful defensive capability, yielded to foreign pressure…and relinquished their already existing deterrent, only to become victims of aggression."[14] Clearly, foreign meddling in Libya and Syria has also produced a negative impact on internal political dialogue in Tehran with regard to the possible ways of resolving the crisis over the Iranian nuclear program.

The Black Market and the Demand for Nuclear Technologies

The potential illicit demand for nuclear and dual use technologies can be met by the black market. This was of major concern for the international community as the black market phenomenon expanded through the 1980s and 1990s. The best known documented case of the involvement of non-state actors in the proliferation of information, materials, and technologies related to nuclear weapons was the underground network created by Abdul Qadeer Khan, a Pakistani nuclear scientist. The full geographical extent of the network, and the range of items supplied through it, remains unclear to this day. Although Pakistan has implemented a number of safeguards to prevent a recurrence of the problem, including stronger export control measures, concerns remain about possible proliferation from that country.

These concerns are explained first and foremost by the general security situation and high terrorist activity in Pakistan, which is largely a consequence of instability in neighboring Afghanistan. Pakistan faces a major problem with

the prevention of unauthorized handling of nuclear materials, technologies, and ammunition by scientists, military officers, and other personnel who have access to such materials in their line of duty. There is growing anti-Western and Islamist sentiment in the Pakistani armed forces. In November 2010, the present author met the then-governor of the Punjab province, Salmaan Taseer, at his residence in Lahore, which was heavily protected by Mr. Taseer's personal guard. Only five weeks later, on January 4, the governor was assassinated by one of his own bodyguards who apparently was a radical Islamist.

In addition, there is increasing concern over the situation in Pakistan owing to the growing nuclear rivalry between Islamabad and New Delhi. Pakistan is pursuing programs with a view to enhance its nuclear weapons technology, primarily by achieving greater accuracy of nuclear delivery systems and improved synchronicity of nuclear detonations. There is a suspicion that Islamabad could try to gain access to the necessary technologies and materials via the black market for WMD-related materials and technologies. Meanwhile, concerns over the possibility of illicit supplies of nuclear-related materials and technologies are not limited to Pakistan. According to an IAEA investigation, the A. Q. Khan network involved individuals and entities from more than 30 countries aside from Pakistan.

Another pressing concern is the need to prevent nuclear materials from falling into the hands of non-state actors, with an emphasis on terrorist organizations and their supporters. Russia consistently advocates the universalization of international legal mechanisms in the area of nuclear security, including the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) and the Convention on the Physical Protection of Nuclear Material (CPPNM), as well as the amendment to the latter convention.

In recent years, Russia has substantially increased its contributions to nuclear security projects in other countries. In late 2010, it announced a decision to contribute $6.5 million to the IAEA Nuclear Security Fund for the period 2010-2015. In addition, Russia contributed $3 million to a project dedicated to the removal of irradiated HEU fuel from the Vinca research reactor in Serbia, and pledged $40 million for clean-up projects at uranium mining facilities in Central Asian states. In the 1990s and early 2000s, Russia was the largest recipient of international assistance for nuclear security projects. Today, Russia finds itself in a stronger economic position,

and has also acquired valuable expertise in such projects. As a result, Russia has become one of the largest donors to international projects designed to strengthen nuclear security in countries around the world.

Closing the Gap between Governments' Words and Actions

There can be no major progress in strengthening the nuclear nonproliferation regime as long as we are encumbered by numerous incomplete projects, some of which were launched more than fifteen years ago. An additional problem relates to the poor implementation of decisions taken at the NPT Review Conferences, which are held every five years.

One of the most obvious examples is the Comprehensive Nuclear Test Ban Treaty (CTBT), which was opened for signature in 1996 but has yet to enter into force. Eight of the countries whose ratification is required for the treaty to enter into force have yet to sign and/or ratify. The United States played a major role in drawing up the text of that document but has yet to ratify it. Progress in that area could be facilitated if the United States were to ratify the treaty. If Washington were to set a positive example, China, India, and Pakistan might follow suit under certain conditions.

A successful outcome of the current NPT Review cycle will largely depend on the ability of the NPT depositary countries, the UN, and the facilitator (representing Finland) to convene the conference on a Middle East zone free of weapons of mass destruction in 2014. A lack of progress in this area could potentially lead to a further weakening of the NPT and the nonproliferation regime. The results of the NPT Second Preparatory Committee meeting in 2013 suggest that a lack of progress in this area could have a very negative impact on the nonproliferation regime in the Middle East. The launch of the conference could also help identify solutions for the ongoing nonproliferation crises in the region.

As far as nuclear security is concerned, we have seen some positive results following the implementation of the commitments undertaken by governments during the series of nuclear security summits initiated by the Obama administration. However, the initiative's effectiveness is diminished by the inability of several countries to fulfill their commitments, including the ratification of two key nuclear security documents: the amended CPPNM and ICSANT. The United States, one of the main proponents of the nuclear security initiative, is actually one of the countries that have yet to ratify the two documents.

Notes

This article reflects the author's understanding of the Russian policy on nuclear nonproliferation. It does not necessarily reflect the official Russian position.

1 Vladimir Dvorkin, "Deterrence and Strategic Stability," in *Nuclear Weapons after the Cold War*, eds. Aleksey Arbatov and Vladimir Dvorkin (Moscow: Carnegie Moscow Center, 2006), pp. 25-46; see in particular p. 30.
2 Remarks by the head of the Russian delegation, and the head of the Foreign Ministry's Security and Disarmament Department M. I. Ulyanov at the second session of the 2015 NPT Conference Preparatory Committee on the first block of issues (nuclear disarmament), Vienna, May 5, 2012, http://www.geneva.mid.ru/rus/sq/dis2_04.html.
3 The New START treaty entered into force on February 5, 2011.
4 US Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms: Fact Sheet," Bureau of Arms Control, Verification and Compliance, April 3, 2013, http://www.state.gov/t/avc/rls/207020.htm.
5 Aleksandr Emelyanenkov, "Nuclear Weapons Straying Out of Bounds," *Rossiyskaya Gazeta*, August 24, 2012.
6 Russian Foreign Policy Concept, paragraph 70, approved by Russian President Vladimir Putin on February 12, 2013, http://www.mid.ru/brp_4.nsf/0/6D84DDEDEDBF7DA644257B160051BF7F.
7 See note 5.
8 Anton Khlopkov, "How to Prevent the Proliferation of Nuclear Fuel Cycle Technologies: Russian Initiatives," *Yadernyy Klub* No. 2 (2011), p. 20.
9 Anton Khlopkov, "Practical Implementation: the Russian Experience," in *Multilateralization of the Nuclear Fuel Cycle: The First Practical Steps*, ed. Yuri Yudin (New York and Geneva: UNIDIR, 2011), pp. 14-16.
10 Khlopkov, "How to Prevent the Proliferation of Nuclear Fuel Cycle Technologies," p. 20.
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Pakistan's Security Perceptions and their Adverse Impact on the Global Nuclear Order

Nir Reichental

The Focus on Pakistan and Nuclear Exports

Pakistan and its nuclear program have been at the center of global attention since the start of the millennium. The focus on Pakistan's nuclear dimension by decision makers, scholars, and the media, particularly in the United States and other Western countries, has been linked largely to two overriding concerns: the risk of a military conflict between India and Pakistan, which could include the use of nuclear weapons, and the danger that Pakistan's nuclear assets could fall into the hands of extremists. These concerns mounted following Pakistan's decision in May 1998 to abandon its opaque nuclear posture and conduct its first nuclear tests, and with the growing number of terror attacks within Pakistan, including against military facilities and institutions.

Yet without underestimating the gravity of the aforementioned issues, the main threat emanating from Pakistan as a nuclear weapon state has been nuclear proliferation to foreign countries. The three rogue regimes of Iran, Libya (under Qaddafi), and North Korea, which have demonstrated strong hostility toward the United States and the West in general, all received assistance from nuclear scientists based in Pakistan. The dissemination of nuclear technologies, materials, and know-how to Iran, for example, has been a significant element in its suspected nuclear weapons program.

The nuclear assistance from Pakistan was carried out by Abdul Qadeer Khan (A. Q. Khan), one of the leading personalities within Pakistan's nuclear weapons program and the authoritative director of a state-run

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nuclear organization, the Khan Research Laboratories (KRL). A. Q. Khan masterminded a new modus operandi for assisting foreign countries in the establishment of their nuclear weapons programs, and orchestrated a nuclear proliferation network based in countries spanning three continents and with nerve centers in Pakistan's KRL and in Dubai. At the same time, it appears that the threat of additional nuclear exports from Pakistan has diminished considerably in the past few years. Officially, the proliferation network was publicly exposed and dismantled by 2004. A. Q. Khan and his associates were interrogated and removed from their positions in Pakistan's nuclear establishment (Khan himself was already forced to retire in 2001). Other members of the network, particularly in Europe, were also arrested. Moreover, since the clampdown on the proliferation network, no substantiated information has surfaced regarding renewed efforts from Pakistan to export nuclear technologies.

This article argues, however, that in spite of the apparent termination of the proliferation network, the possibility of the renewal of nuclear proliferation activity from Pakistan cannot be discounted. The likelihood of renewed nuclear exports is strongly connected to the whims and perceptions of the senior echelon of Pakistan's military establishment. The article first illustrates the dominant position of the Pakistan Army in national security issues, with a focus on the control over the nuclear program. It then reviews the salient elements of the army's strategic thinking. Finally, some conclusions will be put forward regarding the possibility of renewed Pakistani nuclear assistance to foreign countries.[1]

An Army with a Nuclear Weapon State

Following the partition process within the Indian subcontinent that led to Pakistan's independence in August 1947, the Pakistan Army became the dominant organization within the country's defense establishment and took control over various military functions. The British colonial experience shaped the internal relations between the different organs of Pakistan's defense establishment,[2] and civilian agencies whose input is essential for formulating defense policy and planning, specifically the Ministry of Foreign Affairs, have over the years been marginalized by the military establishment.[3] Thus since the first military coup of 1958, the military establishment has taken responsibility for national security matters and has become the hub of strategic planning.

Pakistan's intelligence apparatus is a prominent element within the defense establishment, and is considered most influential in decision making. The Directorate of Inter-Services Intelligence (ISI) is the operational arm of the military for special and sensitive missions; the scope of its activities has always been broader than the traditional responsibilities of intelligence agencies.[4] The ISI has been involved in various key events that have determined Pakistan's strategic situation and its national security thinking, such as the insurgency in Afghanistan against the Soviet military presence between 1979 and 1989.[5]

A few years after the inception of Pakistan's nuclear weapons program in 1972 under the charismatic Prime Minister Zulfikar Ali Bhutto, the army gained control over the development of the nuclear program, as part of its effort to exert influence over all national security issues. Thus, it established a control system with a military directorate, known today as the Strategic Plans Division (SPD), to centralize all aspects concerning Pakistan's nuclear dimension. The SPD was designated as the secretariat of the National Command Authority (NCA) which formally controls Pakistan's strategic capabilities. Its duties include supervising the nuclear agencies, the Pakistan Atomic Energy Commission (PAEC) and the KRL, and formulating the nuclear policy. The SPD works on the nuclear issue in coordination with the Military Operation Directorate, which functions as the army's hub for operations, plans, and military thinking, and with the Army Strategic Forces Command (ASFC), which is responsible for the operational nuclear missile units.[6]

Moreover, the Director General of the SPD reports directly to the army's chief of staff, who is considered to be the most powerful official both within the defense establishment and in Pakistan's internal arena. Army chiefs have exerted direct control over the country (by conducting military coups) in 32 out of the last 67 years since Pakistan's independence. Furthermore, decision making by the chief of staff occurs among a very small group of confidants, including generals in key positions at the army headquarters, the heads of the intelligence apparatus, and prominent corps commanders. Since the national leadership and various military and defense agencies do not place constraints on the chief of staff, he can implement his own agenda with the tacit consent of his close associates with regard to Pakistan's nonproliferation policy. Thus, the army is a pivotal player when evaluating the option of nuclear proliferation from Pakistan.

The proliferation network was originally established in the late 1970s, based on army instructions to acquire technologies and materials for Pakistan's own efforts to develop nuclear weapons. Shortly after Pakistan obtained a nuclear capability, A. Q. Khan began to utilize the network for a nuclear export project, offering to construct nuclear weapons programs based on uranium enrichment technology. Between 1987 and 2003, Khan delivered similar offers to a number of countries: Iran, Libya (under Qaddafi), North Korea, Iraq (under Saddam Hussein), and probably Syria too. Significant amounts of advanced technologies, such as centrifuges, were transported in several air shipments from the KRL facilities by an air freight company with a military affiliation.

Furthermore, there are strong indications that the army was aware of the nuclear exports. For example, according to American officials, in the early 1990s Pakistan Chief of Staff General Aslam Beg issued threats regarding the initiation of nuclear exports. In addition, the United States issued warnings, publicly and in meeting with SPD officials, about A. Q. Khan's activities. Moreover, upon evaluation of the scope and duration of the nuclear export project, it resembles a government-to-government cooperation venture rather than an isolated smuggling initiative carried out by a small group of rogue nuclear scientists and their associates.

Strategic Thinking through an India-Centric Prism

Due to the dominant position the military holds in Pakistan, the state's national security framework was conceived and shaped in the various headquarters of the armed forces and intelligence agencies, as well as in the military's think tanks.

Since the partition of India and Pakistan in August 1947, which sparked large scale inter-communal violence between Muslims and Hindus and the flow of millions of refugees, Pakistan's defense chiefs have viewed India as their main adversary. The abrupt onset of Pakistan's independence created various complications for the newborn state, which lacked any proper institutions and bureaucracy. Pessimistic Indian assessments ignited Pakistan's concerns about Indian aspirations to integrate Pakistan into the Indian federation.[7] In addition, a few months following the partition, both countries clashed over the control of the Kashmir region – a conflict that remains unresolved. Moreover, India threatens the very core of Pakistan's legitimacy by representing an opposite model for self-determination: while

Pakistan officially presents itself as the national homeland for Muslims in South Asia, India is a secular state that encourages the assimilation of Muslims in its society, including its civil service and political system. Pakistan's position was weakened following the 1971 war when it lost its eastern region (Bangladesh), undermining its claim to represent the majority of Muslims in South Asia.

