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Nuclear Weapons and International Law:
Towards a Declaration on the
Prevention and Punishment of the
Crime Of Nuclear Humancide*

BY MATTHEW LIPPMAN**

*Change brings change inexorably, and nothing stands still —
thirty-five years have now passed since that day of disaster.*

*On that day, Hiroshima took the brunt of the age of nuclear war,
in an infernal and scorching blast. Since that day, she has been ever
calling for an end to nuclear weapons, praying for a lasting peace for
man.*

*It is now high time for us to call for the solidarity of all mankind,
and to shift our common path away from self-destruction towards
survival.*

*Today, on the occasion of the thirty-fifth anniversary of the atomic
bombing, we pray devoutly for the repose of the souls of the A-bomb
victims; . . . and we pledge all our efforts to ensure the survival of
mankind.*

The City of Hiroshima
Peace Declaration
August 6, 1980

* This article is dedicated to the memory of Professor Philip J. Meranto, University of Colorado, Denver. Professor Meranto devoted his personal and scholarly life to the struggle for social justice. We shall miss his noble and passionate spirit and presence.

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On August 9, 1945 the city of Nagasaki turned into an inferno beyond human imagination and more than 70,000 precious lives were obliterated.

. . .

Here we pray for the eternal repose of the atomic bomb victims and in the name of the citizens of Nagasaki we appeal for a firm advancement in the realization of everlasting world peace and a total ban on nuclear weapons.

The City of Nagasaki
Peace Declaration
August 9, 1980

I. INTRODUCTION

August 6 and 9, 1985 marked the fortieth anniversary of the dropping of the atomic bomb on Hiroshima and Nagasaki in Japan. Since the first use of the atomic bomb, there has been an expansion in the number, power and sophistication of nuclear weapons. This increase in nuclear weapons has been accompanied by the adoption of numerous bilateral and multilateral treaties limiting the type and use of these weapons.

In this Article, it is argued that the international attempts to regulate nuclear weapons have been unsuccessful¹ and that the threat of nuclear war can be eradicated only through the formal recognition that the possession and use of nuclear weapons is illegal under international law. As a first step towards prohibiting the possession and use of nuclear weapons, it is proposed that a Declaration on the Prevention and Punishment of the Crime of Nuclear Humancide² should be drafted.

Nuclear weapons are central components of various nation-states' nuclear arsenals and the proposed Declaration on Nuclear Humancide may be dismissed as naive or idealistic. However, one of the lawyers' traditional roles has been,

the area of regime building, of inventing and constituting institu-

1. See Meyrowitz, *The Laws of War and Nuclear Weapons*, 9 BROOKLYN J. INT'L L. 227, 240 (1983). "Technological innovation rapidly outstripped the capability of the international legal system to respond . . ." *Id.*

2. The term humancide refers to the killing of humanity. It is derived from the term genocide which literally means the killing of a race or tribe. See generally, Lippman, *The Drafting of the 1948 Convention on the Prevention and Punishment of the Crime of Genocide*, 3 B.U. INT'L L.J. 1, 1-5 (1984).

tions and structures that are capable of coping with major misfeasance of malfunction Lawyers . . . are especially well equipped for what McDougal would call the constitutive enterprise, although shamefully few are now seriously engaged in mapping out those alternatives to the present madness that realistically could enhance our collective national and international security without endangering our biological survival.³

Eliot Meyrowitz observes that,

It is *practical*, not *idealistic*, to take international law seriously. We would be more secure as people, not less, if our governmental leaders were to try to conform national policy to the minimal obligations of international law. To assume the legality of a weapon with the distinct capability to terrorize and to destroy an entire civilian population would make meaningless the entire effort to limit combat through law.⁴

Before outlining a possible Declaration on Nuclear Humancide, it is necessary to examine current nuclear policy.

II. THE UNITED STATES CONTEMPORARY STRATEGIC NUCLEAR DOCTRINE

The arms race between the United States and the Soviet Union has escalated rapidly over the last thirty years. In 1960 the United States possessed 6,500 nuclear warheads while today the United States has close to 11,000 warheads. During the same period, the Soviet Union increased its nuclear arsenal from 300 to over 8,000 warheads. Counting tactical and strategic warheads, together the two superpowers possess close to 50,000 nuclear warheads.⁵

United States nuclear missiles generally are more accurate than are Soviet missiles. The Soviet Union has compensated for this technological disadvantage by building heavier missiles capable of inflicting greater damage on impact.⁶ The United States has distributed its missiles across the strategic triad while the Soviet Union has con-

3. Weston, *Nuclear Weapons and International Law: Illegality in Context*, DENVER J. INT'L L. & POL'Y 1, 2 (1983) (Myres S. McDougal Distinguished Lecture).

4. Meyrowitz, *supra* note 1, at 257 (emphasis added).

5. GROUND ZERO, NUCLEAR WAR: WHAT'S IN IT FOR YOU?, Appendix C, Table c.1 (1982); E. KENNEDY AND M. HATFIELD, FREEZE! HOW YOU CAN HELP PREVENT NUCLEAR WAR 12-14 (1982). Tactical nuclear weapons are designed for use during a conventional, limited battlefield situation. Strategic nuclear weapons are designed for use across long geographic distances and national boundaries.

6. The megatonnage weight of a weapon is referred to as a weapon's "throw-weight."

centrated its nuclear warheads on land-based missiles.⁷

The superpowers' present nuclear arsenals represent "a million Hiroshimas"⁸: "If an explosion equivalent to one Hiroshima bomb went off every hour, twenty-four hours a day, seven days a week, it would take almost 115 years to detonate all of the nuclear explosives presently stockpiled by the two superpowers."⁹

One submarine, equipped with nuclear missiles, can inflict more damage than the Hiroshima and Nagasaki bombs combined. The captain of an American Poseidon submarine is able to:

fire some 160 independently targetable nuclear warheads, each with a yield several times larger than those that destroyed Hiroshima and Nagasaki against as many Soviet cities. If optimally targeted against the Soviet population, this alone could inflict some 30 million fatalities. One clear fact of the present strategic relationship is that the urban societies of both the United States and the Soviet Union are completely vulnerable to even a small fraction of the other side's accumulated stockpile of nuclear weapons.¹⁰

Accompanying this expansion in the number and destructive capacity of the superpowers' nuclear arsenals has been the development of a strategic doctrine which considers nuclear weapons as being appropriate for use in a limited war, one with geographically limited, short-term objectives, rather than as being reserved for use during a total war.

The doctrines which guided United States nuclear policy during the 1950's and 1960's were those of "massive retaliation"¹¹ and "mutually assured destruction."¹² These doctrines were designed to *deter* the Soviet Union from using nuclear weapons by clearly establishing the United States' intention to *respond* to a Soviet nuclear attack with a counter-attack which would inflict an unacceptable level of damage on the Soviet population, military, and economic infra-structure. Under the "massive retaliation" and "mutually assured destruction" doctrines, nuclear weapons were viewed as weapons of "last resort."

7. The strategic triad is composed of land-based, sea-based, and air-based missiles.

8. Bates, *The Medical and Ecological Effects of Nuclear War*, 28 MCGILL L.J. 716, 719 (1983).

9. *Id.*

10. Keeny & Panofsky, *MAD versus NUTS: Can Doctrine or Weaponry Remedy The Mutual Hostage Relationship of the Superpowers*, 60 FOREIGN AFF. 287, 293 (1981/1982).

11. See generally Dulles, *Policy For Security And Peace*, 32 FOREIGN AFF. 353 (1954).

12. See McNamara, *Defense Arrangements of the North Atlantic Community*, 47 DEP'T ST. BULL. 64 (July 9, 1962).

The contemporary generation of strategic thinkers have advocated that the United States adopt a "war-fighting" strategy premised on the United States' willingness and ability to initiate, fight and win a nuclear war. Under this "war-fighting" strategy, nuclear weapons are viewed as one of various options available to a military commander faced with a Soviet threat. Keeny and Panofsky have termed this strategy nuclear utilization target selection (NUTS). "NUTS [seeks] to utilize nuclear weapons against specific targets in a complex of nuclear war-fighting situations intended to be limited, as well as the management over an extended period of a general nuclear war between the superpowers."¹³

Secretary of Defense Caspar Weinberger, in his 1984 report, lists one of the objectives of United States nuclear policy as:

in the event of an attack, to deny the enemy his objectives and bring a rapid end to the conflict on terms favorable to our interests; and to maintain the political and territorial integrity of the United States and its allies. . . . [S]hould deterrence fail, our strategy is to *restore peace on favorable terms*.¹⁴

In his 1985 report, the Secretary of Defense reaffirms this war-fighting strategy: "We must plan for flexibility in our forces and in our options for response, so that we might terminate the conflict on terms favorable to the forces of freedom, and reestablish deterrence at the lowest possible level of violence, thus avoiding further destruction."¹⁵

NUTS theorists have portrayed this "war-fighting" deployment

13. Keeny & Panofsky, *supra* note 10, at 289. See generally R.C. ALDRIDGE, *FIRST STRIKE: THE PENTAGON'S STRATEGY FOR NUCLEAR WAR* (1983).

