A Nuclear Weapons Free World (NWFW): Desirable?; Feasible?

Dr. Marvin Miller
Program in Science, Technology & Society
MIT
Berlin

October 10, 2007

- "Rogue and Responsible" Nuclear Weapons States
- Would a NWFW Make the World "Safe" for Conventional Wars?
- Would a NWFW Be Stable?
 - The Meaning of Abolition
 - Societal Verification as a Complement to Technical Verification Measures
- Conclusion

"America's nuclear arsenal helped thwart Soviet expansionism and provided the umbrella under which Western Europe and the Asian rim countries became and remained free throughout the Cold War. For embattled Israel, nuclear weapons have not only helped guarantee its existence, they have paradoxically provided it with the margin of strength it needs to contemplate territorial concessions...In the hands of democracies, nuclear weapons safeguard liberty; in the hands of dictatorships, they safeguard despotism...Looking back after 60 years, who cannot be grateful that it was Truman who had the bomb, and not Hitler or Tojo or Stalin? And looking forward, who can seriously doubt the need for might in the hands of the right? This is the enduring lesson of Hiroshima, and it is the one we ignore at our peril." [Emphasis added]

(Editorial, "Hiroshima", *The Wall Street Journal, August 5, 2005)*

"Although it is right to oppose the emergence of new nuclear weapons states in all circumstances, it is also right to oppose it more in some than in others. The character and behavior of the regime - its record of aggression, its history of supporting terrorism, its stability, its record on preventing exports of sensitive technologies, whether it is a democracy, its involvement in a dispute with a neighbor that in turn could involve nuclear weapons - all can and should influence the intensity of what the US and other countries should be prepared to do to prevent or counter it. While the emergence of a nuclear Iran and a nuclear Switzerland would be of concern, they would not be of equal concern."

(Richard Haas, *The Opportunity*, 2005, p. 160)

Distinctions are important, but:

• The responsible/rogue categorization is inevitably subjective, e.g., is a state with weapons on hair trigger alert, that refuses to agree to a doctrine of "no first use" or ratify the CTBT, that seeks to modernize its arsenal and pays lip service to its NPT Article VI obligations, a responsible nuclear state?

"This goal [denying nuclear weapons to non-nuclear states] raises basic hypocrisy on the part of the nuclear powers: they retain their own arsenals while denying others the same right. This contradiction prompted Washington unwisely to commit under Article VI of the NPT 'to pursue good-faith negotiations' towards complete disarmament, a goal it has no intention of pursuing." (John Deutch, "Rethinking Nuclear Strategy", Foreign Affairs, Jan./Feb. 2005, p. 51)

- Responsible actors can become rogues, e.g., Iran now and under the Shah
- Accidental, unauthorized, or erroneous attacks are possible, even by responsible states
- Possession of nuclear weapons by some states who insist they are vital to their security provides a constant stimulus to rogue regimes and others to also acquire them; this increases the risk that weapons will actually be used by the existing or new nuclear states and/or be acquired by terrorists

These risks might be "managed", even in a world where the use of nuclear power and hence the risks of proliferation and terrorism are much greater than today, but the consequences of failure could be severe

Do Nuclear Weapons Prevent War?

- Argument in favor largely based on contention that war between the US and its allies and the Soviet Union and hers would have occurred after 1945 if not for nuclear deterrence
- But the existence of nuclear weapons almost led to a nuclear holocaust during the Cuban missile crisis.
 Moreover, millions have died in conventional wars since 1945 in which nuclear states were sometimes active belligerents, and, when facing defeat serious consideration was sometimes given to the use of nuclear weapons against non-nuclear foes. This didn't occur, but the push for the development of clean bombs and "mininukes" as a means of dealing with conventional, chemical, biological and nascent nuclear threats in a "surgical manner" continues.

The Meaning of Abolition

 Common view is that since we cannot stuff the nuclear genie back in the bottle, a NWFW would be inherently unstable: sooner or later someone will build or rebuild a nuclear arsenal. Indeed, there is no way to make nuclear abolition totally irreversible. However, what can be done is to "disarm the nuclear infrastructure", i.e., eliminate the facilities that produced nuclear weapons in the first place, provide credible verification (including "societal verification") of such elimination, and promote an ethic that nuclear weapons, like chemical and biological weapons, are "beyond the pale". Taken together these steps would give "timely warning" of any attempt, covert or overt, to break out and provide opportunities for intervention to prevent this from occurring.

"Outside of the human, intellectual, and material networks that give them life and force, technologies cease to exist. We cannot reverse the invention of the motorcar, perhaps, but imagine a world in which there were no car factories... where no one alive had ever driven, and there was satisfaction with whatever alternative forms of transportation existed. The libraries might still contain pictures of automobiles and texts on motor mechanics, but there would be a sense in which that was a world in which the motor car had been uninvented...What exactly it would take to uninvent the bomb is not self-evident...To date the issue has received remarkably little attention...We have, however, had nearly half a century if 'thinking the unthinkable'pondering nuclear holocaust. The time has surely come to think the other unthinkable, a feasible world permanently free on nuclear weapons."

(Donald MacKenzie, *Inventing Accuracy*, 1990, p. 426)

Societal Verification

- In the future, technology has the potential to make both traditional nuclear safeguards at declared nuclear facilities and the detection of undeclared nuclear activities more credible and cost effective and less intrusive. However, supplementing the present centralized inspection-based system with one that allows non-governmental organizations and individuals to provide "fire alarms" will increase the likelihood that illicit nuclear activities will be detected.
- Non-state actors have shown themselves capable of assisting international regimes in arenas such as human rights, humanitarian assistance, and environmental protection by monitoring and reporting violations.

 Their potential contribution in the nuclear arena, particularly with regard to a NWFW, has been emphasized by the late Joseph Rotblat who advocated that the treaty establishing a NWFW mandate all states to pass national laws making it the right and duty of all citizens to notify an international authority of a suspected attempt to violate the treaty. He called this system "societal verification" and envisaged a special role in it for scientists who may be well placed to detect violations and act as "whistleblowers"

Conclusions

- There will be real challenges and risks involved in achieving and maintaining a NWFW. Thus, even though progress can be made on denuclearization in an environment where suspicion and hostility persist, the last steps may only be possible when political relations among potential adversaries have been normalized and real commitments made to avoid the use of force. However, the alternative of trying to maintain the nuclear status quo involves even greater risks.
- All states need to contribute toward realizing the goal of a NWFW. However, leadership by the US is indispensable in both reasserting the vision and taking practical steps towards achieving that goal.