These historical circumstances led to Pakistan's designation of India as its main foe. Pakistan seeks military parity with India, to enable Islamabad to promote its interests in South Asia and to challenge India's military dominance, which has overshadowed Pakistan's international and regional position. Thus, Pakistan has seen the need for an alliance with a superpower (usually the United States) in order to create a balance with India; it has sought "strategic depth," including control of Afghanistan; and it has pursued a close relationship with China, in view of Beijing's hostility towards New Delhi, reflected through the Sino-Indian military conflict of 1962.

Pakistan's political and military leadership has always sought to establish a central role for Pakistan among Muslim countries and in international and regional arenas: through Islamabad's efforts to portray itself as a homeland for Muslims, it has pursued a position of leadership within the Islamic world. However, Pakistan has been powerless to enforce its interests in its rivalry with India as a result of the latter's superior position in South Asia. The military balance has always been in India's favor, as New Delhi has possessed the resources to become a potential regional power in Asia and even a major world power. By acquiring parity with India, Pakistan would be emboldened in promotion of its agenda for Kashmir.

In 1948 and later in 1965, Pakistan failed in its efforts to use conventional force in a bid to occupy the Indian part of Kashmir, despite taking the initiative and exploiting the element of surprise. Similarly, in the Kargil Operation of spring 1999, Pakistan sought a limited territorial achievement in Kashmir. The operation was designed to force India into negotiating from a weakened position on the future of the region. This too was a failure in spite of the limited scope of the Kargil Operation and its goals.

As a result of Pakistan's lack of success in the use of conventional force, Islamabad decided to turn to asymmetric means in order to neutralize India's growing conventional superiority. Pakistan initiated its efforts to acquire a nuclear capability in the early 1970s, as a response to the development of India's nuclear program and the catastrophic outcome of the Indo-Pakistani

War of 1971. Overall, Pakistan's defeats in the wars of 1947-1948, 1965, and 1971 severely damaged Pakistan's ability to force India to negotiate a political settlement over Kashmir.

Pakistan apparently aspired to utilize its successful acquisition of nuclear capabilities in several ways in order to narrow the power gap with India. First, Pakistan's nuclear expertise and materials were offered for sale in order to help alleviate the financial burden of its development of nuclear and missile programs and to fund extensive military attacks in Indian-held Kashmir. Second, Pakistan contacted Muslim countries in order to help them develop their indigenous nuclear capabilities in return for support in its struggle against India. Thus, Pakistan's closer relationship with Iran, reflected through its provision of nuclear assistance to Tehran, is viewed by Islamabad as a potential asset in the event of an all-out war with India.[8] Third, it appears that Pakistan has exploited the issue of nuclear proliferation to strengthen its leverage over the United States and preserve American military and economic assistance to Islamabad. The consolidation of American support has been one of the main pillars in Pakistan's strategy of modifying the strategic balance with India.[9] The nuclear export project was active largely in a period when Pakistan was under severe US economic and military sanctions (from 1990 and until 2001). Fourth, in the specific cases of China and North Korea, nuclear assistance was offered in return for a desired military capability that significantly improved Pakistan's deterrence against India: Pakistan received long range missile systems (technically capable of carrying nuclear warheads) from North Korea and critical nuclear assistance from China in the early stages of Pakistan's nuclear weapons program.

Conclusion: A Renewal of Nuclear Exports?

Islamabad's nuclear export policy has traditionally been closely connected to the calculations derived from its military establishment's national security agenda. The Pakistan military establishment's fixation on India has been the main factor behind the decision to assist foreign countries in their nuclear weapons programs. This reasoning can also explain Pakistan's efforts in the last few years to expand its own nuclear program by initiating a long term project of constructing more nuclear reactors, which are also needed due to the country's power shortage. Pakistan is also devoting considerable resources to upgrade its arsenal with advanced capabilities such as new delivery systems

and small tactical nuclear weapons. These efforts are primarily a reaction to India's own ambitions to enhance its nuclear capability.

Furthermore, the imbalance between India and Pakistan continues to grow at Islamabad's expense. From the perspective of the Pakistan Army, the strategic situation has deteriorated since the dismantling of A. Q. Khan's proliferation network in 2004. In this period, in the context of China's rise, the United States made a decision to establish close defense cooperation with India. The US also accepted India as a de facto nuclear weapon state when it signed a cooperation agreement with it in the civilian nuclear sphere. In essence, the US agreed to treat India as a special case in the nuclear realm.

However, Pakistan did not enjoy the same special treatment, even as India's nuclear ambitions forced Islamabad to invest more efforts in its own nuclear development. Moreover, the US tilt toward India threatens Pakistan's regional position and any prospect of a strategic balance with India. While the United States has provided significant military and economic assistance to Pakistan since the September 11 terrorist attacks (totaling more than $20 billion) and has designated it as an ally in the "War on Terror" in Afghanistan, Washington has a very narrow interest in Pakistan with regard to confronting the global terror threats. The US military withdrawal from Afghanistan by the end of 2014 is expected to minimize the shared interests between the two countries. Indeed, the US and Pakistan are already in disagreement over the future of Afghanistan.

Yet despite the growing hostility of the Pakistan military establishment toward Washington and its determination to strive for a balanced regional power structure with India, its senior command still values the ties with the US. Furthermore, in its efforts to ameliorate Islamabad's problematic strategic situation, the army's top brass is considering alternative options aside from nuclear exports, such as the strengthening of ties with China as a counterweight to India. While there has been a rise in Islamic influence within the army, reflecting trends among the Pakistani public as a whole, the army leadership is not under the influence of radical Islamic ideology when national security issues are at stake.

Pakistan's defense establishment's obsession with the perceived threat from India and the belief that the United States is behind this threat increases the probability of a renewal of nuclear exports. As long as Pakistan's national security perceptions remain in place, there will be a strong conflict of interests between Pakistan and the US, particularly after the withdrawal of US forces

from Afghanistan. As before, the main clients of Pakistan's nuclear exports stand to be in the Middle East. Countries such as Saudi Arabia, Egypt, and the United Arab Emirates have already expressed an intention to develop advanced nuclear programs. Furthermore, as new regimes in the Middle East develop an interest in nuclear weapons as a security guarantee against a nuclear Iran, the region is expected to become more unstable. Pakistan may be one of the only countries that can assist these regimes.

In order to strengthen controls over the organizations dealing with the nuclear realm, and to prevent a recurrence of nuclear proliferation originating in Pakistan, there is a need for reforms in the Pakistani defense establishment. Sound decision making will also necessitate greater cooperation between the various defense agencies dealing with national security, based on the unfulfilled reforms that Zulfikar Ali Bhutto sought to implement in the defense establishment. As well as empowering inter-agency mechanisms for defense issues, it is vital to strengthen the civilian flank of the defense establishment. The main consideration should be to allow traditionally moderate agencies, such as the Ministry of Foreign Affairs, to exert greater influence and prevent a recurrence of nuclear exports from Pakistan.

Notes

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3 Ibid, p. 72.
4 Maloy Krishna Dhar, "Inter-Services Intelligence: Pakistan's Long Arm of Proxy-War and Jihad," in *Pakistan After 9/11,* ed. Sreedhar (New Delhi: Manas Publications, 2003), p. 246; Pakistan's Ministry of Defence, *Defence Division Yearbook 2004-2005* (Rawalpindi: Ministry of Defence, 2005), p. 113.
5 Shuja Nawaz, *Crossed Swords: Pakistan, Its Army, and the Wars Within* (Oxford: Oxford University Press, 2008), p. 373.
6 "Pakistani Views on Fissile Material Cut-off Treaty (FMCT) Still Malleable" (cable code: 09ISLAMABAD2840, November 24, 2009), Wikileaks database of US diplomatic cables.
7 Husain Haqqani, *Pakistan: Between Mosque and Military* (Washington DC: Carnegie Endowment for International Peace, 2005), pp. 26-27.
8 Asma Shakir Khawaja, *Pakistan and the "New Great Game,"* Islamabad Policy Research Institute, April 2003; Christine Fair, "Indo-Iranian Ties: Thicker than Oil," *Middle East Review of International Affairs* 11, no. 1 (2007), pp. 42, 44.
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PART IV

The Verification Challenge

The IAEA Verifications System in Perspective

Olli Heinonen

The nightmare scenario envisioned by President John F. Kennedy in March 1963, that by the 1970s we would live in a world where as many as 25 states possessed nuclear weapons, did not materialize.[1] Nonetheless, over the last two decades, a number of nuclear proliferation cases have challenged the nuclear weapons status quo. Much of the achievements to prevent the spread of nuclear weapons can be attributed to the Nuclear Non-Proliferation Treaty (NPT), and to the work of the nuclear watchdog, the International Atomic Energy Agency (IAEA). Nonetheless, the new cases of proliferation reveal weaknesses in the IAEA verification systems, and illustrate states' willingness to circumvent international safeguards. These cases also highlight the need to recognize that safeguards verification is a work in progress that must adapt to evolving challenges and technology. The IAEA has taken action in a number of instances to rectify its various shortcomings, such as adopting the Model Additional Protocol, revising the Small Quantities Protocol, and advocating a more analytical safeguards culture. These and other efforts have had varied levels of support from its member states.

Timely detection, prevention, and deterrence of states' proliferation-related activities in order to ensure the purely peaceful nature of nuclear power use should, at best, be understood as without absolute guarantee. Rather, safeguards can only strive to reduce the uncertainty factor as much as possible. Understanding this calls for the need for strengthened safeguards as well as resources. Both have not been easy to secure, and the path forward will likely face a similar trajectory. What this means is that effective international

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safeguards must embody up-to-date verification tools and enhanced access to relevant information on nuclear programs. This paper highlights the difficult environment the IAEA faces regarding proliferation challenges[2] and its responses to these challenges, with some lessons learned.

Addressing Nuclear Intents

The NPT seeks to prevent diversion of nuclear energy to military purposes, and non-nuclear weapon states (NNWS) parties to the NPT are obliged to accept safeguards with the aim of preventing the diversion of nuclear energy from peaceful uses.[3] To this end, in 1972 the IAEA Board of Governors laid down a model Comprehensive Safeguards Agreement (CSA), under which the NNWS accept and are bound by safeguards undertakings.[4]

The IAEA CSA states that *"*the objective of safeguards is the timely detection of diversion of significant quantities of *nuclear material* from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection."[5] However, these early safeguards, which focus on nuclear material and states' declared nuclear material, were clearly limited and did not stand up to the stated safeguards objectives. It took the revelations from Iraq's nuclear program to galvanize the IAEA Board to revisit the rights and obligations of states under IAEA CSA safeguards. In 1992, the IAEA Board reaffirmed that the Agency was also obliged to verify the correctness and completeness of declarations.[6] To ensure it had the proper tools to carry out its job, the Additional Protocol (AP) was negotiated, which gave the IAEA additional rights to access information, including certain sites and locations not utilizing nuclear material.[7]

While the AP was significant in that "old" safeguards were transformed to include wider access and improved means to investigate undeclared nuclear materials and activities, inherent tensions remain in verifying the purely peaceful nature of nuclear power use. Since nuclear energy is a dual use technology, states that operate the sensitive aspects of nuclear enrichment and/or reprocessing can in principle harness the knowledge for non-peaceful purposes. And while the AP provides for assurances of the absence of undeclared parts of a state's nuclear program, it is always a challenge to credibly confirm an absence of proscribed activities. As history has shown, a state can well run a separate military nuclear program completely detached from its civilian program and devise ways to avoid or circumvent detection.

Detection is not impossible, but it demands much attention, access, legwork and a certain amount of luck.

In its 2011 annual Safeguards Statement, the IAEA concluded:

> Safeguards activities were implemented for 61 States with comprehensive safeguards agreements in force, but without additional protocols in force. For these States, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities. On this basis, the Secretariat concluded that, for these States, declared nuclear material remained in peaceful activities.[8]

The statement continued that in the course of its evaluation, the Agency also seeks to determine whether there is any indication of undeclared nuclear material or activities in the state. Significantly, the Agency does not assign any value on how confident it is about the absence of undeclared or military related activities. For the 58 states where both the CSA and AP are in force, the Secretariat stated that it "found no indication of the diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material or activities. On this basis, the Secretariat concluded that, for these States, all nuclear material remained in peaceful activities."

These safeguards statements need to be read and understood in the context of what can and cannot be achieved. The IAEA is not able to verify the current or even future intentions of a state. Nuclear weapons programs of state members of the NPT would of course be highly secret and compartmentalized, and would leave few if any signs, particularly at the early stages of the programs, about the true intentions of the state. In addition, a state may build nuclear threshold capabilities, or even become a virtual nuclear weapon state, just a few screwdriver turns away from being able to manufacture a nuclear weapon. A state can also run both its civilian and military programs in parallel, choosing not to use nuclear materials in its weapons development, while at the same time mastering the enrichment technology from its civil nuclear program. Contrary to what is commonly understood, the AP does not provide the IAEA with unfettered access. Given that IAEA access to all relevant information – even under the AP – faces certain limitations, assurances provided on the peaceful nature of the program remain credible, with caveats.

It can be argued that a virtual nuclear weapon state could, at least in theory, be in compliance with its safeguards agreement. In reality, however, this is certainly not the case, nor should it be interpreted as such, as it goes against the spirit of the NPT and of common sense. The cases of Iraq, Libya, and Iran in the 1980s and 1990s demonstrated that such statements in the Annual Safeguards Implementation Reports, based mainly on the confirmation of the non-diversion of declared nuclear material (or CSA safeguards), created false illusions about the lack of nuclear weapons-related activities underway. Certainly, the IAEA has come a long way since the "old days" in strengthening and adapting safeguards. Also, while a number of states have failed in their reporting procedures or have provided information only after the IAEA found inconsistencies in their declarations, many of these lapses have been corrected, nor did they exhibit the scope, extent, and content that would fall under the suspicion of non-compliance. But we are also living in a different world today with a diffusion of sensitive nuclear technologies, increased nuclear technical know-how, and an unsettled and unmapped future nuclear landscape in the Middle East with the threat of a nuclear Iran.