14. U.S. DEP'T OF DEF., *ANNUAL REPORT OF SECRETARY OF DEFENSE CASPAR W. WEINBERGER* 16, 32 (1984).

15. U.S. DEP'T OF DEF., *ANNUAL REPORT OF SECRETARY OF DEFENSE CASPAR W. WEINBERGER* 24 (1985). Secretary of Defense Weinberger reiterated this war-fighting strategy in a letter to social commentator Theodore Draper:

[I]t would be militarily, politically and morally unsound to confine the President to resorting either to capitulation or massive retaliation. The consequences for the United States and our allies in either case would be unacceptable. Accordingly, our policy requires that if necessary, we prevail in denying victory to the Soviets and in protecting the sovereignty and continued viability of the United States and of the Western democracies as free societies It should be apparent that if our forces cannot be used effectively, if necessary, neither can they credibly deter.

T. DRAPER, *PRESENT HISTORY* 48, 49 (1983).

The "flexible response" doctrine has its origins in the Ford and Carter Administrations. See generally, U.S. DEP'T OF DEF., *ANNUAL REPORT OF SECRETARY OF DEFENSE JAMES R. SCHLESINGER* 38 (1975); U.S. DEP'T OF DEF., *ANNUAL REPORT OF SECRETARY OF DEFENSE JAMES SCHLESINGER II* 6-7 (1976); U.S. DEP'T OF DEF., *ANNUAL REPORT OF SECRETARY OF DEFENSE HAROLD BROWN* 5-6 (1981).

of nuclear weapons as humanitarian in that nuclear weapons are to be used to resolve a conflict before either superpower feels compelled to resort to an all-out nuclear attack. NUTS "could enable both sides to avoid the killing of vast millions and yet to inflict assured destruction on military, industrial and transportation assets — the sinews and muscles of the regime initiating war."¹⁶ The United States, it is argued, is capable of defeating the Soviet Union with a targeting strategy designed to "destroy key leadership cadres, their means of communication, and some of the instruments of domestic control."¹⁷ It is estimated that "a combination of counterforce offensive targeting,¹⁸ civil defense and ballistic missile and air defense should hold U.S. casualties down to a level compatible with national survival and recovery," and ensure the "emergence of a postwar world order compatible with Western values."¹⁹

According to advocates of NUTS, this "war-fighting" strategy already has been adopted by the Soviet Union. Harvard Professor Richard Pipes notes that "there is something innately destabilizing in the very fact that we consider nuclear war unfeasible and suicidal for both, and our chief adversary views it as feasible and winnable for himself."²⁰

This essay considers under which circumstances the United States would employ a nuclear war-fighting strategy. In a 1984 letter to Jeremy J. Stone, Director of the Federation of American Scientists, Defense Department general counsel Chapman B. Cox stated that the United States would use "any of the weapons" in its arsenal, including intermediate-range and intercontinental ballistic missiles in response to a Soviet invasion of Western Europe. Cox added that the President would not consult the United States Senate prior to the deployment of nuclear weapons since this would "tend to undermine" NATO's defense and "threaten NATO's ability to deter Soviet aggression."²¹ According to one poll, only twenty percent of Americans realized that it was United States policy to use nuclear weapons in

16. Ikle, *Can Nuclear Deterrence Last Out the Century*, 51 FOREIGN AFF. 267, 282 (1973).

17. Gray & Payne, *Victory is Possible*, 39 FOREIGN POL'Y 14, 21 (1980).

18. Counterforce targeting is a nuclear attack directed against the enemy's military forces. Countervalue targeting is a nuclear attack directed against the enemy's population.

19. Gray & Payne, *supra* note 17, at 21, 25.

20. Pipes, *Why The Soviet Union Thinks It Could Fight and Win a Nuclear War*, 64 COMMENTARY 21, 34 (1977).

21. *War is War: U.S. Backs Nuclear Option*, Chi. Tribune, Sept. 9, 1985, at 6, col. 5. See generally Stone, *Presidential First Use Is Lawful*, 56 FOREIGN POL'Y 94 (1984).

response to a conventional Soviet attack on Western Europe; eighty percent of Americans believed that it was United States policy to use nuclear weapons *only* in response to a Soviet nuclear attack on the United States.²²

Critics of the new war-fighting nuclear doctrine argue that "it does not seem possible, even in the most specialized utilization of nuclear weapons, to envisage any situation where escalation to general nuclear war would probably not occur."²³ Leon Wieseltier has criticized the concept of nuclear war-termination:

It is not enough to want to end a nuclear war. You must be able to. War termination must not only be posited; it must be planned. The mighty military, strategic and technological tendencies of America's nuclear arsenal cannot be reversed or redirected in a time of crisis or a time of war. By then it will be too late There is no evidence, however, that the Pentagon, even during the tenure of officials who understood the immense importance of nuclear war termination, has developed plans to end the war with anything like the devotion that it has developed plans to fight the war.²⁴

The public fear that the nuclear war-fighting doctrine will lead to the capricious use of nuclear weapons has been heightened by provocative comments by political leaders regarding the possible use of nuclear weapons,²⁵ and by several potentially dangerous accidents involving nuclear weapons.²⁶ In January 1985, twenty-nine percent of Americans considered nuclear war very or fairly likely in the next decade (in June 1981 the percentage was forty-seven percent); fifty-two percent of Americans believed that the threat from Moscow was "constantly growing" (in September 1983 the percentage was sixty-four percent); and a majority of Americans did not believe that the Soviets desired to reach a new arms agreement and felt that the Soviets had violated the terms of past arms agreement.²⁷

Nuclear war thus arguably is coming to be perceived as inevitable by American strategic thinkers and by a substantial segment of the

22. See Chi. Tribune, *supra* note 21.

23. Keeny & Panofsky, *supra* note 10, at 290-91.

24. Wieseltier, *When Deterrence Fails*, 63 FOREIGN AFF. 827, 840 (1985).

25. *President's Joke About Bombing Leaves Press in Europe Unamused*, N.Y. Times, Aug. 14, 1984, at 8, col. 4.

26. *Soviet Cruise Missile Said to Stray Across Norway and Into Finland*, N.Y. Times, Jan. 3, 1985, at 1, col. 5; *Weinberger in Error, Says Soviet Downed Own Missile*, N.Y. Times, Feb. 1, 1985, at 3, col. 5.

27. *Poll Shows Skepticism on Arms Pact*, N.Y. Times, Jan. 8, 1985, at 8, col. 1.

American population. The danger is that an American political leader faced with a perceived Soviet threat may precipitously initiate a nuclear strike in order to preempt an anticipated Soviet attack.

III. THE IMPACT OF NUCLEAR WAR

Hiroshima and Nagasaki are the only known instances of an atomic bomb being dropped on a populated urban area. These two "announced United States nuclear tests" resulted in the death of between 60,000 and 300,000 persons.²⁸ Surveying the damage resulting from the Hiroshima-Nagasaki bombings, The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki concludes that "the magnitude of the killing is, in essence, better termed *genocide* — if not also *sociocide*, *ecocide*, *biocide*, and *earthocide* — for it is a complete negation of human existence. . . . man at last can devise the means for ending all human life."²⁹

The damage inflicted against Hiroshima and Nagasaki pales in comparison with the likely effects of a contemporary nuclear exchange. The explosions in Japan were in the range of fifteen-to-twenty kilotons, slightly above the level of what today is regarded as a tactical nuclear weapon. A modern city of between 300,000 and 400,000 inhabitants would probably be targeted by a one megaton bomb — "a bomb fifty to seventy times larger"³⁰ than those dropped on Hiroshima-Nagasaki. A larger population center likely would be targeted by a nuclear bomb "equivalent to two hundred Hiroshimas (three to five megatons)."³¹ The detonation of a relatively small one megaton bomb two miles above a city would have three main effects — blast, thermal and nuclear radiation.³²

A nuclear explosion results in the emission of a fireball with a temperature and pressure equivalent to that at the center of the sun. A blast wave will move out from the fireball in a widening circle at supersonic speed followed by high winds with twice the velocity of a

28. R. WASSERMAN & N. SOLOMON, *KILLING OUR OWN: THE DISASTER OF AMERICA'S EXPERIENCE WITH ATOMIC RADIATION* 6 (1982).

29. THE COMMITTEE FOR THE COMPILATION OF MATERIALS ON DAMAGE CAUSED BY THE ATOMIC BOMBS IN HIROSHIMA AND NAGASAKI, *HIROSHIMA AND NAGASAKI: THE PHYSICAL, MEDICAL, AND SOCIAL EFFECTS OF THE ATOMIC BOMBINGS* 340-41 (E. Ishikawa and D.L. Swain trans. 1981).