In light of these complexities, it would be useful for the IAEA Secretariat to look at further developing and disclosing the criteria and basic parameters, along with the confidence levels it employs in assessing the peaceful use of nuclear materials. Such methodologies were delineated in two reports, one for Iran and another for Syria,[9] but there is no comprehensive explanation available on the practices used.

Access Rights and Transparency Visits

The strength of IAEA safeguards is to be found in its access to NPT member states' information, nuclear material, sites, and people. These access rights were limited under the traditional CSA, but the Secretariat has sought the cooperation of inspected states by asking for additional information or access. When the AP was not yet in force, such access took place under the name of transparency visits. The Secretariat used the term "transparency" or "technical" visits, which on the one hand gave it a less confrontational cover, but at the same time was based to a large extent on the goodwill of the inspected party to allow such visits. Today, difficult non-compliance cases such as Iran mean that AP-plus type access to sites, location, and information are required. For Iran, where the AP is not in force (Iran signed but did not ratify the AP), and with requests that go beyond even the AP, the IAEA's

authority to conduct more rigorous inspections stems from the UNSC and IAEA Board resolutions. While under the UN Charter the Security Council resolutions are binding, this does not change the fact that the inspected state (Iran) continues to see and treat such visits as based on its own goodwill, while claiming that the resolutions are illegal. In other cases, where states do not have an AP in force but where the IAEA seeks greater access, the "transparency type" scenario re-emerges.

The limitations of transparency visits are well known. In the early 1990s (pre-AP days), then-IAEA Director General Hans Blix advocated voluntary "transparency visits" to clarify questions and ambiguities that were raised by the international community. When allegations on clandestine nuclear activities in Iran in the early 1990s began to emerge, the IAEA tried to clarify claims by conducting "transparency visits." Given both the prevailing safeguards culture at that time and the fact that the said transparency visits were not carried out with due technical inspection procedures (e.g., actual verification activities), in hindsight the limitations of such visits are clear. Thus, IAEA statements issued then stated that "activities...at...facilities and sites were found to be consistent with the peaceful application of nuclear energy and ionizing radiation."[10]

Moreover, the limitations and conclusions drawn from these transparency visits were not well understood by the Board and the general public. It was not obvious that assurances made by the IAEA through press statements and in its Board meetings – that no evidence was found on undeclared nuclear activities in Iran – were actually not based on the results of rigorous safeguards verification. In the same period, similar transparency-type visits were conducted in North Korea. But when additional difficulties regarding North Korea's statements on its plutonium inventories arose in September 1992, the IAEA Secretariat reverted to the use of provisions in its safeguards agreement with North Korea that included a call for a special inspection at a later date. The IAEA subsequently gathered additional evidence by utilizing new tools such as environmental sampling and satellite imagery.

Following the September 2007 bombing of a reactor at Deir ez-Zor/ al-Kibar in Syria, and given the limited information available, the IAEA initially sought explanations from Syria under the "transparency" umbrella. In October 2007, the Agency issued a statement[11] referencing open source reports, which alleged that the installation in Syria that was destroyed in September 2007 was an undeclared nuclear facility. The IAEA stated that

it had no related information about undeclared nuclear facilities, but that it would investigate the open source reports, and that it was in contact with the Syrian authorities. The Secretariat also urged any country having information about nuclear related activities in another country to provide that information to the Agency.

In the period after April 2008, when the US issued public statements on the bombed Syrian facility based upon evidence previously unknown to the Agency, the Secretariat continued seeking answers from Syria as part of a "transparency" understanding. This, de facto, undermined the stronger footing the Agency had with the new evidence emerging after April, inter alia, from environmental sample results indicating existing unreported activities with nuclear material and procurement information. Granted it is doubtful whether Syria would have reacted differently if the Agency presented its requests as exercising its mandated rights under the safeguards agreement. Regardless, it would have clearly acknowledged the Secretariat's full exercise of its legal authority, including that of a special inspection. Such inspection should have been widened to include not only the al-Kibar site, where Syria permitted visits only once, but locations where debris was taken and three other sites mentioned in the IAEA reports, which the Agency believes can shed light on the completeness of Syria's declarations.

At the June 2011 IAEA Board of Governors meeting, Syria was found to be in non-compliance with its Safeguards Agreement and a resolution was passed to refer Syria's case to the United Nations Security Council. At the same time, some delegations, notably Russia, were of the view that the Agency had not yet fully exhausted the evidence and the means to investigate the matter. Had the Secretariat at that time sought a special inspection in Syria, the case could have been clearer. One must also remember that special inspections are not necessarily a location-specific event, but the IAEA could have sought access to information on possible uranium conversion and fuel fabrication activities and attempted to clarify public statements made by Syria on contacts related to uranium enrichment related activities.

Addressing Concealment and Deception: The Case of Syria

As the cases of North Korea, Iran, and Syria have all demonstrated, states can and have used the strategy of denial, misinformation, and delay to hamper IAEA investigations. A closer look at the case of Syria, for example, reveals

that its public statements and communications to the Agency and to the Board as laid out in IAEA public documents do not reflect realities on the ground.

Soon after the bombing in 2007, the Syrian government stated that foreign airplanes had violated its airspace, but left without causing any material damage. Syria then sent a letter to the UN General Assembly complaining about the intrusion and the bombing of military targets on its territory.

The IAEA sought information from Syria concerning the bombed site not long after its destruction. Syria's responses followed the line of public statements saying that the destroyed target was a military installation. Presentation of the satellite imagery that suggested otherwise made no impact on Syrian statements. The IAEA offered to undertake a transparency visit to the site so that Syria could provide proof to support its statements. Moreover, while the sanitization of the site was obvious from satellite imagery, Syria refused the IAEA's request to disclose the location where the site's debris was taken or to allow sample taking. Syria also refused to provide engineering drawings of the destroyed building or any detailed explanation regarding the buildings.

Uranium particle contamination at al-Kibar was at one time explained by the Syrian authorities as resulting from the munitions used in the bombing. In another instance, Syria alleged that the contamination resulted from the winds blowing from al-Qaim milling facility in Iraq to the said site. Likewise, the contamination of natural uranium particles found at the MNSR was initially explained as contamination from imported radioisotope containers. Then, it was alleged a result of uranyl nitrate samples handled at the facility. Finally Syria acknowledged that small scale uranium conversion experiments were carried out at the laboratories at the MNSR. Syria also first denied the existence of nuclear material in its waste storage, but finally acknowledged the IAEA's position that it had failed to report these activities and the nuclear material involved.

In its letter of August 2009, Syria stated that the destroyed building had been under construction at the time of the bombing, and hence could not have been the source of the anthropogenic natural uranium particles collected in the environmental samples. Syria added that due to the disposal of the debris from the site, it was impossible to meet the Agency's request for access to the debris, as the Agency's request had been made more than a year after the destruction of the building. In point of fact, from September 2007 the Agency had asked to see the debris.

Given the nature of investigative procedures, the IAEA Secretariat must meticulously review each claim submitted by the investigated state, spending a fair amount of time as well as analytical resources, including providing additional samples to refute or confirm any claim. Revised explanations slow down the Secretariat, given that each claim must be processed and in most cases refuted. There is a need to rethink the system of the in-house approach to dealing with cases where the inspected party drags matters out and stalls on issues.

It is also necessary to sensitize and familiarize inspectors on the approach of the IAEA and its negotiating tactics in the face of cover-ups and changing explanations, and how not to fall into potential pitfalls and strategies offered up by the inspected state. In cases of misleading or incorrect information by the inspected parties, the IAEA Secretariat has chosen not to enter into a war of words with states. While there are justifications for such an approach, this should also be weighed against the downside of misrepresentation of facts from states on their activities as well as the Agency's activities. Rather than a blanket approach, it may be prudent for the Secretariat to adopt a flexible approach as a model for responding to such cases of misinformation.

Access to Military Sites

Alongside a number of negative stories with regard to requests for access to military sites, the IAEA has one positive story to tell. In the 1990s, the IAEA was able to repeatedly visit military sites and workshops in South Africa without major problems to confirm the dismantlement of its nuclear weapons program, which had taken place before the CSA with the IAEA entered into force.[12] To provide assurances that the program was not reconstituted, the South African authorities agreed to such visits for an extended period of time with the understanding that such visits have a reason. This indicates that the onus of proof to show the peaceful nature of a state's nuclear program is on the state, and the provisions of the CSA do not limit a state to denying access to military sites. Issues of protecting confidentiality to visits within military zones can and have been negotiated and addressed.

Unfortunately, the cases of North Korea, Iran, and Syria tell a different story. Provisions of the comprehensive safeguards agreement oblige states to declare all nuclear material throughout their territory, and the IAEA has a right and obligation to verify this information. Military installations do not constitute a sanctuary to this end. If nuclear material is located in a military

installation, normal safeguards confidentiality rules apply. Turning again to the case of Syria, the IAEA offered Syria access arrangements in May 2008 that were specifically formulated to address security concerns Syria may have. However, Syria was unwilling to engage in substantial discussions on this matter until October 2011. According to Syria, at a subsequent meeting in Damascus in October 2011, IAEA and Syrian officials agreed on a formula that if the Agency was satisfied with information provided by Syria that the destroyed building was not a reactor, the IAEA would have no reason to visit the other three IAEA requested locations. Such an agreement was purportedly recorded in the meeting minutes. However, Director General Amano was not known to have agreed to this approach.

From the point of view of verification, the supposedly agreed-upon approach has several flaws. There are two basic open questions: the bombed building, which was likely a nuclear reactor, and the existence of uranium particles in several samples taken from the site. Even if the Agency is able to solve the problem of the reactor, the existence of the particles at al-Kibar indicates that Syria's nuclear material declaration may not be complete. Some of the technical characteristics at the three additional sites mentioned in the IAEA reports in any case warranted further separate investigations to ensure that Syria has declared all nuclear facilities and materials.

Even then, and even in the event where access is granted under AP terms, the IAEA's job is not over. The IAEA can seek access under Article 4d, but is still very much dependent on the cooperation of the inspected party. All this, while information regarding debris, documentation, and so on risks disappearing or deteriorating. This will make the verification task increasingly difficult. To overcome this problem, the Secretariat should be vigorous from the beginning, and certainly when it becomes obvious that transparency and the provisions of the safeguards agreement are not providing the desired result.

Starting Point of Safeguards

Throughout the IAEA's safeguards history, proliferators have hesitated to divert declared nuclear material, preferring to use undeclared material to decrease the prospect of detection. Loopholes in the safeguards system have been exploited by states. For instance, material drawn from stocks of yellow cake that are not subject to safeguards verification, or from nuclear material exempted from safeguards verification activities, were then converted

and manufactured further without reporting this to the IAEA. At the same time, such unreported uranium conversion activities were often carried out using equipment available at declared conversion and fabrication plants to manufacture fuel rods or targets.

Though the quantities of nuclear material in these cases were small, it reveals the vulnerability of safeguarding the front end of the nuclear fuel cycle. Such steps should also be potential signs for the Agency to be wary of possible diversion. Indeed, all proliferation cases of the last two decades have exploited the front-end cycle weaknesses of safeguards.

Another important factor is that the shipments of ores containing uranium are not subject to reporting under the safeguards agreements and additional protocols. This is a weakness in the system, particularly when uranium concentrations could be high, as is the case with cobalt in the People's Democratic Republic of Congo. By contrast, in Finland two companies separate uranium as a by-product from imported minerals, and report their inventories to the IAEA.[13] The Agency should investigate whether the shipment of ores with high uranium content constitutes a proliferation concern, and take action to close the loophole.

Conclusion

According to a Chinese saying, gold cannot be pure, and people cannot be perfect. Recognizing that there are flaws and imperfections is just as important when it challenges one to seek as good a standard and as much purity as possible.

To continue to achieve its goal of nuclear nonproliferation, the IAEA's safeguards system must continue to seek improvements, while adapting to changing circumstances. The CSA with an AP should be considered as a modern nonproliferation norm. The norm should also include the understanding that cooperation for an AP-plus approach will be provided where needed if requested by the Secretariat. States have competing political interests that make such a scenario unlikely in the near term. It is important that the Secretariat exercise fully its legal rights under the CSA and AP. Budgetary resources are also finite, and thus a strong analytical culture and motivated individuals are necessary to maintain a robust international inspectorate. While the IAEA is striving to achieve all these, without the requisite support and ingredients, existing levels of safeguards should be understood as what

they can do instead of what they should do. None of these measures require any new legal authority.

Notes

1 US Delegation to the 2010 Nuclear Nonproliferation Treaty Review Conference, "Treaty on the Non-Proliferation of Nuclear Weapons," http://www.state.gov/documents/organization/141503.pdf.

2 See for example the following reports on Iran, Libya, and Syria: Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, GOV/2004/11, February 24, 2004; Implementation of the NPT Safeguards Agreement of the Socialist People's Libyan Jamarihiya, GOV/2004/33, June 1, 2004; and Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic, GOV/2011/30, May 24, 2011.

3 The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Article III, http://www.un.org/en/conf/npt/2005/npttreaty.html.

4 The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, INFCIRC/153 Corrected, http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc153.pdf.

5 The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, INFCIRC/153 Corrected, Article 1, http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc153.pdf.

6 Some scholars and states challenge the 1992 interpretation of the IAEA Board. See D. Albright, O. Heinonen, and O. Kittrie, "Understanding the IAEA's Mandate in Iran: Avoiding Misinterpretations," ISIS, November 27, 2012, http://isis-online.org/uploads/isis-reports/documents/Misinterpreting_the_IAEA_27Nov2012.pdf.

7 INFCIRC/540 (Corrected), Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards, http://www.iaea.org/Publications/Documents/Infcircs/1997/infcirc540c.pdf.

8 Safeguards Statement for 2011 and Background to the Safeguards Statement, IAEA, http://www.iaea.org/safeguards/documents/es2011.pdf.