30. Bates, *supra* note 8, at 718-19.

31. *Id.*

32. *Id.* at 722.

hurricane. Within two miles of ground zero all structures will be destroyed and within four miles of ground zero only the steel frames of buildings will be able to withstand the hurricane-like winds.³³

The nuclear explosion also will result in a heat wave being radiated from the fireball at the speed of light which will ignite flammable objects within a three-to-five mile radius. Fires caused by this thermal radiation will coalesce into a firestorm with temperatures which will reach 1,500 degrees Fahrenheit. These fires will incinerate, asphyxiate and suffocate most of the individuals in their path. Ten miles from ground zero, the thermal radiation will be sufficient to cause second degree burns to exposed skin; and as far as thirty miles from ground zero, individuals looking at the fireball will suffer retina burns and, possibly, blindness.³⁴

Individuals at the point of explosion will be exposed to radioactive fallout which will cause severe burns and biological damage. Most radioactive material will be swept into clouds of radioactive dust and carried thousands of miles down-wind where it will contaminate the food chain and water supply. Individuals digesting radioactive particles may contract cancer, leukemia, genetic damage, sterility, cataracts and birth defects.³⁵

This one megaton bomb will result in the devastation of an area twenty-five miles in diameter, the fifteen-mile core of which will be destroyed.³⁶ One third of the population within this area will die immediately, including close to one hundred percent of those individuals within a two-mile radius. Another third of the individuals will be seriously injured and many of them ultimately will die due to a shortage of medical assistance and supplies.³⁷

The detonation of one-half of the megatons in the current United States and Soviet arsenals would result in approximately seven hundred and fifty million immediate deaths; three hundred and forty million persons being seriously injured; and two hundred million "healthy" survivors.³⁸ These survivors will inherit what Jonathan

33. *Id.*

34. *Id.*

35. *Id.* at 725, 729.

36. *Id.* at 724.

37. *Id.*

38. *Id.* at 726. *See generally*, U.S. ARMS CONTROL AND DISARMAMENT AGENCY, EFFECTS OF NUCLEAR WAR (1979); U.S. CONGRESS, OFFICE OF TECHNOLOGICAL ASSESSMENT, THE EFFECTS OF NUCLEAR WAR (1979).

Schell terms "a Republic of Insects and Grass"³⁹ — there will be a loss of communication, transportation, utilities, electricity, food and water, and there will be a spread of smallpox, cholera, typhoid fever and a complete breakdown of social organization.⁴⁰

The ability of the survivors to overcome these difficulties will be complicated by the fact that the detonation of between five hundred and two thousand nuclear warheads may possibly result in the partial destruction of the ozone layer. The ozone layer both protects the earth's surface from the ultraviolet radiation contained within sunlight which radiates the heat reflected from the earth's surface back to earth. The damaging of the ozone layer, combined with the dust and smoke lofted into the atmosphere by a nuclear explosion, will result in a cooling of the earth's surface.⁴¹ This cooling could result in the onset of a "nuclear winter"⁴² which, among other results, may

cut the biological productivity of deciduous forests by as much as twenty percent, shift the monsoons in Asia in a way that could be ruinous for both agriculture and ecosystems, and eliminate all wheat-growing in Canada. . . . Another global consequence of the injection of oxides of nitrogen into the stratosphere by nuclear explosions would be pollution of the environment as these gases fell back into the stroposphere.⁴³

This ecological imbalance would drastically reduce the world's food supply and "large numbers of people there would die of starvation."⁴⁴

Doctor Don G. Bates observes that "[A] combination of population thinning through immediate decimation, the subsequent ravages of disease, famine and social disorder, relative infertility and shortened life spans, and a climatically unsupportive environment conceivably could push man into the position of an endangered species."⁴⁵

IV. CONTROLLING THE NUCLEAR THREAT

Three approaches have been developed for controlling the deployment and use of nuclear weapons: the concept of the nuclear free zone; the prohibition on the transfer and testing of nuclear weapons;

39. J. SCHELL, *THE FATE OF THE EARTH* 3-96 (1982).

40. Bates, *supra* note 8, at 726, 727.

41. Sagan, *Nuclear War and Climatic Catastrophe: Some Policy Implications*, 62 *FOREIGN AFF.* 257 (1983/84).

42. *Id.*

43. J. SCHELL, *supra* note 39, at 89.

44. Sagan, *supra* note 41, at 272.

45. Bates, *supra* note 8, at 730.

and bilateral agreements between the United States and the Soviet Union limiting the number and type of nuclear weapons deployed by the two superpowers.

A. *The Nuclear Free Zone*

The nuclear free zone concept prohibits the testing and the deployment of nuclear weapons in geographic areas in which nuclear weapons previously have not been introduced.

The Treaty of Tlatelolco⁴⁶ obligates twenty-two Latin American States to limit the use of nuclear materials and facilities within their jurisdiction "exclusively for peaceful purposes"⁴⁷ and "to prohibit and prevent in their respective territories."⁴⁸

(a) The testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons, by the Parties themselves, directly or indirectly, on behalf of anyone else or in any other way, and

(b) The receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or indirectly, by the Parties themselves, by anyone on their behalf or in any other way.

2. The Contracting Parties also undertake to refrain from engaging in, encouraging or authorizing, directly or indirectly, or in any way participating in the testing, use, manufacture, production, possession or control of any nuclear weapon.⁴⁹

The Contracting States are obligated to submit semi-annual reports to the International Atomic Energy Agency (IAEG) "stating that no activity prohibited under this Treaty has occurred in their respective territories."⁵⁰ Signatory States also are required to enter into agreements with the International Atomic Energy Agency agreeing to adhere to IAEA safeguards on the Signatory States' nuclear

46. Treaty for the Prohibition of Nuclear Weapons in Latin America, Feb. 14, 1967, 22 U.S.T. 754, at 762, T.I.A.S. No. 7137, 634 U.N.T.S. 281 [hereinafter cited as Latin America Nuclear Weapons Treaty].

47. *Id.* at art. 1.

48. *Id.*

49. *Id.*

50. *Id.* at art. 14, which provides:

1. The Contracting Parties shall submit to the Agency and to the International Atomic Energy Agency, for their information, semi-annual reports stating that no activity prohibited under this Treaty has occurred in their respective territories.

2. The Contracting Parties shall simultaneously transmit to the Agency a copy of any report they may submit to the International Atomic Energy Agency which relates to matters that are the subject of this Treaty and to the application of safeguards.

activities.⁵¹ The IAEA, and under certain circumstances the Council of the Agency for the Prohibition of Nuclear Weapons in Latin America,⁵² are empowered under Article Sixteen to conduct "special inspections" to insure that Contracting Parties are complying with the terms of the Treaty.⁵³

The General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America,⁵⁴ when non-compliance with the Treaty "might endanger peace and security, . . . shall report thereon simultaneously to the . . . United Nations, and to the Council of the Organization of American States" who shall take appropriate action.⁵⁵

51. *Id.* at art. 13. "Each Contracting Party shall negotiate multilateral or bilateral agreements with the International Atomic Energy Agency for the application of its safeguards to its nuclear activities." *Id.*

52. *Id.* at art. 7, which provides:

1. In order to ensure compliance with the obligations of this Treaty, the Contracting Parties hereby establish an international organization to be known as the Agency for the Prohibition of Nuclear Weapons in Latin America

2. The Agency shall be responsible for the holding of periodic or extraordinary consultations among member States on matters relating to the purposes, measures and procedures set forth in this Treaty and to the supervision of compliance with the obligations arising therefrom.

3. The Contracting Parties agree to extend to the Agency full and prompt cooperation in accordance with the provisions of this Treaty, of any agreements they may conclude with the Agency and of any agreements the Agency may conclude with any other international organization or body.

4. The headquarters of the Agency shall be in Mexico City.

Id.