9 Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran, Paragraph 18, GOV/2007/58, November 15, 2007; and Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic, Paragraph 4, GOV/2009/79, November 16, 2009.

10 Press Release 92/11, February 14, 1992, IAEA.

11 Recent Media Reports Concerning Syria, IAEA Press Release 2007/018, October 15, 2007.

12 A. von Baeckmann, G. Dillon, and D. Perricos, "Nuclear Verification in South Africa," IAEA Bulletin 1, 1995, pp. 42-48.

13 Olli Okko, ed., "Implementing Nuclear Non-proliferation in Finland, Regulatory Control, International Cooperation, and the Comprehensive Nuclear-Test-Ban Treaty," Annual report 2012, STUK.

Verifying the Prohibition on Chemical Weapons: The Relevance of OPCW Processes to the IAEA

Jean Pascal Zanders

Introduction

The prohibitory regimes governing chemical and biological weapons (CBW) on the one hand, and nuclear weapons, on the other hand, are fundamentally different. The bans on CBW acquisition, stockpiling, and use are total. The respective disarmament treaties – the 1993 Chemical Weapons Convention (CWC) and the 1972 Biological and Toxin Weapons Convention (BTWC) – have a global reach. States party to either agreement enjoy equal, non-discriminatory rights, and all must fulfill equal obligations. While the treaties are of unlimited duration, their goals are finite and well defined: no single state can possess chemical or biological weapons under any circumstances. As weapons have been or are in the process of being destroyed, the principal challenges are to ensure ongoing confidence in treaty compliance, to expand or strengthen the tools to detect violations and restore compliance, and to adapt the treaties, including their verification or transparency-enhancing procedures, to scientific and technological innovation and ever-evolving realities of international politics and security. The BTWC, negotiated in the depths of the Cold War, has no verification machinery. Conceptions of sovereignty and national security precluded tools such as on-site inspections, whereas verification by substitution – i.e., focusing on large delivery systems, such as missiles or bombers instead of the (nuclear) warheads – or remote sensing were not an option. By the time the negotiation of the CWC was

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concluded in 1992, the internationally accepted verification toolbox had not only expanded, but was also much more diversified.

In contrast, limitations on the acquisition and possession of nuclear weapons are contained in different international, regional, or bilateral legal instruments. Regional agreements, such as nuclear weapons free zones (NWFZ), are comprehensive in scope, but do not incorporate autonomous, dedicated verification machinery. Bilateral arms control treaties between the United States and the Soviet Union/Russia include detailed verification provisions and structures, but these are of no consequence to other countries. Global treaties relating to the nuclear realm normally limit their focus to a specific aspect of the armament dynamic. The Comprehensive Test Ban Treaty (CTBT), for example, has set up a provisional implementation organization and deployed a global monitoring network to detect nuclear explosions despite not yet having entered into force. The Nuclear Non-Proliferation Treaty (NPT) prohibits non-nuclear weapon states from acquiring nuclear weapons, in exchange for the right to research and develop nuclear energy for peaceful purposes and benefit from international cooperation and technology transfers in support of these goals. Rather than equipping the NPT with its own compliance, monitoring, and enforcement tools, the negotiators entrusted the International Atomic Energy Agency (IAEA) with the role of verification regarding the non-diversion of nuclear materials in declared facilities.

Since its entry into force in 1975, parties to the BTWC have agreed to a limited set of confidence building measures (CBMs) to enhance transparency concerning certain treaty-relevant activities. These CBMs pertain to a wide range of issue areas: research centers, laboratories, and biodefense programs; outbreaks of infectious diseases; publication of research results and the promotion of knowledge; declarations of legislative and regulatory measures; past offensive and/or defensive biological research and development programs; and vaccine production facilities. (One CBM concerning the promotion of contacts among scientists and experts was dropped at the 2011 Review Conference.) However, failure to submit the annual CBM declarations cannot be sanctioned or forcibly subverted. A serious attempt to equip the BTWC with verification measures ended unsuccessfully in 2001, after which states parties embarked on so-called inter-sessional processes – sets of annual meetings between two review conferences during which experts and government representatives consider specific issues of relevance to the

convention. The CWC, in contrast, has an elaborate verification system that serves to demonstrate state party compliance with the CWC provisions and simultaneously offers reassurance to other states parties.

This chapter first briefly describes the CWC and summarizes the routine dimensions of verification, before discussing in detail the tools available to ensure and enforce compliance. It then considers the autonomy of the CWC challenge inspection process. The final part considers some implications for the nuclear realm.

Organizing for Verification

The CWC is a disarmament treaty. It calls for the total elimination of all chemical weapons (CW), and thereby also removes the weaponry from the military doctrines of states: never, under any circumstances – including time of war – can a party to the CWC arm itself with CW, or use or threaten another state with CW, even for the purpose of deterrence. As no party to the convention can develop an advanced CW capacity and assimilate it into its military doctrine (which implies weapons testing and training of large military formations) without detection, universality of the CWC is therefore a major guarantor of disarmament. Indeed, verification generates the confidence that a party should never face a major chemical threat as an instrument of war or a tool for political blackmail.

In the first instance, verification has two primary components: first, certifying the destruction of declared weapon stockpiles, related equipment, and infrastructure (storage sites and production facilities), or the conversion of former production plants to peaceful purposes; and second, assuring present and future non-development and production of CW, which covers activities in the (civilian) chemical industry and international commerce, as well as the creation and strengthening of various types of barriers to illicit activities. To serve these primary goals, the CWC established the Organisation for the Prohibition of Chemical Weapons (OPCW), an international organization based in The Hague. It consists of two decision making bodies and the Technical Secretariat (figure 1).

The Conference of the States Parties (CSP) comprises all states that have ratified or acceded to the CWC. It is the highest decision making body of the OPCW. It elects the Executive Council (EC) and appoints the Director-General of the Technical Secretariat (DG). The CSP usually meets in regular session once a year to consider and adopt the annual report, program, and

budget submitted by the EC. It also meets at the request of a state party supported by one-third of all OPCW members or at the request of the EC. The CSP convenes as a Review Conference every five years and may be called as an Amendment Conference.[1] It decides procedural matters by simple majority and matters of substances by two-thirds majority. In practice, the CSP strives for consensus decision making.[2]

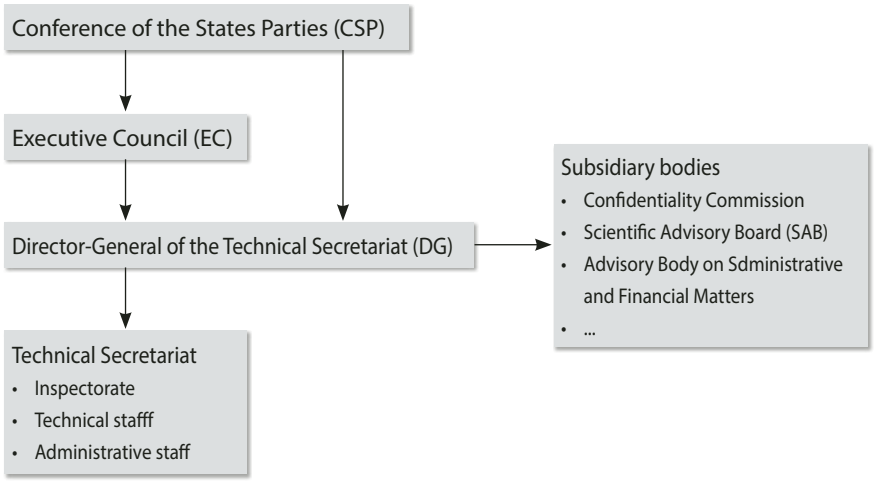

Figure 1. OPCW Organizational Structure

The Executive Council consists of 41 states parties elected by the CSP for a term of two years. Candidates are proposed by their respective regional groups. It has contractual authority on behalf of the OPCW with respect to international organizations (e.g., its cooperation with the UN regarding the investigation of CW use in Syria and the removal of CW from Syria in 2013) and states parties (e.g., agreements concerning inspections or special verification modalities, as has been the case with Syria after becoming a party to the CWC in October 2013). The EC bears special responsibilities in matters relating to compliance and non-compliance.[3]

The Technical Secretariat serves as the implementation body of the OPCW. It provides administrative and technical support to the decision making organs and subsidiary bodies.[4] It consists of the Director-General (DG), inspectors, legal, scientific, and other technical experts, and administrative staff. The large pool of international inspectors has expertise covering the

whole spectrum from munitions destruction and investigation of alleged use to industry manufacture and processing of toxic chemicals.

Finally, three subsidiary bodies function on a continuous basis:

1. The Confidentiality Commission considers disputes relating to breaches of confidentiality involving both a state party and the OPCW.[5] This includes confidentiality matters pertaining to the verification procedures. Thus far, it has never been required to consider any such dispute.
2. The Scientific Advisory Board enables the DG to provide specialized advice to the CSP, EC, or states parties in areas of science and technology relevant to the CWC.[6]
3. The Advisory Body on Administrative and Financial Matters examines and reports on the draft program, the annual budget, and any other budgetary or financial matters.[7]

In addition, the DG can establish temporary ad hoc advisory panels, such as the Advisory Panel on Future OPCW Priorities, which after four meetings in 2010 and 2011 issued its report in July 2011.[8]

Routine Verification Activities

The CWC verification system functions on both the international and national levels. Although each level has its own sets of instruments, they are interconnected and mutually reinforcing.[9]

On the international level, the tools are: declarations to be submitted by the states parties to the Technical Secretariat, and routine inspections conducted by inspectors of the Technical Secretariat to validate the declarations and confirm that no illicit activities take place. The Technical Secretariat addresses ambiguities or omissions.

On the national level, verification tools include legislation, data collection, and the National Authority. States parties must adopt the CWC provisions into their national legislation. Besides criminalization and penalization, implementation legislation must also enable the state to collect the relevant data from public and private actors in order to fulfill its reporting obligations to the Technical Secretariat. States parties must establish a National Authority, which acts as a focal point between the Technical Secretariat and the government of the state party, and other states parties. Among the National Authority's principal responsibilities are escorting OPCW inspections of relevant industrial or military sites; submitting initial and annual declarations; assisting and

protecting those states parties that are threatened by, or have suffered, chemical attack; and fostering the peaceful uses of chemistry.[10]

Over the past 17 years the OPCW devoted a considerable part of its activities to overseeing the destruction of CW and related equipment and installations. These activities included declarations of CW stockpiles, production and storage facilities, CW abandoned on the territory of another state party, and old CW,[11] and their verification by the Technical Secretariat. Given the requirement that international inspectors must be on site at all times during destruction activities (rather than relying on remote monitoring), these types of inspections have consumed most of the inspector hours and verification budget.

Industry verification is growing quickly in relative importance. The activities of the chemical industry are monitored through declarations and on-site inspections. The nature of an industrial facility's obligations depends on the types and quantities of chemicals it produces, possesses, transfers, and consumes. Reporting requirements, monitoring activities, and routine inspections are organized around three lists of chemical warfare agents and their precursors based on a weighing of their threat to the CWC and commercial importance (the so-called "schedules"). The CWC also sets forth reporting requirements concerning firms that produce specific quantities of discrete organic chemicals that do not appear on any of the schedules, as well as special requirements for firms that manufacture more than a specified amount of unscheduled discrete organic chemicals with the elements phosphorus, sulfur, or fluorine. The number of industry inspections has been capped, and the number of such inspections that a state party may expect per year are calculated according to complex formulae weighing different factors.

Ensuring Compliance under the CWC

The CWC contains additional types of verification procedures. Although they may seem to suggest a hierarchy in terms of increasing stringency or steps in an escalatory process, they can run in parallel and one procedure is not necessarily a prerequisite for the next. Central to the understanding is that the OPCW, as an independent international organization dedicated to overseeing the implementation of the CWC, also provides a forum for consultation and cooperation among states parties in matters concerning compliance.[12] The different procedures are:

1. *Consultation concerning anomalies*: The CWC does not detail what consultations should entail, but views and encourages them to take place together with information exchanges as one of the early (or low key) diplomatic exchanges among states parties to resolve doubts or ambiguities regarding compliance.[13]
2. *Clarification of compliance concerns*: If in doubt or concerned about compliance, a state party may seek clarification.[14] A state party will address the initial request for clarification to another state party, which must reply within ten days. Although not stipulated in the convention, a degree of expectation exists that the latter would supply supplementary information (i.e., beyond what is available from, for instance, annual declarations or routine inspections) to address the concern.

   In case the reply does not resolve the concern, the requesting state party may request assistance from the EC, which must use its authority to lend weight to the request, including by forwarding the request within 24 hours. Here too the state party to whom the clarification request is addressed has up to ten days to respond. If the replies still do not satisfy, the requesting state party may then issue a request to the EC to obtain further information, in which case it may (i.e., not "must") decide to convene a group of experts to examine all available information and reports and submit a factual report. Although the group of experts can draw on previous inspection reports, it is in no position to launch its own inspection procedure.

   After either of the two previous steps, the requesting state party may call for a special session of the EC, which then has the decision authority to "recommend any measure it deems appropriate to resolve the situation." Although not stated explicitly in CWC Article IX, those measures would presumably include obtaining further information or persuading the targeted state party to resolve the presumed violation in accordance with the CWC. If the requesting state party still remains unsatisfied with the response, it may call for a special session of the CSP 60 days after the submission of the request for clarification to the EC. The CSP is to consider and may take any measure, which, as in the case of the EC, remains unspecified in the convention.

   Note that an individual state party with specific concerns may call for a clarification procedure to be launched, while routine inspection reports may trigger additional requests for information. In addition, the

procedures described above do not affect the requesting state party's right to request a challenge inspection, nor are they affected by the conduct of a challenge inspection.

Again, the CWC does not prescribe mandatory courses of action. The sources of ambiguity may be multiple and often unintended. As an instrument of cooperative security, the entire compliance monitoring and enforcement system in the convention seeks to resolve issues at the lowest level of confrontation, as suggested by the drive to use bilateral consultations first and the possibility to initiate a formal clarification procedure without the involvement of the OPCW decision making organisms. The wide leeway for the EC to decide on remedies to reconcile anomalies or restore compliance can also be viewed as means to avoid automatic or mandatory courses of action that might lead to the path of major confrontation.

3. *Challenge of non-compliance*: Challenge inspections, the third tool outlined in CWC Article IX, consist of a short-notice inspection at any site (irrespective of whether it has been declared or not) in a state party. Once the OPCW has authorized the challenge inspection, the targeted state party has no right of refusal, but it can invoke the technique of managed access, whereby OPCW inspectors may be denied access to certain parts of the site. Managed access cannot be implemented in such a way that inspector access to the site as such is denied. However, irrespective of the outcome of the managed access negotiations between representatives of the challenged state party and the OPCW inspectors, the latter retain full right to interview any site staff member (and thus possibly obtain relevant information about the areas to which they have been denied access). Although a challenge inspection can be requested at any stage of consultation of clarification processes, the CWC encourages states parties to view the tool as an instrument of last resort.[15]
4. *Investigation of alleged use*: Part XI of the Verification Annex details the process of investigating the alleged use of CW or the alleged use of riot control agents as a method of warfare. In case the alleged use involves a state not party to the CWC, then the DG will closely cooperate with the UN Secretary General.[16]

Since the CWC entered into force in April 1997, the Executive Council has not received any requests for clarification and no state party has requested

a challenge inspection. Several states parties have used the consultations mechanism to their overall satisfaction.[17]

Autonomy of the Challenge Inspection Process

Of any weapon control arrangement currently in force, the OPCW is unique in the sense that it has autonomous responsibility for detecting non-compliance and restoring compliance. While it can report non-compliance to the United Nations, this is not an automatic outcome of an escalating breach of compliance, but rather the result of a conscious decision to be taken by the OPCW's policymaking organs. Referral to the UN, either by the EC or the CSP, is not just to the Security Council (UNSC), but also to the General Assembly (UNGA).[18] Reference to the UNGA adds political weight to the non-compliance matter without the risk of a veto block. UNGA conclusions may bestow further legitimacy on any actions the OPCW may subsequently decide upon. They may also reduce the likelihood of a veto in the UNSC if a proposal for non-military measures (e.g., economic sanctions) submitted by the OPCW is to be considered.[19] Furthermore, a dispute between CWC states parties can be referred by mutual consent to the International Court of Justice (ICJ), or the CSP or EC (subject to the authorization from the UNGA) can submit a serious dispute to the ICJ.[20] The relationship between the OPCW and the United Nations (including the ICJ) is the subject of a bilateral agreement, which entered into force in 2001 following approval by the CSP and UNGA.[21]

Embedding the CWC in the broader framework of international law and organizations considerably strengthens the power of the OPCW's autonomous decision making processes with regard to non-compliance. This contrasts strongly with the IAEA, which has no choice but to report any compliance concern relating to its mandate under the NPT (safeguards) to the UNGA and UNSC.[22] The IAEA is not an organ created by the NPT (and also has a different membership than the NPT) and its responsibilities do not cover all possible NPT compliance questions. It is rather difficult to envisage the emergence of an international crisis regarding the CWC that is similar to the challenge posed by Iran's nuclear activities: the UNSC cannot simply ignore the complex set of internal compliance mechanisms of the OPCW, nurture a parallel mechanism of negotiations (such as the P5+1), or adopt further sanctions based on the violation of its own resolutions, leaving the international organization (i.e., the IAEA) hanging between the accused

state and the UNSC. Furthermore, the CWC suggests certain measures, but does not limit its decision making bodies to them. Endorsement by outside sources adds legitimacy to whatever course the OPCW decision making organs choose to take. At the same time, if anything else fails, it becomes politically much harder for any state – the five permanent members of the UNSC, in particular, since they are parties to the CWC – to dissent or abstain if serious coercive measures to rectify non-compliance with the CWC must be considered. The legitimacy bestowed by the UNGA at earlier stages of the OPCW process will also bear heavily on the UNSC deliberations.

Occasionally people will refer to the type of intrusive inspections imposed on Iraq based on UNSC Resolution 687 (1991). Inspectors from the IAEA and the UN Special Commission on Iraq (UNSCOM), established after Iraq's military expulsion from Kuwait, had unlimited access to installations, documents, and personnel. The inspection process was backed up by a web of economic and other sanctions. The overall context was one of coercive disarmament following the military defeat of a belligerent. However, unlike with nuclear weapons and considering that the CWC was still under negotiation, the process was not supported by an autonomous international organization for CBW. As time wore on, consensus in the UNSC on the reported findings and unresolved issues became the victim of political and economic calculations of the permanent members. The UN Secretary-General's repeated interventions to negotiate compromises to the many standoffs between Iraqi authorities and UNSCOM ultimately weakened the original inspection mandate beyond verification utility.

Again, the CWC has equipped the OPCW with several buffers against political interference in the verification processes by granting the DG several degrees of autonomy in his actions and ordering the inspectorate to limit its reporting to facts.[23] Furthermore, both parts of the Technical Secretariat are held to strict observation of confidentiality (as regards other states parties or outside institutions, such as the press), whose observance is overseen by the subsidiary body of the Confidentiality Commission. Such confidentiality is also required to prepare for challenge inspections, as too much information may allow the challenged state party to expand the scope of managed access or manipulate the site to be inspected. Planning and execution of a challenge inspection are automatic following a request, and can only be halted by an EC vote to such effect if supported by two-thirds of all its members within

twelve hours after having received the inspection request. Short time frames and voting quorums thus also uphold the autonomy of the process.

A third element buttressing the autonomy of the challenge inspection process is the requirement of each state to accept the no-refusal principle upon becoming a party to the CWC.

By Way of Conclusion

The CWC has the most elaborate verification toolbox of any arms control or disarmament treaty. The convention, however, is also the product of the time it was negotiated; hence the heavy emphasis on CW destruction and processes to detect and restore compliance. In addition, it addresses the forward-looking aspect of disarmament, namely the prevention of new weapons programs. At the same time, this framework is less developed and may require modifications, which include revisiting the relationship between the general purpose criterion and the three schedules for reporting, monitoring, and industry verification; the annual number of industry inspections across the world; reorganization of the OPCW inspectorate in light of industry and trade verification; possible recalibration of the responsibilities between the OPCW and states parties (who are responsible for nonproliferation policies); and more.

The challenge inspection procedure stands out as the ultimate tool to maintain the integrity of the CWC. True, it has never been invoked. Some commentators therefore tend to view this as a major weakening of the treaty regime. However, many explanations may account for the situation. Perhaps the negotiators were too ambitious in their design of the challenge inspection procedure; perhaps the post-Cold War world proved more cooperative than anticipated, and other mechanisms to address compliance concerns (such as bilateral consultations) turned out to be more effective in the new global context; perhaps the conditions that might have warranted the launch of a challenge inspection never materialized; perhaps national intelligence data underlying any call for a challenge inspection was never as firm as people might wish; and so on. Moreover, not only has the challenge inspection tool never been mobilized, but states parties have also not taken recourse to the formal clarification process. Irrespective of possible reasons, other parts of Article IX to address non-compliance concerns are widely regarded to be efficient and effective. Perhaps, paradoxically, they are efficient and effective precisely because of the big bludgeon of the challenge inspection

looming behind all CWC compliance monitoring activities. Meanwhile the OPCW is conducting increasingly sophisticated exercises to test and perfect challenge inspection plans and procedures under realistic conditions. Indeed, if it were unable to satisfactorily conduct such an inspection when called for, the credibility of the CWC would be irretrievably damaged.

The challenge inspection concept is not unique to the CWC. The IAEA, for example, has special inspections to address concerns about incomplete submissions or inadequate explanations for discrepancies discovered during routine inspections. However, the CWC system is all-inclusive and affects all states parties. In contrast, the control regime for nuclear weapons is not only fragmented, but the IAEA lacks competency to verify *all* dimensions of compliance with the NPT. The NPT discriminates between nuclear weapon and non-nuclear weapon states. As the IAEA has no mandate to verify nuclear disarmament, the armament programs of the five official nuclear weapon states are beyond its verification machinery. Presumably the robustness of the CWC's challenge inspection follows from the way it is embedded in the overall verification toolbox, the confidentiality involved in various aspects of the verification process, and the high degree of autonomy of the challenge inspection process with its strict time lines. Its strength also follows from the way it is integrated in overall machinery to address compliance concerns, which involves not just internal tools, but also international organizations, notably the United Nations. Instead of attempting to initiate separate processes to restore compliance, the UN decisions would most likely enhance the OPCW's legitimacy.

From the CWC perspective, the gravest concerns with the IAEA inspection process appear to be the high degree of politicization of the verification process, including the slew of reports and decisions traded between the IAEA Board of Governors and the UNSC; the seemingly endless process of trying to enforce compliance without any hope of near-term resolution of a major proliferation concerns (e.g., Iran and North Korea); the resulting event-driven decision making processes that have replaced strategic decision making; and the constant leaking of what should be confidential documents ahead of key meetings. The lack of total equality with regard to safeguard agreements among all IAEA members means that the legitimacy of the verification process can be and is being challenged. In addition, the fact that the NPT recognizes five states as legitimate nuclear weapon possessors (in spite of their longer term disarmament obligation) and the existence of nuclear-armed

states outside the NPT framework means that nuclear weapons are not as fully delegitimized as CW. Consequently, pressures among NPT parties to research and develop nuclear weapon capacities short of actually testing and deploying the weapon continue to exist and challenge the integrity of the NPT and the IAEA verification processes. Given that the disarmament obligation applies uniformly to all parties to the CWC, compliance issues can be detected at far earlier stages and addressed at the lowest possible levels of confrontation. As the party concerned is less likely to lose face in public, it will under those circumstances also be more willing to cooperate in resolving the concern. Likewise, the state that raised the concern can determine – after receiving further information – that the matter does not challenge the integrity of the treaty, even if not every detail of the concern can be fully resolved.

Contrary to popular belief, the challenge inspection procedure is not the ultimate tool of the CWC. After the conclusion of the inspection itself, a complex political process follows in which states parties assess the inspection findings and deliberate follow-on measures to restore compliance in case of a breach. The EC and CSP can each take actions, up to and including sanctions, against the non-compliant state party. By referring at appropriate moments to the UN or the ICJ they can not only enhance the legitimacy of their course to redress the situation, but also bear considerable supplementary political pressure on the offending state party. Political judgement is the potential Achilles' heel in the whole setup, particularly if corrective measures need to be considered after a challenge inspection has revealed a case of borderline non-compliance.

Perhaps the most important lesson to be drawn from the CWC is how an international disarmament agreement shapes the security environment in which it must function. Much of the verification machinery was devised during the 1980s when suspicion between the USA and the USSR was very high and major chemical warfare was still conceivable. Today, the possibility of hostile use of toxic chemicals still exists, but it no longer amounts to major chemical warfare (at least not among parties to the CWC). As a result, existing concerns about full compliance – and they do exist – can be addressed at or below levels of confrontations, thereby avoiding the public megaphone diplomacy so typical of nonproliferation policies. One can only wonder whether the Iranian nuclear dossier would have reached the type of political polarization of the past years if the IAEA had the OPCW's toolbox

of member obligations and mechanisms to address compliance concerns available.

Notes

1 Details of functions, procedures, and responsibilities are in CWC Article VIII (B) and, with regard to amendments, in Article XV.
2 Thus far, there have been only two instances in which the CSP did not take a decision by consensus, namely the ouster of the first Director-General in April 2002 and Iran's vote against an OPCW decision to extend the final deadline for CW destruction for the US (but not Russia) at the 2011 CSP.
3 Details of functions, procedures and responsibilities are in CWC Article VIII (C).
4 CWC Article VIII (D).
5 CWC, Confidentiality Annex, §23.
6 CWC Article VIII, §§ 21(h) and 45.
7 OPCW Financial Regulations, Article 15.
8 Note by the Director General, OPCW document S/951/2011, July 25, 2011, available from http://www.opcw.org/fileadmin/OPCW/PDF/Advisory_Group_report_s-951-2011_e_.pdf.
9 Daniel Feakes, "Evaluating the CWC Verification System," *Disarmament Forum*, no. 4 (2002): 11.
10 OPCW, "National Authorities," http://www.opcw.org/about-opcw/member-states/national-authorities.
11 Old Chemical Weapons were produced before 1946. The CWC distinguishes between two categories of OCW. The first contains those munitions produced before 1925, which can be disposed of as toxic waste. The second groups those weapons that were produced between 1925 and 1946, but which have deteriorated to the point that they are no longer useable. These must be destroyed like any other CW, but according to time lines that may differ from those of other CW following agreement with the OPCW.
12 CWC Article VIII, §1 and Article IX, §1. The OPCW is not an organ of the United Nations. Relationships and cooperation between both institutions are the subject of formal agreements that require ratification by the respective membership (i.e., the CSP and the UNGA).
13 CWC Article IX, §2. Wikileaks, for instance, contains some US reports on consultations with Iran about Iran's lack of declarations of CW stockpiles to the OPCW.
14 CWC Article IX, §§3–7.
15 CWC Article IX, §2.
16 A situation in which an allegation of CW use does not concern or affect a party to the CWC may also present itself. As has been the case with allegations of CW use in the Syrian civil war, the UN Secretary General may activate a UN investigative mechanism and call upon the OPCW (and the World Health Organization) to provide technical expertise and inspectors. The investigations conducted in August and early September were carried out according to OPCW-established investigative and analytical protocols. The final report was released in December 2013.

17 As noted in Informal Chairperson's Provisional Texts, Working Group for the Preparation of the Third Review Conference, January 9, 2013, Section "Review of the Operation of the Chemical Weapons Convention," §§59–61.
18 CWC Articles VIII, §36 and XII, §4.
19 As far as this author is aware, military measures under Chapter VII of the UN Charter against a non-compliant state party to the CWC have not been considered in any depth,.
20 CWC Article XIV, §§ 2 and 5.
21 Agreement concerning the relationship between the UN and the OPCW, October 17, 2000, available from http://www.opcw.org/about-opcw/un-opcw-relationship/.
22 IAEA Statute, Article XII (C). In practice, the IAEA can request in its report that the UNSC take no action – see comment 9.
23 Routine inspections, in contrast, allow OPCW inspectors to append personal assessments to the factual reports if these have a direct bearing on the matter at hand.