53. *Id.* at art. 16, which reads:

1. The International Atomic Energy Agency and the Council established by this Treaty have the power of carrying out special inspections in the following cases:

(a) In the case of the International Atomic Energy Agency, in accordance with the agreements referred to in article 13 of this Treaty;

(b) In the case of the Council:

(i) When so requested, the reasons for the request being stated, by any Party which suspects that some activity prohibited by this Treaty has been carried out or is about to be carried out, either in the territory of any other Party or in any other place on such latter Party's behalf

(ii) When requested by any Party which has been suspected of or charged with having violated the Treaty, the Council shall immediately arrange for the special inspection requested

Id.

54. *Id.* at art. 9, which provides:

1. The General Conference, the supreme organ of the Agency, shall be composed of all the Contracting Parties; it shall hold regular sessions every two years, and may also hold special sessions whenever this Treaty so provides or, in the opinion of the Council, the circumstances so require

[2](c) Shall elect the members of the Council and the General Secretary.

Id.

55. *Id.* at art. 20. Article 20 reads:

Protocol I obligates nuclear states with *de jure* or *de facto* international responsibility for territories within Latin America to apply "the status of denuclearization" within such territories.⁵⁶ Treaty Protocol II obligates contracting nuclear powers to respect the Latin American nuclear free zone⁵⁷ and to undertake "not to use or threaten to use nuclear weapons against the Contracting Parties of the Treaty for the Prohibition of Nuclear Weapons in Latin America."⁵⁸

The Antarctic Treaty⁵⁹ provides that Antarctica is to be:

1. [U]sed for peaceful purposes only. There shall be prohibited, *inter alia*, any measures of a military nature, such as the establishment of military bases and fortifications, and carrying out of military maneuvers, as well as the testing of any type of weapons.
2. The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.⁶⁰

Article V(1) prohibits "any nuclear explosions in Antarctica and

1. The General Conference shall take note of all cases in which, in its opinion, any Contracting Party is not complying fully with its obligations under this Treaty and shall draw the matter to the attention of the Party concerned, making such recommendations as it deems appropriate.

2. If, in its opinion, such non-compliance constitutes a violation of this Treaty which might endanger peace and security, the General Conference shall report thereon simultaneously to the [United Nations] Security Council and the General Assembly through the Secretary-General of the United Nations, and to the Council of the Organization of American States. The General Conference shall likewise report to the International Atomic Energy Agency for such purposes as are relevant in accordance with its Statute.

Id.

56. Additional Protocol I to Latin America Nuclear Weapons Treaty, *supra* note 46, 22 U.S.T. 754, at 786, T.I.A.S. No. 7137, 634 U.N.T.S. 281, at 362.

Article 1. To undertake to apply the status of denuclearization in respect of warlike purposes as defined in articles 1, 3, 5 and 13 of the Treaty for the Prohibition of Nuclear Weapons in Latin America in territories for which, *de jure* or *de facto*, they are internationally responsible and which lie within the limits of the geographical zone established in that Treaty.

Id.

57. Additional Protocol II to Latin America Nuclear Weapons Treaty, 22 U.S.T. 754, at 755, T.I.A.S. No. 7137, 634 U.N.T.S. 281, at 364.

Article 2. The Governments represented by the undersigned Plenipotentiaries undertake, therefore, not to contribute in any way to the performance of acts involving a violation of the obligations of article 1 of the Treaty in the territories to which the Treaty applies

Article 3. The Governments represented by the undersigned Plenipotentiaries also undertake not to use or threaten to use nuclear weapons against the Contracting Parties of the Treaty for the Prohibition of Nuclear Weapons in Latin America.

Id.

58. *Id.*

59. Antarctic Treaty, Dec. 1, 1959, 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71.

60. *Id.* at art. I.

the disposal there of radioactive waste”⁶¹ The Treaty is to be enforced by observers designated by the Contracting Parties.⁶²

The Seabed Arms Control Treaty⁶³ obligates States Parties not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a seabed zone . . . , any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.⁶⁴

The States Parties to the Seabed Treaty “undertake not to assist, encourage or induce any State to carry out [these] activities”⁶⁵ In order to ensure compliance with the Treaty, each State Party to the Treaty shall have the right “to verify through observations the activities of other States Parties to the Treaty on the seabed and the ocean floor and in the subsoil thereof.”⁶⁶

A State Party which has “reasonable doubts” concerning whether a State is fulfilling its obligations under the Seabed Treaty is entitled to consult with the State Party which it believes to be in violation of the Treaty. The Parties concerned “shall cooperate on such further procedures for verification as may be agreed. . . . After completion of the further procedures for verification, an appropriate report shall be circulated to the other Parties by the Party that initiated such procedures.”⁶⁷ If “consultation and cooperation . . . have not removed the doubts concerning the activities and there remains a serious question concerning fulfillment of the obligations assumed under this Treaty, a State Party may, . . . refer the matter to the Security

61. *Id.* at art. V(1).

62. *Id.* at art. VII, which provides:

1. In order to promote the objectives and ensure the observance of the provisions of the present treaty, each Contracting Party . . . shall have the right to designate observers to carry out any inspection provided for by the present Article. Observers shall be nationals of the Contracting Parties which designate them. The names of observers shall be communicated to every other Contracting Party having the right to designate observers, and like notice shall be given of the termination of their appointment.

Id.

63. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof, Feb. 11, 1971, 23 U.S.T. 701, T.I.A.S. No. 7337.

64. *Id.* at art. I(1). Article II defines the “outer limit of the seabed zone as . . . coterminous with the twelve-mile outer limit.” *Id.* at art. II.

65. *Id.* at art. I(3).

66. *Id.* at art. III(1).

67. *Id.* at art. III(2).

Council, which may take action in accordance with the Charter.”⁶⁸

The Outer Space Treaty,⁶⁹ in Article IV, requires that “States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, instal [sic] such weapons on celestial bodies, or station such weapons in outer space in any other manner.”⁷⁰ “The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes.”⁷¹ The Outer Space Treaty is to be enforced through consultation between States Parties concerning a State Parties’ experiments or activities in space⁷²; through State Parties’ observations of other States Parties “stations, installations, equipment and space vehicles in celestial bodies and space flights”;⁷³ and through disclosure of the “nature, conduct, locations and results” of States Parties’ activities in outer space.⁷⁴

68. *Id.* at art. III(4).

69. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205.

70. *Id.* at art. IV.

71. *Id.*

The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations, fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.

Id.

72. *Id.* at art. IX, which reads:

If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.

Id.

73. *Id.* at art. XII. “All stations, installations, equipment and space vehicles on the moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity” *Id.*

See also art. X, which provides: “[T]he States Parties to the Treaty shall consider on a basis of equality any requests by other States Parties to the Treaty to be afforded an opportunity to observe the flight of space objects launched by those States.”

74. *Id.* at art. XI, which provides:

In order to promote international co-operation in the peaceful exploration and use of

The nuclear free-zone approach has been successful in halting the spread of nuclear weapons into those geographic areas covered under the treaties. However, these areas, in general, are of minor strategic significance. The existence of nuclear submarines and underground missile silos, for instance, makes the emplacement of stationary nuclear weapons in the seabed unnecessary. In addition, States tend to ignore the nuclear free-zones when they conflict with their self-interest. For example, the testing of space-based Soviet and American anti-satellite and anti-missile weapon systems threatens to erode the Outer Space Treaty.⁷⁵ Also, the failure of Argentina, Brazil and Cuba to ratify the Treaty of Tlatelolco⁷⁶ and the United States' contingency plan to abrogate the Treaty Protocols and to place nuclear weapons in Puerto Rico and in Bermuda⁷⁷ undermines the integrity of the Latin American nuclear free zone. Finally, attempts to expand the nuclear free zone to other areas, such as the Pacific Basin, have been opposed by the superpowers.⁷⁸

B. Prohibition on the Transfer and Testing of Nuclear Weapons

A complementary approach for controlling the spread of nuclear weapons into various geographic regions and countries is the Nuclear Non-Proliferation Treaty which has been ratified by ninety-three states.⁷⁹ In Article One, each States Party possessing nuclear weapons:

undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any

outer space, States Parties to the Treaty conducting activities in outer space, including the moon and other celestial bodies, agree to inform the Secretary-General of the United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities. On receiving the said information, the Secretary-General of the United Nations should be prepared to disseminate it immediately and effectively.

Id.

75. See generally UNION OF CONCERNED SCIENTISTS, *THE FALLACY OF STAR WARS* (1983); but see Note, *Antisatellite Weaponry: The High Road To Destruction*, 3 B.U. INT'L L.J. 167 (1985).

76. U.S. ARMS CONTROL AND DISARMAMENT AGENCY, *ARMS CONTROL AND DISARMAMENT AGREEMENTS* 80-81 (1984).

77. *U.S. Plans for Deploying A-Arms Wasn't Disclosed to Host Nations*, N.Y. Times, Feb. 13, 1985, at 1, col. 1.

78. See generally L.A. DUNN, *CONTROLLING THE BOMB: NUCLEAR PROLIFERATION IN THE 1980'S* 131-32 (1982).

79. Treaty on the Non-Proliferation of Nuclear Weapons, July 1, 1968, 21 U.S.T. 483, T.I.A.S. No. 6839, 729 U.N.T.S. 161.

way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.⁸⁰

Article II provides:

Each non-nuclear State Party to the Treaty . . . undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.⁸¹

The Treaty does not affect the “inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes.”⁸² However, each non-nuclear State Party,

undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency [IAEA] . . . , for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. . . .⁸³

The provisions of the Non-Proliferation Treaty are supplemented by bilateral agreements between nuclear supplier and recipient states. The United States’ bilateral agreements, for instance, generally specify that a recipient state “grants the United States certain safeguard rights, including inspections, to guarantee that the materials and equipment are used solely for peaceful purposes.”⁸⁴ The majority of these “safeguard rights” may be transferred to the IAEA upon the

80. *Id.* at art. I.

81. *Id.* at art. II.

82. *Id.* at art. IV.

83. *Id.* at art. III(1).

Each State Party to the Treaty undertakes not to provide:

(a) source or special fissionable material, or

(b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article.

Id. at art. III(2).

84. Doub & Weiss, *International Nuclear Development in The Age of Interdependence*, 32 *VAND. L. REV.* 843, 849 (1979); Agreement for Cooperation for Civil Uses of Atomic Energy, July 11, 1969, United States—Austria, 21 *U.S.T.* 10, T.I.A.S. No. 6185.

conclusion of a trilateral agreement between the United States, the recipient state and the IAEA.⁸⁵

The Nuclear Non-Proliferation Treaty appears to have controlled the spread of nuclear weapons technology. The world's nuclear generating capacity has expanded from five MWE's (electrical megawatts) in one nation in 1954 to over 100,000 MWE's in twenty-two countries in 1979. During the same period, only three nations developed atomic weapons.⁸⁶

However, a number of nations — Pakistan, South Africa, Israel, Brazil, Argentina and India — have failed to ratify the Non-Proliferation Treaty.⁸⁷ A Twentieth Century Fund study concluded that four or five additional countries may acquire the bomb in the next decade and that the world may be confronted by "runaway proliferation."⁸⁸ The spirit of the non-proliferation treaty also has been violated by the superpowers' stationing of nuclear missiles in NATO, Warsaw Pact and other countries.⁸⁹

Another approach to limiting the development of nuclear arms is controls on nuclear weapon testing. These testing limits primarily control nuclear fallout, but also indirectly discourage the testing of larger, more powerful nuclear weapons.⁹⁰

In 1963 the United States, United Kingdom and the Soviet Union signed the Limited Test Ban Treaty (LTBT).⁹¹ The Treaty prohibits the testing of nuclear weapons or any other nuclear explosion by a State Party in an area under its jurisdiction or control:

- (a) in the atmosphere; beyond its limits, including outer space; or underwater, including territorial waters or high seas; or
- (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted⁹²

In 1974 the United States and the Soviet Union entered into the Threshold Test Ban Treaty.⁹³ Under this Treaty, which has not yet

85. Doub & Weiss, *supra* note 84, at 849.

86. Doub & Weiss, *supra* note 84, at 850.

87. DUNN, *supra* note 78, at 60, 130.

88. *Id.* at 68.

89. *See generally*, Ronald Reagan, *Peace and National Security*, 83 DEP'T ST. BULL. 8-10 (April 1983).

90. *See generally*, G. SEABORG, KENNEDY, KHRUSHCHEV, AND THE TEST BAN (1981).

91. Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, Aug. 5, 1963, 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 43.

92. *Id.* at art. I(a)(b).

93. Treaty Between the United States of America and the Union of Soviet Socialist Re-

been ratified by the United States, "each Party undertakes to prohibit, to prevent, and not to carry out any underground nuclear weapon test having a yield exceeding 150 kilotons at any place under its jurisdiction or control beginning March 31, 1976."⁹⁴

Both countries also agree to "limit the number of its underground nuclear weapon tests to a minimum⁹⁵ . . . [and to] continue their negotiations with a view toward achieving a solution to the problem of the cessation of all underground nuclear weapon tests."⁹⁶ In order to provide assurance of compliance with the provisions of the Treaty, "each Party may use the national technical means of verification at its disposal"⁹⁷ and agrees to provide data concerning its underground tests.⁹⁸

In May 1976, the United States and the Soviet Union entered into a treaty, which has not yet been ratified by the United States, on underground nuclear explosions for peaceful purposes (PNE's).⁹⁹ There is no essential distinction between the technology of a nuclear device which would be used as a weapon and the technology of a nuclear explosive device used for peaceful purposes.¹⁰⁰ The Treaty permits peaceful nuclear explosions to be performed outside the "geographical boundaries of test sites specified under the provisions of the Treaty on the Limitation of Underground Nuclear Weapon Tests"¹⁰¹ and the "territory of another State at the request of such other State."¹⁰²

The United States and the Soviet Union agreed in the Treaty on Underground Nuclear Explosions for Peaceful Purposes not to carry out any individual nuclear explosions with a yield exceeding 150 kilo-

publics on the Limitation of Underground Nuclear Weapon Tests, (never signed), July 3, 1974, U.S. Dep't State, Press Release No. 281 (July 3, 1974), *reprinted in* 13 I.L.M. 906 (1974).

94. *Id.* at art. I(1).

95. *Id.* at art. I(2).

96. *Id.* at art. I(3).

97. *Id.* at art. II(1).

98. Protocol to the Treaty Between the United States Of America and the Union of Soviet Socialist Republics on the Limitation of Underground Nuclear Weapon Tests, *supra* note 93.

99. Treaty Between the United States of America and the Union of Soviet Socialist Republics on Underground Nuclear Explosions for Peaceful Purposes, U.S. Arms Control & Disarmament Agency, Pub. No. 871 (May 13, 1976), *reprinted in* 15 I.L.M. 891 (1976) [hereinafter cited as Peaceful Purposes Treaty].

100. U.S. ARMS CONTROL AND DISARMAMENT AGENCY, *supra* note 76, at 171 (1984).

101. Peaceful Purposes Treaty, *supra* note 99, at art. III(1)(a).

102. *Id.* at art. III(1)(b).

tons;¹⁰³ not to carry out any group explosions (consisting of a number of individual explosions) with an aggregate yield exceeding 1,500 kilotons;¹⁰⁴ and not to carry out any group explosion with an aggregate yield exceeding 150 kilotons unless the individual explosions in the group could be identified and measured by agreed verification procedures.¹⁰⁵ The two parties also affirmed their obligations to comply fully with the Limited Test Ban Treaty of 1963.¹⁰⁶ To assure compliance with the provisions of the treaty, each Party may "use national technical means of verification"¹⁰⁷ and shall "provide to the other Party information and access to sites of explosions."¹⁰⁸ The Treaty establishes a Joint Consultive Commission "to promote the objectives and implementation of the provisions of [the Treaty]."¹⁰⁹

Reviewing the impact of the limits on the testing of nuclear weapons, Robert Johansen notes that the limits on atmospheric testing resulted in a shift to underground testing, but did not limit or decrease the number of tests being conducted.¹¹⁰ Johansen also notes that the 150 kiloton limit is "the size of ten Hiroshima bombs, and test devices exceeding that amount represent no more than 10 percent of the Soviet and American tests during the years immediately preceding the new accord [of 1974]."¹¹¹ Studies also indicated that the test ban treaties have also limited, but have not eliminated, the release of radioactive particles into the atmosphere.¹¹²

C. Limitations on the Number and Type of Nuclear Weapons

The primary legal mechanism for controlling nuclear weapons are bilateral agreements between the United States and the Soviet Union which limit the number and types of nuclear weapons deployed by each country. These bilateral treaties are supplemented by measures designed to prevent the accidental or mistaken resort to nuclear weapons.

103. *Id.* at art. III(2)(a).

104. *Id.* at art. III(2)(b)(2).