PART V

Perspectives on the Middle East

Nonproliferation and Regional Security: An Israeli Policy Perspective

Jeremy Issacharoff

Address by Ambassador Jeremy Issacharoff, DDG for Strategic Affairs, MFA
at the 2013 Annual Arms Control Conference
INSS, Tel Aviv, February 11, 2013

I would like to thank the INSS and the FRS for inviting me here today. Some of you may remember that I was a research fellow in this Institute for a short period of time prior to my present position. I now can readily admit that I often look back with nostalgia to the relative quiet and civility that reigned here. I definitely cannot relate to Woodrow Wilson who when asked why he left academia for Government and the US Presidency replied "I was tired of politics."

The overall theme of the seminar poses the question "is the NPT regime at a crossroads?" This will be discussed over the next couple of days in the light of many different factors in the context of the post-Cold War environment, newer transformational challenges, and broader goals set by the NPT in the year 2000 known as "the thirteen steps."

This question could also be addressed in the more specific context of the Middle East. I have little doubt that if Iran crosses the nuclear threshold, this would not be a crossroads for the NPT, but rather more of a dead end. While I believe that Iran will remain the defining challenge for the NPT in the coming years, another nuclear test by North Korea will also add considerable strain to the treaty.

Whatever perspective one takes, it seems evident that the NPT is actually at several crossroads and facing multiple challenges and dilemmas. Clearly

there is not only one issue or one challenge testing the credibility of the NPT regime at this time.

While I believe this to be self-evident – I am equally certain that some of my regional counterparts will continue to lay the problems of the NPT and the Middle East at Israel's doorstep. I believe by any objective standard that they are mistaken and would like to explain why.

Over the years two parallel assumptions have guided Israel's policy on nonproliferation and regional security. Generally it has not been possible for Israel to consider nonproliferation issues in isolation from the regional context and Israel's regional security approach has always embodied clear commitments to nonproliferation.

While this policy has evolved and developed over the last five decades, it has remained one of the most consistent elements of Israel's national security and foreign policy. This has been a policy of restraint and responsibility that has commanded a broad consensus within Israel. It may be said that this policy does not only underwrite our national security, it also underwrites our capacity to take risks for peace.

In its short history, Israel has faced an array of conventional threats, missile attacks aimed at its civilians, cross border terrorist attacks, and suicide bombings in its cities. The region as a whole has seen the growth of every type of terrorist organization, the accumulation of massive rocket and missile inventories, the use of chemical weapons against civilians and now witnesses the relentless Iranian efforts to acquire a military nuclear capability.

In these circumstances Israel must continue to find the appropriate balance between deterrence against actual and potential threats and keeping the door open to a genuine dialogue that could begin to address regional security in all its different aspects.

Recently we have all heard repeated calls by the Arab League to establish an elaborate mechanism to free the Middle East of WMD, but nothing has been said of freeing the region from wars, terror, conflict, and hostility. It is not tenable to expect a country to discuss disarmament measures without reference to the attainment of peace and the political process needed to ensure an infrastructure of stability and coexistence.

Not only has this dimension of the problem been ignored, but over the last two years we have attended – along with many others here today – regional meetings and seminars in the hope of direct engagement with our

Arab neighbors on these issues. Sadly no such engagement has occurred and therefore no minimal consensus exists on a common approach to regional security or modest confidence building measures that could facilitate such consensus. So we remain with an Arab demand to establish an ambitious disarmament measure without, as yet, any direct face-to-face engagement.

This has been the cardinal impediment to progress. We firmly believe that the regional parties themselves must discuss and determine agreed objectives, terms of reference, a broad agenda, and modalities for any such meeting. Ultimately, all arrangements must be reached on the basis of consensus. Israel cannot agree to predetermined formulations that were conceived without its agreement and do not take into account its national security concerns and positions.

Over the last year and a half, Israel has conducted numerous and lengthy discussions with the Under Secretary of State of Finland, Ambassador Jaakko Laajava, as well as with other allies and other relevant countries. We have outlined in great detail our views and positions regarding the challenges of regional security in the area. If no progress has been made to date, it has not been because of any lack of effort on our part.

As we continue to address these issues, we will also have to find a balance between the global context and regional constraints. The lack of peace, non-recognition of Israel, and the absence of normalized relations between the states in the Middle East severely curtail the implementation of international treaties and protocols that could work in other regions.

While Israel has never sought to undermine the Non-Proliferation Treaty, it should be recalled that when Syria joined that Treaty it specifically declared that the ratification "shall in no way signify recognition of Israel or entry into relations with Israel thereunder."

Another factor working against global treaties has been the regional record of compliance. Four out of five violations of the Non-Proliferation Treaty occurred in the Middle East – Iraq under Saddam, Libya under Ghadaffi, Syria, and Iran. It is no coincidence that these regimes, in the past and present, rejected Israel's existence and like Iran today, sought its destruction. It is also no coincidence that the latter countries are leading state sponsors of terror organizations in our part of the world and beyond.

Furthermore it is not forgotten that certain of these regimes have also used chemical weapons well within living memory and as in the case of Syria, possess a significant and operational chemical weapons arsenal.

This is another reason that the Arab approach has always stressed the fact that Israel has not signed the NPT, but conveniently ignored the use and possession by others of chemical weapons as well as the indiscriminate use of rockets and missiles against civilians.

This explains why global treaties cannot necessarily provide adequate security guarantees to Israel and why direct negotiations and recognition have to be inherent in any arms control process. Such a process should lay the foundation for gradual step-by-step confidence building measures to reduce tensions; the attainment of a comprehensive peace; and for the parties themselves to determine an appropriate security architecture for this region. This cannot be imposed from outside and must evolve from within the region itself. This remains the essence of our nonproliferation policy and regional security approach.

Clearly the Middle East is currently undergoing one of the most profound periods of historic transition. The changes affect many countries in the area and impact dramatically the respective strategic interests of states in the Middle East, creating an even more uncertain and unstable security environment for all. It is a shame that this change has not been harnessed to reshape attitudes in the Arab world and create a new paradigm of dialogue with Israel on strategic and regional issues that could serve the wider interest.

An Iran striving to obtain nuclear weapons, supplying weapons to terrorist groups and other non-state actors, the present turmoil in Syria, its possession of strategic missiles, advanced conventional weaponry and significant chemical weapon capabilities, the smuggling of arms and increasing strategic weaponry reaching the hands of terrorists and the broader impact of radical political Islam – to recall just several critical issues in our region – do not only impact Israel's national security, but also our Arab neighbors and the international community as a whole.

I will conclude with three final observations:

Serious conceptual differences exist between the parties in the region and they must be recognized and addressed if we are to embark on a process designed to create a stable regional security architecture for the Middle East.

Notwithstanding these differences there could be broader strategic convergences between Israel and our Arab neighbors that could be enhanced if there would be a genuine and pragmatic willingness to reframe the debate on regional security and its parameters.

In the final analysis, Israel has faced in the field of battle virtually every type of military threat and attack, all manner of weapons systems, rockets, missiles, and types of terrorist outrage. Consequently, we have employed all of our ingenuity to develop a strong IDF and an array of defensive systems – an operational ballistic missile defense, "Iron Dome," "David's Sling," numerous counter measures, and various counter responses. There is one thing, however, for which we have not been able to develop any adequate counter measure – the outstretched hand of peace. Ultimately this could be the most disarming.

Security Asymmetries in the Middle East

Shimon Stein

Efforts to resolve the Arab-Israeli conflict in general – and the Israeli-Palestinian conflict in particular – have over the years been subject to endless academic conferences and Track II activities of many kinds. But it is only since the end of the Gulf War in 1991 that the community of experts on security and Middle Eastern affairs, let alone government officials, began to focus seriously on ways to establish a regional security regime in the Middle East. The trigger for this development was the establishment of the working group on Arms Control and Regional Security (ACRS) within the framework of the multilateral track of the Madrid peace process, designed to complement the bilateral negotiations. The realization that resolving the political conflicts will not be sufficient to guarantee security and stability in the region led to the recognition that there is a need to establish a regional security structure for the Middle East. It was President George H. W. Bush who in the aftermath of the 1991 war defined three goals for the US in the wider Middle East, with the aim of transforming the region. The three goals were: solving the Arab-Israeli conflict; democratization of the region; and the construction of a regional security structure. Over twenty years have elapsed, and the region has yet to establish the long overdue regional security structure.

One of the issues discussed that will surely figure on the agenda again once regional discussions resume will be security asymmetries among regional states. The idea to reintroduce the subject came up of late in the context of discussions regarding the conference on the establishment of a WMD-free zone in the Middle East, which was originally slated to take place

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in 2012. On the Arab side, the intention was to focus on asymmetries with respect to weapons capabilities, and more specifically, regarding nuclear weapons capabilities. Indeed, the long-held Egyptian motivation to narrow the discussion to the nuclear realm is well known, but that does not mean that this is the way to proceed. On the contrary, there is actually a need to broaden the scope of security asymmetries and introduce additional elements to the equation beyond nonconventional asymmetries. Against this backdrop, the question is whether the envisioned 2012 WMDFZ conference, with its narrow mandate, is the appropriate framework for discussing security asymmetries, as well as many other related topics that must be discussed in order to deal with the entire spectrum of security issues that pose a threat to peace and stability in the Middle East.

If the WMDFZ conference is not the correct setting, what is? The following remarks will hopefully trigger a discussion of the appropriate framework for regional discussion of security matters, a framework that has been lacking far too long.

From an Israeli point of view, it is not at all self-evident that the proper forum for engaging in a discussion on regional security issues is a conference that is mandated by a global treaty like the NPT. Though from the outset Israel has supported the goals embedded in the NPT, it has never considered the treaty to be an appropriate framework to discuss, let alone negotiate arms control and regional security issues, including the notion of a WMD-free zone.[1] Moreover, one cannot understand Israel's approach to the NPT without understanding the role that the regional dimension plays in its thinking about regional security and arms control. On the one hand, "official" Israel has supported the goals of the treaty and its efforts to stem the proliferation of nuclear weapons. On the other hand, Israel has long maintained that under the prevailing circumstances in the Middle East, joining the treaty would not meet Israel's unique security requirements. Only a radical shift in the region – namely, a reality where peace relationships are established between Israel and its neighbors that stand the test of time – might lead Israel to reconsider its position regarding accession to the NPT, or alternatively, to consider the WMDFZ as an alternative to joining the NPT.[2]

The saliency of the regional dimension was highlighted once again in the context of the efforts to convene the 2012 Helsinki conference, as included in the final document adopted at the close of the 2010 NPT Review

Conference.[3] Israel's reservations regarding its participation in the conference are fourfold: procedural, "ideological," cultural, and political.

The procedural reservation stems from the fact that the mandate to convene the 2012 conference, as well as previous resolutions on the Middle East, were adopted in the context of the NPT, to which Israel is not a party. As such, Israel did not participate in drafting or voting for the resolutions. That being the case, Israel does not feel bound by the resolution and has no formal obligation to implement it.

The "ideological" differences pertain to the different approaches of the parties regarding regional security and arms control, first and foremost between Egypt and Israel, as manifested during discussions in the early 1990s within the framework of ACRS. Whereas Israel underscores that the region must undergo a long and comprehensive transformation process and a gradual process of confidence and trust building, at whose end negotiations might commence on the creation of a WMD-free zone, the Egyptian/Arab position considers Israel's joining the NPT at the outset of the process as the ultimate confidence building measure. Additionally, Egypt's approach accords priority to dealing with weapon systems.

Cultural differences relate primarily to the culture of deceit and lies that is prevalent in the Middle East far more than in other regions. Iraq, Libya, Syria, and Iran serve as examples of countries that joined the NPT and thereby undertook a commitment to abide by certain obligations, but then consciously chose to undermine the treaty by engaging in activities that were in clear violation of the commitments that they had made. Against that backdrop, it is of secondary importance if the 2012 conference takes place or not. The fact that the member states during the 2010 Review Conference chose to ignore this problem bodes ill for the future of the nonproliferation regime. The pervasive nature of the culture of deceit raises a much more fundamental question that is outside the scope of this paper – to wit, what is it in the political culture of the region that motivates countries to violate a basic tenet in inter-state relations, namely, trust?

Last but not least are Israel's political reservations, which derive from the rather dramatic changes that have taken place in the region following the so-called Arab Awakening. Even at this stage if one cannot predict the outcome of this tumultuous process, one can say that we are witnessing a paradigm shift. The transformation process will have (or perhaps has already had) an impact on all walks of life – including the way Israel must assess

and subsequently act regarding security and stability in the region. Some of the developments evident in the last few years include: the weakening of the authority of central government, and consequently an expansion of non-governable territories; a growing assertiveness of non-state actors and organizations; a growing fragmentation and disintegration of societies along confessional, ethnic, and tribal lines; the rise of political Islam; and the phenomenon of failed states. Against this backdrop, Eli Levite's poignant conclusion in a paper presented to an EU conference in November 2012 is most relevant:

> What it all boils down to is a quasi-anarchical Middle East characterized by fluidity, complexity, uncertainty and anxiety. As a result, traditional paradigms for thinking about security in the region based on states and interstate relations (e.g., deterrence and prevention but also alliances, peace treaties, and arms control agreements) seem less relevant though not entirely without remaining merit. Equally worrisome is the growing challenge to the legitimacy and efficacy of those few international bodies (UN Security Council and the IAEA) that could provide the basis for effective action addressing the multiple security crises in the region.[4]

An additional testimony to the difficulties expected in the coming years regarding efforts to combat proliferation in the region can be found in the report on global trends 2030 published by the US National Intelligence Council. Especially pertinent is the following passage:

> Progress on security related issues such as nonproliferation is particularly difficult because the Middle East suffers from domestic instability and trans-border conflicts with several countries in a state of war with each other, and many refusing to recognize Israel's legitimacy and conduct diplomatic relations with it. Even among those Middle East states that have normal diplomatic relations with each other, cooperation is relatively rare, with a severe lack of region-wide integration relations and institutional interaction. These impediments make it harder to implement regional nonproliferation strategies.