105. *Id.* at art. III(2)(b)(1).

106. *Id.* at preamble, para. 3.

107. *Id.* at art. IV(1)(a).

108. *Id.* at art. IV(1)(b).

109. *Id.* at art. V(1).

110. R. JOHANSEN, *THE NATIONAL INTEREST AND THE HUMAN INTEREST: AN ANALYSIS OF U.S. FOREIGN POLICY* 115 (1980).

111. *Id.*

112. H. WASSERMAN & N. SOLOMAN, *supra* note 28, at 58-124.

The "Hot Line" Agreement¹¹³ establishes a direct communications link between the United States and the Soviet Union "to guard against the accidental or unauthorized use of nuclear weapons."¹¹⁴ The 1971 "Hot Line" Modernization Agreement established a satellite communications link between the two countries.¹¹⁵

The superpowers also have signed the Agreement on Measures to Reduce the Outbreak of Nuclear War¹¹⁶ in which each country agrees:

- (1) to maintain and to improve, . . . its existing organizational and technical arrangements to guard against the accidental or unauthorized use of nuclear weapons under its control;¹¹⁷
- (2) to notify each other immediately in the event of an accidental, unauthorized or any other unexplained incident involving a possible detonation of a nuclear weapon which could create a risk of outbreak of nuclear war;¹¹⁸
- (3) to notify each other immediately in the event of detection by missile warning systems of unidentified objects, or in the event of signs of interference with these systems . . . if such occurrences could create a risk of outbreak of nuclear war between the two countries;¹¹⁹
- (4) to notify the other Party in advance of any planned missile launches if such launches will extend beyond its national territory in the direction of the other party;¹²⁰
- (5) In other situations involving unexplained nuclear incidents, . . . [to] inform the other Party or request information when, in its view, this is warranted by the interests of averting the risk of outbreak of nuclear war.¹²¹

113. Memorandum of Understanding Between the United States of America and the Union of Soviet Socialist Republics Regarding the Establishment of a Direct Communications Link (Hot Line Agreement), June 20, 1963, 14 U.S.T. 825, T.I.A.S. No. 5362, 472 U.N.T.S. 163. See also Agreement Between the United States of America and the Union of Soviet Socialist Republics on Measures to Improve the USA-USSR Direct Communications Link (Hot Line Modernization Agreement), Sept. 30, 1971, 22 U.S.T. 1598, T.I.A.S. No. 7187, 806 U.N.T.S. 402.

114. Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics Sept. 30, 1971, 22 U.S.T. 1590, T.I.A.S. No. 7186 [hereinafter cited as Risk Reduction Measures Agreement].

115. Hot Line Modernization Agreement, *supra* note 113, at art. I(1) (a).

116. Risk Reduction Measures Agreement, *supra* note 114, at Preamble.

117. *Id.* at art. I.

118. *Id.* at art. II.

119. *Id.* at art. III.

120. *Id.* at art. IV.

121. *Id.* at art. V.

At the same time, the United States and the Soviet Union undertook an additional step towards preventing nuclear war by entering into an Agreement on the Prevention of Nuclear War.¹²² The two countries agreed that it is "an objective of their policies . . . to remove the danger of nuclear war and of the use of nuclear weapons."¹²³ The Parties "agree that they will act in such a manner as to prevent the development of situations capable of causing a dangerous exacerbation of their relations, as to avoid military confrontations, and as to exclude the outbreak of nuclear war between them and between either of the Parties and other countries."¹²⁴ The Parties also agree to "refrain from the threat or use of force against the other Party, against the allies of the other Party and against other countries, in circumstances which may endanger international peace and security."¹²⁵ If, at any time, a situation appears to present the risk of nuclear war between the two parties, the United States and the Soviet Union agree to "immediately enter into urgent consultations with each other and make every effort to avert this risk."¹²⁶

These mutual pledges of precaution and restraint concerning the deployment of nuclear weapons are at odds with the two superpowers' reliance on nuclear weapons as central components of their strategic arsenals.¹²⁷ The effectiveness and credibility of these efforts to limit the superpowers' use of nuclear weapons depends upon the two countries' willingness and ability to maintain a stable foreign policy relationship and overcome the pattern of discord which generally has characterized their relationship with one another over the last few decades.¹²⁸

The major mechanism for maintaining a dialogue between the superpowers and for limiting the number and type of nuclear weapons deployed by the two countries has been the bilateral arms talks and agreements negotiated between the United States and the Soviet Union at Geneva.

122. Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Prevention of Nuclear War, June 22, 1973, 24 U.S.T. 1478, T.I.A.S. No. 7654.

123. *Id.* at art. I.

124. *Id.*

125. *Id.* at art. II.

126. *Id.* at art. IV.

127. See, e.g., 2 *U.S.-Soviet Regional Talks Set*, N.Y. TIMES, May 29, 1985, at 6, col. 3. See also *supra* note 14-15.

128. For the relationship between nuclear weapons strategy and foreign policy, see generally, L. FREEDMAN, *THE EVOLUTION OF NUCLEAR STRATEGY* (1983).

The 1972 Interim Agreement Between the United States of America and the Union of Soviet Socialist Republics on Certain Measures With Respect to the Limitation of Strategic Offensive Arms,¹²⁹ which expired in 1977 provided, *inter alia*, that:

The Parties

undertake not to start construction of additional fixed land-based intercontinental ballistic missile (ICBM) launchers after July 1, 1972.¹³⁰

The Parties

undertake not to convert land-based launchers for light ICBMs, or for ICBMs of older types deployed prior to 1964, into land-based launchers for heavy ICBMs of types deployed after that time.¹³¹

The Parties

undertake to limit submarine-launched ballistic missile (SLBM) launchers and modern ballistic missile submarines to the numbers operational and under construction on the date of signature of th[e] Interim Agreement. . . .¹³²

The Parties

[agree to limit the] modernization and replacement of strategic offensive ballistic missiles and launchers. . . .¹³³

Each Party

shall use national technical means of verification at its disposal . . . ,¹³⁴

undertakes not to interfere with the national technical means of verification of the other Party¹³⁵[and] undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance¹³⁶

A Standing Consultative Commission was established "to promote

129. The Interim Agreement Between the United States of America and the Union of Soviet Socialist Republics on Certain Measures With Respect to the Limitation of Strategic Offensive Arms, May 26, 1972, 23 U.S.T. 3462, T.I.A.S. No. 7504 [hereinafter cited as SALT I].

130. *Id.* at art. I. The United States had 1054 ICBM launchers; the Soviet Union 1608. See THE HARVARD NUCLEAR STUDY GROUP, *LIVING WITH NUCLEAR WEAPONS* 94 (1983).

131. SALT I, *supra* note 129, at art. II. The United States had no ICBM launchers; the Soviet Union had 308. THE HARVARD NUCLEAR STUDY GROUP, *supra* note 130, at 94.

132. SALT I, *supra* note 129, at art. III. The United States had 656 submarine launched ballistic missiles (SLBMs) while the Soviet Union had 740 SLBMs. HARVARD NUCLEAR STUDY GROUP, *supra* note 130.

133. SALT I, *supra* note 129, at art. IV.

134. *Id.* at art. V(1).

135. *Id.* at art. V(2).

136. *Id.* at art. V(3).

the objectives and implementation of the provisions of this Interim Agreement. . . ."¹³⁷

A separate agreement limits each side to two anti-ballistic missile (ABM) systems¹³⁸ which are designed to intercept strategic ballistic missiles in-flight. A comprehensive ABM system is viewed as destabilizing in that it would force each superpower to develop sophisticated offensive missiles to counter the other side's ABM defense.¹³⁹ The 1974 Anti-Ballistic Missile Protocol restricts the superpowers to one ABM site.¹⁴⁰ Each Party, with advance notice, has the right "to dismantle or destroy its ABM system" and "to deploy an ABM system or its components in . . . [an] alternative area"¹⁴¹

In 1974, President Gerald Ford and Soviet Party General Secretary Leonid L. Brezhnev reaffirmed:

the great significance that both the United States and the USSR attach to the limitation of strategic offensive arms. They are convinced that . . . a long term agreement on this question would be a significant contribution to improving relations between the US and the USSR, to reducing the danger of war and to enhancing world peace.¹⁴²

The two leaders affirmed their intention to conclude a new arms limitation agreement covering the period from October 1977 through December 31, 1985.¹⁴³ The new agreement would have imposed limits on the aggregate number of strategic delivery vehicles, including the number of intercontinental ballistic missiles and submarine-launched missiles each side would be permitted to possess.¹⁴⁴

137. *Id.* at art. VI.

138. Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, 23 U.S.T. 3435, T.I.A.S. No. 7503, and Protocol of 1974, July 3, 1974, 27 U.S.T. 1645, T.I.A.S. No. 8276.

139. *See generally* ABM: AN EVALUATION OF THE DECISION TO DEPLOY AN ANTI-BALLISTIC MISSILE SYSTEM (A. Chayes & J. Wiesner eds. 1969).

140. Protocol to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, July 3, 1974, 27 U.S.T. 1645, T.I.A.S. No. 8276.

141. *Id.* at art. II.

142. *Joint Statement on Strategic Offensive Arms Issued at Vladivostok, Nov. 24, 1974*, 71 DEP'T OF ST. BULL. 879 (1974).

143. *Id.*

144. *Excerpt from "President Ford's News Conference of December 2,"* 71 DEP'T ST. BULL. 861 (1974).

The contemplated treaty would provide for:

—a ceiling of 2,400 on the total number of intercontinental ballistic missiles, submarine-launched missiles and heavy bombers.

Under the unratified SALT II Treaty¹⁴⁵ the two superpowers undertake "to limit strategic offensive arms quantitatively and qualitatively, to exercise restraint in the development of new types of strategic offensive arms, and to adopt other measures provided for in this Treaty."¹⁴⁶ The Treaty, *inter alia*, provided for:

An aggregate limit of 2,400 on intercontinental ballistic missile (ICBM) launchers, submarine-launched ballistic missile (SLBM) launchers, heavy bombers and air-to-surface ballistic missiles (ASBMs). Each side pledges to reduce these arms to a number not to exceed 2,250 as of January 1, 1981.¹⁴⁷

An aggregate limit of 1,320 launchers of ICBMs and SLBMs and ASBMs equipped with multiple independently targetable reentry vehicles (MIRVs), and heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers.¹⁴⁸

An aggregate limit of 1,200 on ICBMs and SLBMs launchers and on ASBMs equipped with MIRVs.¹⁴⁹

An aggregate limit of 820 ICBM launchers equipped with MIRVs.¹⁵⁰

A prohibition on the construction of additional fixed ICBM launchers; on the relocation of fixed ICBM launchers; on increasing the internal volume of ICBM silo launchers by more than thirty-two percent; and a prohibition on the conversion of ICBM launchers deployed prior to 1964 into launchers of heavy ICBMs "of types deployed after that time."¹⁵¹

A ban on mobile launchers of heavy ICBMs; and on heavy SLBMs and on heavy ASBMs.¹⁵²

Permitting the flight-testing or deployment of one new type of

—a limit on the number of missiles armed with multiple warheads (MIRVs) to approximately 1,320 of 2,400 missiles. *Id.*

145. Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Weapons, June 18, 1979, U.S. DEP'T ST. PUB. no. 8984, SALT II Agreement, (Selected Documents, No. 12A, June 18, 1979), *reprinted in* 18 I.L.M. 1138 (1979) [hereinafter cited as SALT II].

146. *Id.* at art. I.

147. *Id.* at art. III, 1, 2.

148. *Id.* at art. V, 1.

149. *Id.* at art. V, 2.

150. *Id.* at art. V, 3.

151. *Id.* at art. IV, 1, 2, 3, 4.

152. *Id.* at art. IX, 1, (d), (e), (f). "Heavy" is defined as a missile whose launch-weight or throw-weight is "greater than that of the heaviest, in terms of either launch-weight or throw-weight, respectively, of the light ICBMs deployed by either Party as of the date of signature of this Treaty . . ." *Id.* at art. IX, 1 (e).

light ICBM.¹⁵³ The "new type" of ICBM may carry up to ten reentry vehicles.¹⁵⁴

A prohibition on the flight-testing or deployment of ICBMs with a number of reentry vehicles greater than the maximum number of reentry vehicles on ICBMs "of that type which have been flight-tested as of May 1, 1979."¹⁵⁵

Each Party undertakes not to flight-test or to deploy SLBMs with a number of reentry vehicles greater than the maximum number of reentry vehicles with which an SLBM of either Party has been flight-tested as of May 1, 1979, that is, fourteen.¹⁵⁶

Each Party undertakes not to flight-test or deploy ASBMs with a number of reentry vehicles greater than the maximum number of reentry vehicles with which an ICBM of either Party has been flight-tested as of May 1, 1979, that is, ten.¹⁵⁷

Each Party undertakes not to deploy at any one time on heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers, a number of such cruise missiles which exceeds the product of twenty-eight and the number of such heavy bombers.¹⁵⁸

Each Party undertakes not to develop, test or to deploy ICBMs which have a launch-weight or throw-weight greater than that of existing missiles.¹⁵⁹

A ban on rapid reload ICBM systems.¹⁶⁰

A ban on certain types of strategic weapons: ballistic missiles capable of a range in excess of 600 kilometers for installation on waterborne vehicles other than submarines;¹⁶¹ fixed ballistic or cruise missile launchers for emplacement on the ocean floor, on the seabed, or on the beds of internal waters and inland waters;¹⁶² and systems for placing into Earth orbit nuclear weapons or any other kind of weapons of mass destruction, including fractional orbital missiles.¹⁶³

President Carter withdrew the SALT II Treaty from Senate con-

153. *Id.* at art. IV, 9. A "new" type of ICBM is defined as one "not flight-tested as of May 1, 1979." *Id.*

154. *Id.* at art. IV, 11.

155. *Id.* at art. IV, 10.

156. *Id.* at art. IV, 12.

157. *Id.* at art. IV, 13.

158. *Id.* at art. IV, 14.

159. *Id.* at art. IV, 7.

160. *Id.* at art. IV, 5 (c).

161. *Id.* at art. IX, 1 (a).

162. *Id.* at art. IX, 1 (b).

163. *Id.* at art. IX, 1 (c).

sideration following the Soviet invasion of Afghanistan. However, as of 1985, the United States and the Soviet Union both appear to have respected the terms of the SALT II Treaty.¹⁶⁴

The Reagan administration has adopted the position that the SALT Treaties have weakened the United States' military position relative to the Soviet Union. At a March 31, 1982 press conference, President Reagan observed that "the Soviet Union does have a definite margin of superiority, enough so that there is a risk and there is what I have called, as you all know, several times a window of vulnerability."¹⁶⁵ President Reagan warned that as a result of this "window of vulnerability", that "all the moral values which this country cherishes . . . are fundamentally challenged by a powerful adversary which does not wish these values to survive."¹⁶⁶ The Reagan Administration also questioned whether the Soviets had complied with the requirements of the SALT treaties.¹⁶⁷

President Reagan believed that the United States could not negotiate from weakness and argued that the Soviets only would enter into meaningful arms negotiations if the United States embarked on arms build-up which would force the Soviets to choose between either matching the American nuclear arsenal or entering into negotiations limiting the arms race.¹⁶⁸ The Reagan Administration took the position that any future arms control negotiations with the Soviet Union should be based upon four principles:¹⁶⁹

164. CONGRESSIONAL QUARTERLY, U.S. DEF. POL. 60-61 (3d ed. 1983).

165. *News Conference of March 31 (Excerpts)*, 82 DEP'T ST. BULL. 29 (May 1982).

166. Ronald Reagan, *Reducing the Danger of Nuclear Weapons*, 83 DEP'T ST. BULL. 1 (May 1983).

167. *Id.* at 1-2.

168. Ronald Reagan, *Arms Control and Reduction*, 83 DEP'T ST. BULL. 34, 35 (March 1983).

169. Ronald Reagan, *Reducing the Danger of Nuclear Weapons*, *supra* note 166, at 3. The Reagan Administration's nuclear policy is based on a number of propositions. See S. TALBOTT, *THE RUSSIANS AND REAGAN* 51, 52 (1984). These propositions are:

1. [T]he United States was militarily inferior to the Soviet Union.
2. In the past, arms control had contributed to American military inferiority and, if continued, would have locked the United States permanently into second place
3. The best course was to suspend bilateral bargaining and concentrate on unilateral American rearmament.
4. If forced by political expediency to engage in arms control, the United States must find a way of pursuing an arms buildup simultaneously, and it must give priority to the buildup on its own side.
5. [A]rms control must feature reductions, and the deeper the reductions, the better. . . .
6. The United States must insist on drastic cutbacks in the most modern, pat-

First, our efforts to control arms should seek reductions on both sides — significant reductions.

Second, we insist that arms control agreements be equal and balanced.