One of the possible conclusions that could be derived from the above-mentioned description is that the "classical" or perhaps traditional working assumptions concerning inter-state relations – honoring commitments, accountability, trust, and so on – that serve as prerequisites or guiding principles to negotiations on arms control and disarmament are under the current circumstances not relevant (or at least questionable) as far as the Middle East region is concerned. Consequently, there is a need to revisit traditional thinking regarding regional security and arms control in general, and subsequently the way to engage in negotiations and sign agreements.[5]

The changes described should be manifested institutionally as well as content-wise. The rather chaotic situation that currently prevails in the Middle East, the lessons learned from the crisis of the ACRS discussions, and lessons that could be learned from the Asia region experience, for example, which of all other regions has some pertinent similarities with the Middle East,[6] should all find expression in a regional security forum.

Indeed, in the absence of any regional forum, and in view of the highly volatile situation in the Middle East, it is essential to establish a regional security forum as a new institution for discussing security issues. The underlining principles of the forum would be inclusiveness as far as participation is concerned and comprehensiveness as far as the agenda is concerned, as there is a need to look at security in a comprehensive manner. We must deal with all aspects that present a current or potential threat to stability. That would certainly include not only the traditional "hard power" military threats but also "soft power" issues like economic, social, environmental, and water aspects that, if not dealt with at the regional level, might affect regional stability.

A regional security forum would provide a framework for confronting the challenge of security asymmetries. Veterans of the ACRS process, as well as the greater expert community, will recall that the traditional discourse on threat perceptions between Israel and its Arab neighbors over the years followed a well-established pattern. The Israeli side would point to geographic and demographic asymmetries, including the fact that it was outnumbered by the sheer size of the Arab military standing forces, their missile and biological and chemical weapons capabilities, and last but not least, the fact that in assessing the threat it faced, Israel had to take into account the Arab states' denial of its very existence. Israel had to offset the above-mentioned asymmetries, with its advanced technology, for example,

and by adopting a relevant military doctrine as well as deterrence capabilities. The Arab side has focused on weapons capabilities, and underscored that Israel's nuclear capabilities were a major source not only of instability but also of continued asymmetry. As is well known, this ongoing discussion did not yield any results.

Indeed, the issue of structural and other asymmetries will have to be tackled by the parties when they come together to discuss their threat perceptions with the aim of creating a regional security structure that will enhance peace and stability. Once the discussion/negotiations on arms control and regional security ultimately resume in the Middle East – and with that, the discussion on asymmetries – they will also have to take into account the dramatic changes that have occurred in the region in the wake of the tumultuous events in the Arab world, with their far reaching implications for the regional security situation. It is clear that the traditional discourse on asymmetries will no longer be sufficient, given the new situation.

Establishing a regional security forum presents a challenge to the regional parties as well as to the extra-regional parties that have a keen interest in stabilizing the region. Setting up the forum based on the principles of comprehensiveness and inclusiveness would be a meaningful step in building a cooperative security environment that is an essential step on the way to the establishment of a regional security regime.

The Arab Awakening presents a paradigm shift in the history of the Middle East, with highly uncertain outcomes. However, given the changes that have already taken place, there is also a need to revisit the overall approach to regional security and arms control issues. "More of the same" – as manifested in the efforts to convene the Helsinki conference – is not the right approach. There is a need to take a hard look at the changing environment and adjust approaches so as to reflect that change. Establishing a regional security forum will be a step in that direction.

Notes

1 This is an unprecedented undertaking for a treaty whose sole mandate is confined to the nuclear realm.
2 An interesting idea raised by Ambassador (ret.) Israel Michaeli in his speech at the INSS Annual Arms Control Conference, February 11-12, 2013.
3 The Final Document of the 2010 NPT RevCon must be seen in the context of the ongoing Egyptian efforts to implement the Resolution on the Middle East adopted by the NPT Review and Indefinite Extension Conference in 1995.

4 Ariel (Eli) Levite, "Reflections on 'The Regional Security Environment and Basic Principles for the Relations of the Members of the Zone,'" Background Paper, Second EU Non-Proliferation Consortium Seminar to Promote Confidence Building and in Support of a Process Aimed at Establishing a Zone Free of WMD and Means of Delivery in the Middle East, Brussels, November 5-6, 2012, http://www.nonproliferation.eu/documents/backgroundpapers/levite.pdf.

5 Against the backdrop of efforts to convene the 2012 conference, it is worthwhile noting that the prevailing notion among some of the conveners and the Arab states is that even if the current circumstances are not conducive to negotiations, let alone implementation of decisions, one could still begin negotiations (which will take a long time anyway), and any decisions reached could be put on the shelf until the situation ripens. The problem with such a proposal is that the negotiation as such could create expectations and put pressure on the parties, which at this juncture could be counterproductive.

6 The Asian model is more relevant than any of the NWFZ regions which are often cited as relevant examples to follow. As such, when searching for a model for a regional forum, the Asian model is worth studying. This model could serve as an example that the need to resolve political problems first does not have to constitute a precondition for establishing a regional framework to discuss security issues or to agree and subsequently implement a series of CBMs. Anyone who deals with Asia can testify to the fact that the region is as complex, and some would argue even more complex than the Middle East. After analyzing the different options in the realm of arms control and disarmament in Asia, Robert Ayson, an Australian expert on security matters, in "Yesterday's Concept for Today's Region?" (*Asian Journal of International Affairs*, January 2013), asserts that the current circumstances are not conducive to reaching formal arrangements in the arms control sphere. Instead he proposes reaching an informal agreement that takes the political environment into account.

The Need for a Regional Security Regime in the Middle East

Shlomo Brom

Although it is one of the most conflict-ridden areas in the world, the Middle East is one of the few regions without an inclusive security regime. Ironically, the region that seems to need a security regime more than most other regions in the world is one that lacks an essential instrument that could actually help it deal better with its conflicts.

The only serious attempt to try to develop such a regime occurred in the first half of the 1990s, in the framework of the Arms Control and Regional Security working group (ACRS) that was established as one of the five working groups that together comprised the multilateral track of the Madrid peace process. In these discussions, the idea of establishing a cooperative security regime in the Middle East similar to the OSCE (Organization for Security and Cooperation in Europe) framework in Europe was examined, and different confidence and security building measures (CSBMs) were explored and then adapted to the security needs of Middle East states.

Although different groups of states in the Middle East have engaged in recent decades in various attempts to establish collective security regimes, what the region in fact needs is a cooperative, not collective, security regime. This, because the main problem in the region is not the need to unite for the purpose of cooperating against a common enemy, but rather the need to deal with the multitude of conflicts afflicting the region as a whole. It is not surprising that collective security frameworks have not been a success story in the Middle East. The Arab League, which was designed to serve as a kind of collective Arab defense alliance, failed in its mission because of the

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internal tensions and conflicts within the group of Arab states. The attempt in the 1950s to establish the Baghdad Pact to contain Soviet influence in the Middle East collapsed soon after its inception. The only alliance that holds and functions to some extent is the Gulf Cooperation Council (GCC), which is a sub-regional organization that satisfies a specific sub-regional need to unite against common enemies, namely, Iran and Iraq.

The first basic need of a region that is afflicted by many conflicts is to have inclusive frameworks for discussion of the conflicts, namely, where all the relevant parties are invited and where all can participate in the discussions. However, exclusion is more the rule in the Middle East than inclusion. For many years Israel was banned from any regional discussion by the Arab states, and it is still banned by some Middle East states. Even in ACRS, there were states (Iraq, Iran, and Libya) that were not invited due to US objections in light of their "rogue state" status.

There are different models of cooperative security regimes in various regions of the world. The two models that are probably the most relevant to the Middle East are the European model and the Asian model. The European model, more formal and institutionalized, is based on detailed agreed-upon documents such as the Helsinki Final Act (1974), the Stockholm Document (1986), and the Vienna Document (1990-1992). Institutions such as the CSCE/OSCE, which is a purely inter-governmental enterprise, were established in the framework of the European model. The model also led to the conclusion of comprehensive arms control agreements such as the CFE. The Asian model is a less formal and less institutionalized model based on a combination of dialogue among governments (official level) and a Track II/Track I½[1] dialogue led by research institutes, including a degree of coordination between the official and non-official tracks.

It seems that the most logical approach for the Middle East is to avoid over-ambition at the outset and pursue a gradual process. It can start with a framework similar to the Asian model – namely, a very limited dialogue among states, parallel to an intensive Track II/I½ dialogue among research institutes and think tanks. Building on success at this level, it can then progress to a more ambitious model that would resemble the European design. Another reason for adopting a gradual approach is that not all the states in the region would likely be willing to participate in the regime in its initial steps. Comprehensive participation is a condition for engagement in ambitious institutionalized regional security and arms control initiatives.

Thus while all states must be invited, the participation of several core states of the region would be sufficient to begin the process of building up a regional security regime.

The delineation of the region for the purpose of a regional security regime should not be too difficult. This subject was discussed extensively in ACRS and the participants agreed that it would include the Arab League states plus Iran and Israel. It seems that the only modification that is needed is the addition of Turkey because it has shifted its orientation from Europe to the Middle East, and has consequently become a very important Middle East actor.

There will probably be a need to integrate a regional approach with a sub-regional approach based on a division of the region into three sub-regions: the Levant, the Maghreb, and the Gulf area. This can be done through the concept of "Geometry Variable," meaning that some arrangements will encompass the entire region while some will cover specific sub-regional areas. An example of the application of this principle would be that arrangements that pertain to conventional weapons that are not strategic would apply only to specific sub-regions because of the limited ranges of the weapon systems. In addition, states can belong to more then one sub-region. For example, Iraq should belong both to the Levant and to the Gulf area, and Egypt should belong both to the Levant and to the Maghreb. This is important when a certain state plays a major role in the security relationship of two adjacent sub-regions. Iraq, for example, participated in major military conflicts in the Gulf sub-region and in the Levant sub-region. Egypt too has participated in different sub-regional conflicts, albeit to a lesser extent when it concerns the Levant and the Maghreb.

The parties to the regime should adopt a broad concept of security and should deal not only with hard security issues. Indeed, it may be easier to start with soft security issues that do not touch upon the core hard security interests of the participating regional states. A list of subjects of common interest should be drawn up, and priorities for discussion should be agreed upon. Discussions of topics of common interest may later facilitate a dialogue on the regional conflicts. One partial list could include: illegal immigration; cross border crimes; protection of energy installations at sea; spread of diseases; piracy at sea; weapons smuggling to criminal gangs and terrorists; and missile and rocket defense.

The centrality of the Arab-Israeli conflict, with the Israeli-Palestinian conflict at its core in the mindset of many Middle East societies, makes the Arab Peace Initiative (API) an important instrument for the development of a regional cooperative security regime. In the API, the member states of the Arab League committed themselves to accept a peaceful relationship and normal relations with Israel and provide security guarantees and a secure environment to all, once Israel and the Palestinians, Syria, and Lebanon succeed in concluding peace agreements. Attempts to disconnect the establishment of a regional security regime from the resolution of the Arab-Israeli conflict are futile and stand little chance of success. Instead, the parties can develop the API into an instrument that will facilitate the constitution of such a regime. The concept of a gradual development of the regime can go hand in hand with such an approach. Any progress in the bilateral processes should be coupled with progress in the establishment of the security regime.

Thus while the last three turbulent years in the Middle East injected many uncertainties and much instability into the region, they also produced an opportunity for a more comprehensive political process that should aim to begin to establish a cooperative security regime in the Middle East. It might be very difficult and slow, but all regional states will derive important benefits from the resumption of such a process.

Notes

1 Track II dialogue refers to informal dialogue among groups drawn from the civil society of nations that are involved in conflict. Track I½ dialogue is a sub-set of Track II dialogue where in addition to members of civil society, some officials participate in a personal capacity.

A WMD-Free Zone in the Middle East: The Main Challenge is not the NPT

Benjamin Hautecouverture

Introduction: Postponement of a Regional Conference

The decision of the Egyptian delegation to leave the Second Preparatory Committee (PrepCom) of the NPT Review Conference (RevCon) before its conclusion in the spring of 2013[1] punctured the enthusiasm generated by the consensual adoption of a Final Document at the most recent NPT RevCon in the spring of 2010.[2] The Egyptians explained that their decision was a protest against the lack of international commitment to Part IV of the Conclusions and Recommendations in the above mentioned document, which called on the states from the Middle East to convene a regional conference in 2012 to discuss advancing toward a Weapons of Mass Destruction-Free Zone (WMDFZ) in the Middle East.

What does this dramatic diplomatic move perpetrated by a single state – though claimed to be in the name of collective diplomatic failure – mean? How can it help in understanding the successive failures that the WDMFZ project has encountered over the last twenty years?

There is a small group of experts within the Western and Middle Eastern strategic community who understand the aim of a WMDFZ in the Middle East. They are the same people who also understand that this goal returned to the agenda in 2010. However, the vast majority in the West and the Middle East are not acquainted either with the idea itself or its new momentum. This lack of interest is exacerbated by the media, which usually ignores the topic or confuses a WMDFZ with a Nuclear Weapons-Free Zone (NWFZ). The same is true, to varying extents, among political elites. Indeed, it would be

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interesting to analyze the degree of priority granted to this topic at different levels in the foreign ministries of the states involved. Although for obvious reasons such analysis cannot be performed, in recent years I have noticed frequently that the WDMFZ project is rarely prioritized by decision makers of concerned ministries, despite their official claims to the contrary. This state of affairs is not surprising, even when considering the revival of the initiative by the 2010 NPT RevCon.

This paper distinguishes between a short term challenge, i.e., the hosting of a conference involving states from the region, and a long term challenge, namely, the establishment a WMDFZ in the Middle East. The failure to hold a conference in 2012 is the result of a combination of exogenous and endogenous factors. Regarding the long term challenge, this paper will make several methodological remarks about the role of the NPT review process and its contribution to the achievement of the final objective.

Behind the WMDFZ Conference Postponement

Exogenous factors

Most observers would agree that the current Middle East political-strategic landscape is not conducive to convening a regional conference on a WMDFZ. The idea for such a conference, though on the agenda for 20 years and promoted publicly in New York in May 2010, has been relegated to a secondary role since 2011, due to severe regional turbulence.

Internal political upheavals in a number of Arab states are at the top of the list of identifiable causes. Furthermore, the Arab Spring is not over, as evidenced by the overthrow of President Morsi in Cairo in mid-2013 and by the highly fragile nature of democratic procedures in Egypt and in other states that are also undergoing changes of government and regimes. It seems obvious that the necessary interest, commitment, and ability to make progress on the zone project does not currently exist on the Middle East political scene. The institutional transformations, internal security emergencies, and regional expectations are such that the revival of the complex strategic issue of the WMDFZ since 2011 would have appeared completely out of place, had the final document of the 2010 NPT Review Conference not invited states to take a fresh look at this idea.[3]

Two ongoing major regional crises also have direct relevance to the WMDFZ project: the unresolved Iranian nuclear issue and the use of chemical weapons in Syria in 2013. The deterioration of these two situations before the

end of 2013 indicates both the urgent need to push for the implementation of a WMDFZ in the Middle East and the impossibility of negotiating in an atmosphere of defiance. Even if the conference planned for 2012 was not meant to start a negotiations process, the role of Syria and Iran in this preparatory meeting has been a topic of debate and disagreement over the last three years and a major obstacle to convening a conference of all states of the region.

To what extent does the Arab-Israeli conflict influence this issue? This conflict affects the beginning of any diplomatic effort in the future toward a WMDFZ. This is why the curtailed peace process at this time is, most probably, an indirect factor explaining the postponed conference. Conversely, the different revivals of the zone idea throughout contemporary history have resulted from the revival of the peace process, most particularly in the early 1990s with the multilateral arms control talks that were part of the Madrid peace process. Moreover, the Israeli political agenda and its internal balance of political power in 2012, notably during the second half of the year, was not keen on creating a revival climate (early elections for the nineteenth Knesset were held in Israel on January 22, 2013). To some extent, the objective of a regional conference to be held in 2012 on a very sensitive topic for the Netanyahu administration was negatively affected by this agenda.

Endogenous Factors

In addition to these factors – generally considered to be exogenous because they relate to the environment for organizing a conference by the end of 2012 – there were additional factors that resulted directly from the context in which the revival took place in 2010.

Clearly the internal political agendas in the US and Russia – conveners of the 2012 conference along with the UK – did not include prioritizing a regional conference in 2012. The United States came under particular criticism from a number of Arab states for its lack of support for the idea. On the other hand, following the conclusion of the 2010 NPT RevCon, American politicians kept repeating that the preparation and organization of regional conferences should be the responsibility of the regional states. The context of the adoption of the Middle East chapter of the 2010 NPT RevCon Final Document is clearly linked to the American position.

In addition, Israel, a key regional state, has not signed the NPT and therefore is not bound by the 2010 document. Under these circumstances, the 2012 conference was a priori weakened. Israel has never hidden its reluctance to take part in this initiative, and has argued that in the midst of Arab revolutions and the Syrian civil war, the timing is particularly poor.

More generally, the role that the Middle East WMDFZ project has played within the NPT RevCons should be clarified, particularly since the Middle East Resolution was adopted in 1995[4] in exchange for Egyptian agreement to indefinite extension of the NPT. The inclusion of the WMDFZ objective in the Middle East in the five-year NPT RevCon cycle was not a spontaneous gesture, either in 1995 or 2010, and was rather the result of heavy bargaining. For some Arab countries, the objective has always been the singling out of Israel in an arena where it does not have a say. For others, notably for the American delegation, it has been a matter of maintaining the NPT as the cornerstone of the global nuclear nonproliferation regime, especially since the emergence of the proliferation crises in Iran and North Korea, as well as the manifest failure of the 2005 NPT RevCon. In this way, neither the former nor the latter is absolutely committed to what should primarily be a project of regional security.

In all, the delay in convening the WMDFZ conference may be disappointing but it is hardly surprising. Whether the conference takes place before the next NPT RevCon remains to be seen. Nevertheless, the worldwide cohesion of the nuclear nonproliferation regime does not depend on the organization of a regional conference on a WMDFZ. Rather, it depends today on the outcome of the Iranian and North Korean proliferation crises, and to a lesser extent on the latent Syrian nuclear crisis.[5] To claim otherwise, in the way that Egypt and the Arab states normally do, is a sign of frustration. Blaming NPT member states for the postponement of the planned 2012 conference, and risking undermining the ongoing review process of the treaty, is unwise.

Balancing the Two Approaches

It is striking that the plausibility of a WMDFZ in the Middle East is tied to the NPT review process. Granted, the conference did not take place in 2012; but in line with the 2010 document, a host country, Finland, was chosen, and a facilitator appointed, Ambassador Jaako Laajava. Ambassador Laajava has held over 300 consultations with every concerned state over the last two years, and continues with this task. At the last PrepCom, he called attention to

the need for cooperation between each partner to the project, and introduced a few ideas for the event. It should be relatively short, pursue the target of restating the common goal of a WMDFZ in the Middle East, and identify steps to achieve it, such as regional cooperation, expertise in arms control, and confidence building. It is also necessary to highlight the mildness of this objective, which underscores the extent to which the Helsinki conference remains the first step toward a long revival process.[6]

In line with a clause in the 2010 document, the EU has already facilitated two international seminars for regional states, in the summer of 2011 and the autumn of 2012.[7] Similar events were hosted by a range of unofficial organizations and research institutes, and dozens of research articles have been published on this topic worldwide over the last three years. This is evidence of the strong commitment of civil society specialists, who are willing to be involved in the examination process in order to propose pragmatic recommendations.

Yet while the NPT is the most recent and most palpable setting where collective thinking about a WMDFZ in the Middle East is underway today, this has not always been the case and should not be the case.

The idea originated in an initiative to create a zone free of nuclear weapons (NWFZ) in the Middle East, which was approved by the UN General Assembly in December 1974. It was then extended to all WMD after the Iraq-Iran War and the 1991 Gulf War. The urgent need to pursue a WMDFZ in the Middle East was made official multilaterally by UN Security Council Resolution 687 (1991)[8] – which insisted in particular on the goal of eliminating chemical weapons. As the General Assembly and the Security Council took charge of the topic, the organization's General Secretariat published a research paper in October 1990[9] that underscores that the process directed to the creation of a WMDFZ should be preceded by confidence building measures between states in the region.

In addition to the UN framework, a regional scope of study and preparation should be considered. The two past main initiatives in this regard were the multilateral Arms Control and Regional Security (ACRS) working group, established as part of the Madrid peace process and active from January 1991 to December 1995, and the Barcelona Process, which arose from the Euro-Mediterranean Conference in November 1995. As the latter initiative can to date be considered largely sterile, ACRS remains the only initiative where, irrespective of the conclusion of the process in the mid-1990s, the

project of a WMDFZ was substantially and institutionally discussed. This was admitted by Mohamed I. Shaker at the end of 1994: "The multilateral Working Group on Arms Control and Regional Security of the Madrid Conference offers the best opportunity to proceed with the establishment of the two zones," he said, even though according to what he claimed then, only little progress could be expected, and this because of the lack of resolution of the Arab-Israeli conflict.[10]

If one leaves this development aside, and focuses exclusively on the NPT RevCons since the 1995 Resolution on the Middle East, the WMDFZ project does not seem to have any chance of making progress, regardless of the conclusions reached at the Helsinki conference. Rather than asserting, in the way that Egypt does, that the 1995 resolution has become the fourth pillar of the NPT, which is not the case, it would be more helpful to affirm that the WMDFZ project in the Middle East leans against three pillars that are not redundant but rather complementary: the support of the UN as a legitimating institution and an historical guarantor; the NPT as a wake-up call; and a regional framework as a place to implement the project (preparation, agenda, negotiation). Today, this regional setting needs to be reinvented.

Therefore, although the ongoing NPT review cycle allows for a revival of the intellectual and diplomatic activity surrounding the project of a WMDFZ, there is a need to give the decisive push to a project that requires a regional security forum in order to be implemented. This forum still needs to be created. The presence of all regional states is not necessary for it to be launched. There is no need for it to be heavily institutionalized, at least at the beginning. Rather, it needs technical working groups that regularly deal with non-strategic security topics. It also needs to federate and finance cooperation projects between member states. It must establish synergies with cooperative projects and assistance projects that help neighboring countries (for instance, the EU CBRN Centers of Excellence that are being established in the region[11]). It needs to gather the elite-to-be in the region by cultivating a common security culture among younger generations. For now, it has only one objective: to prove the existence of movement by moving forward.

In any event, such an initiative must be motivated by a willingness to overcome the permanent obstacle the WMDFZ constantly faces: the adherence of Israel to the NPT as a non-nuclear weapon state, and the disarmament of its unrecognized arsenal. This goal is praiseworthy and one day will be a definitive indication of its success – in the same way as the dismantling of

the South African nuclear arsenal or the abandonment of military nuclear programs in Argentina and Brazil heralded the return of regional security at the end of the twentieth century. However, it will never be a realistic prerequisite. If this is taken as an inviolable red line, the goal of a WMDFZ in the region will continue to appear to attentive observers as a political instrument devoid of any authentic will to make progress.

What Role Can Civil Society Play?

The project of a WMDFZ is primarily part of a regional security debate that involves states and international organizations in the Middle East. Yet historical obstacles to such a zone have rendered for many observers the perception of the project as utopian. At the same time, they dismiss the potential of civil society and give it a secondary role. Lastly, the context in which the Helsinki conference is to take place is already unstable enough for organizers to focus on the crux of the matter. Nonetheless, civil society demands to take part in the debate. Its representatives advertise themselves as independent actors, in the midst of a debate undermined by incompatible state positions. Rightly or wrongly, civil society considers itself a source of alternative solutions that attempt to overcome existing oppositions and to further the final project.

Whatever role is granted to civil society at the Helsinki conference, and in the context of the revival of negotiations, the mere fact of giving a public role to civil society seems a positive development. First, it would mean that Middle East states recognize that any arms control project has a civil society dimension, in the sense that its final aim remains the security of regional populations, and not only the interests of the states that represent them. Moreover, the "diplomatic bubble" needs to be regularly oxygenated from the outside in order to avoid asphyxia. As such, the fashion of fresh thinking needs to match reality with a role that some segments of civil society can perform because it is, in fact, their role. A portion of the strategic research community has appropriated the topic, giving rise to numerous ideas, the most operational of which will hopefully be taken up, if only to run them by the respective capitals. Such public recognition would be a success in itself. However, the Helsinki process could go even further, as at the end of the conference it could create thematic working groups with the inclusion of civil society experts – that is, far removed from obstacles imposed by diplomatic agendas and from regional political-strategic vicissitudes.

Notes

1 "The Arab Summit resolution in March 20 12 has clearly indicated that the Arab countries will review their position vis-à-vis the non-implementation of the Action Plan. In light of the above, Egypt has decided to withdraw from the rest of the second session of the Preparatory Committee of the NPT Review Conference right after this statement, to protest this unacceptable and continuous failure to implement the 1995 Middle East Resolution." Statement by H. E. Ambassador Hisham Badr, Assistant Minister of Foreign Affairs for International Organizations and Multilateral Affairs of the Arab Republic of Egypt before the Second Session of the Preparatory Committee to the 2015 NPT Review Conference. Cluster 1 specific issues: Regional issues, including with respect to the Middle East and implementation of the 1995 Middle East Resolution, Geneva, April 29, 2013, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom13/statements/29April_Egypt.pdf.

2 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Volume I, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/revcon2010/FinalDocument.pdf.

3 The dramatic failure of political Islam in Egypt is not the topic of this article, but the fall of President Morsi highlights political-religious topics in Muslim states in the early twenty-first century. The challenge posed by the WMDFZ in the Middle East never considers this issue. It remains obvious that there will be no substantial progress to achieve the goal for as long as religion and politics are intertwined in the Middle East in a way that threatens the security of regional states, Mediterranean neighbors, or various local collectivities.

4 NPT/CONF.1995/32 (Part I), Annex: Resolution on the Middle East, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/GENERAL-DOCS/outcome1995-ME.pdf.

5 The Syrian civil war and the confirmed use of chemical weapons in the conflict last summer have overshadowed the ongoing crisis surrounding the Syrian nuclear program, notably its supposed military dimension. There has been a nuclear crisis in Syria since at least June 2011 if one refers to decisions taken by the Board of Governors of the International Atomic Agency (IAEA) rather than the Agency's reports. This crisis has remained latent to date.

6 April 29, 2013, Second Session of the Preparatory Committee for the 2015 Nuclear Non-Proliferation Treaty Review Conference, April 22-May 3, 2013, Geneva. Remarks by Under-Secretary of State Jaakko Laajava, facilitator for the Conference on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom13/statements/29April_Laajava.pdf.

7 Dedicated webpage to the two EU Non-Proliferation Consortium Seminars "to Promote Confidence Building and in Support of a Process Aimed at Establishing a Zone Free of Weapons of Mass Destruction (WMD) and Means of delivery in the Middle East," http://www.nonproliferation.eu/middleEastSeminar2012/.

8 "The Security Council…*notes* that the actions to be taken by Iraq in paragraphs above represent steps towards the goal of establishing in the Middle East a zone free from weapons of mass destruction and all missiles for their delivery and the

objective of a global ban on chemical weapons." Security Council Resolution 687, 1991.

9 UN Secretary General "Study on Effective and Verifiable Measures which Would Facilitate the Establishment of a Nuclear Weapons Free Zone in the Middle East," October 10, 1990.

10 Mohamed I. Shaker, "Prospects for Establishing a Zone Free of Weapons of Mass Destruction in the Middle East,"*Director's Series on Proliferation*, no. 6, October 1994, Lawrence Livermore National Laboratory, p. 30.

11 CBRN, "Centers of Excellence," http://www.cbrn-coe.eu/home.aspx.