Third, arms control agreements must be effectively verifiable. We cannot gamble with the safety of our people and the people of the world.

Fourth, we recognize that arms control is not an end in itself but a vital part of a broad policy designed to strengthen peace and security.

The Reagan Administration's initial arms control plan was comprised of two components. The "zero-option" or "zero-zero plan" was proposed at the bi-lateral, Intermediate-Range Nuclear Forces Negotiations (IRNF) in Geneva which began on November 30, 1981. The plan would have delayed United States deployment of 572 Pershing II and Cruise missiles in NATO countries in return for a Soviet agreement to dismantle its SS-20, SS-4 and SS-5 missiles which were targeted at Western European countries.¹⁷⁰ The "zero-option" plan was modified on March 30, 1983 so as to require the United States and the Soviet Union to have an equal number of intermediate-range missiles on a "global basis."¹⁷¹ The latter phrase was designed to include the Soviet missiles targeted at China and Japan in the arms agreement.¹⁷² The Soviets left the intermediate-range missile negotiations in November 1983 when the United States initiated the deployment of Pershing and Cruise missiles in Western Europe.¹⁷³

In June 1982 representatives of the two countries met at Geneva to begin what the Reagan Administration termed the Strategic Arms Reduction Talks (START).¹⁷⁴ The Soviets rejected the Reagan Administration's proposal to reduce both sides' total ballistic missile warheads by roughly one-third to approximately 5,000 ballistic missile warheads. No more than one-half of these 5,000 warheads were

ent Soviet weapons already ployed; no comparable reductions should be considered in existing American forces.

Id.

170. Ronald Reagan, *U.S. Program for Peace and Arms Control*, 81 DEP'T ST. BULL. 10, 11, 13 (Dec. 1981).

171. Ronald Reagan, *President's Statement, March 30, 1983*, in *Reducing the Danger of Nuclear Arms*, *supra* note 166, at 3.

172. *Id.*

173. S. TALBOTT, *DEADLY GAMBITS: THE REAGAN ADMINISTRATION AND THE STALEMATE IN NUCLEAR ARMS CONTROL* 185-305 (1984).

174. Ronald Reagan, *President Reagan Visits Europe*, 82 DEP'T ST. BULL. 34, 36 (July 1982).

to be deployed on land-based missiles.¹⁷⁵

In the second phase of its START initiative, the Reagan Administration proposed that equal ceilings be placed on the throw-weight of the two countries' nuclear arsenals. This ceiling was to be placed at a level below the existing United States aggregate throw-weight.¹⁷⁶ The START Talks were abandoned when the Soviets left Geneva in protest over the United States' stationing of Pershing II missiles in Western Europe.¹⁷⁷

The Reagan START proposal may have been unrealistic in that it would have required the Soviet Union to restructure its strategic arsenal so as to de-emphasize the land-based component of its nuclear triad. Soviet ICBMs carry approximately seventy percent of the Soviet strategic warheads and account for more than eighty percent of the Soviet nuclear arsenal.¹⁷⁸

On January 8, 1985, the United States and the Soviet Union agreed to reopen arms negotiations and to consider limitations on intermediate, strategic and on space-based nuclear weapons.¹⁷⁹ The possibility of a successful arms agreement, however, appears to be jeopardized by President Reagan's Strategic Defense Initiative ("Star Wars" Plan) which calls for the development of a defensive missile system capable of intercepting incoming offensive missiles.¹⁸⁰

The effectiveness of arms control negotiations and agreements may be judged by the extent to which they have slowed, stopped or have reversed the arms race. "By that standard, arms control has failed. Several thousand diplomatic meetings on armaments between the United States and the Soviet Union over the past thirty-five years have failed to eliminate a single weapon or to reduce the willingness of governments to use military power in diplomacy and combat."¹⁸¹

175. *Id.*

176. *Id.*

177. S. TALBOTT, *supra* note 173, at 330-42.

178. See generally, R. SCHEER, WITH ENOUGH SHOVELS: REAGAN, BUSH AND NUCLEAR WAR 165-68, n.1 (1983). The Reagan proposal required that nuclear warheads be distributed equally between SLBMs and ICBMs. Soviet ICBM warheads currently outnumber their SLBM warheads by roughly four-to-one and the Reagan initiative would necessitate that the Soviets destroy approximately one-half of their MIRVs and ICBMs. The Reagan proposal did not address strategic advantage. *Id.* at 167-68.

179. *U.S.-Soviet Parley on Arms Control Begins in Geneva*, N.Y. Times, Jan. 19, 1985, at 1, col. 1; *Reagan Names Three Delegates to Arms Talks*, N.Y. Times, Jan. 19, 1985, at 1, col. 2.

180. Ronald Reagan, *supra* note 89, at 8, 14. See generally, UNION OF CONCERNED SCIENTISTS, *supra* note 75; *U.S. Will Hold Out For a Soviet Shift in Talks on Arms*, N.Y. Times, June 2, 1985, at 1, col. 3.

181. Johansen, *SALT II: A Symptom of the Arms Race*, in TOWARD NUCLEAR DISARMA-

Robert C. Johansen compares attempting to halt the arms race through negotiations with "attempting to dam a wide stream by dropping one large rock in its middle. No water will pass through the space actually displaced by the rock, but the stress will flow around it without decreasing its volume by increasing its speed on both sides of the rock."¹⁸²

The two superpowers arguably do not want to limit their ability to exercise military force and do not want to place themselves in an inferior military position relative to one another. As a result, bilateral arms negotiations have proven unsuccessful in curbing nuclear arms development and have tended to legitimate the level and type of weapons which the two superpowers would have developed had no agreement been reached.¹⁸³ Johansen, with perhaps some exaggeration, notes that:

[I]f there had been no arms control negotiations, it would have been clearer to Congress and the public that they were paying for an open-ended arms race, whereas during SALT many people were led to believe that they were supporting limited arms increments for the purpose of facilitating arms control . . . in the absence of arms negotiations, the assumption that advanced technology should be exploited for new weapons could have been challenged more directly. The justification for weapons programs, at the least, would then have had to rest on military rather than on arms control needs.¹⁸⁴

In order to compensate for the limited ability of bilateral arms control agreements to control the nuclear arms race, various unilateral policies have been proposed to limit nuclear weapons and to initiate a process of meaningful arms reduction. These policies include a mutual "build-down" of nuclear weapons;¹⁸⁵ a "freeze" on nuclear weapons development and deployment;¹⁸⁶ a policy of "no first use" of

MENT AND GLOBAL SECURITY: A SEARCH FOR ALTERNATIVES (B. Weston ed. 1984) [hereinafter cited as B. Weston].

182. R. JOHANSEN, *supra* note 110, at 55.

183. B. Weston, *supra* note 181, at 94-103.

184. R. JOHANSEN, *supra* note 110, at 61.

185. Frye, *Strategic Build-Down: A Context for Restraint*, 62 FOREIGN AFF. 293 (1983). The build-down principle states that no new weapons system should be deployed unless a larger number of weapons are destroyed. *Id.*

186. *See generally*, E. KENNEDY & M. HATFIELD, *supra* note 5, at 169. The original freeze is to be on the testing, production and deployment of nuclear warheads, missiles and other delivery systems. Following a mutual and verifiable freeze, the United States and the Soviet Union would be required to pursue mutual and verifiable reductions in nuclear war-

nuclear weapons;¹⁸⁷ a limitation on the number of nuclear weapons to that level which, if deployed, would avert environmental catastrophe;¹⁸⁸ and the creation of a nuclear "free zone" in Europe in order to reduce the risk that nuclear weapons will be used in the event of a conventional conflict.¹⁸⁹

These proposals do not alter the superpowers' reliance on nuclear weapons as central components of their defense forces.¹⁹⁰ Jonathan Schell observes that although nuclear weapons ultimately should be prohibited, international efforts in the meantime should be devoted to "interim measures" designed to avert the possibility of an imminent nuclear disaster:¹⁹¹

Today, mankind is like a person who lies bleeding to death on the street after an accident. Eventually, this person will require major surgery. But right now he needs to be rushed to the hospital in an ambulance, and given first aid on the way. It is pointless to say at this moment, This person doesn't need an ambulance, he needs major surgery. The passage from our nuclear-armed world to a nuclear-weaponless world would be that ambulance ride. Once the life of mankind is out of immediate danger, we will have the time — we will have won it for ourselves — to address the radical and sweeping measures of global political renovation which alone can fully deliver us from the evil.¹⁹²

Despite the necessity of focusing on short-run measures to halt the nuclear arms race, the fact remains that so long as nuclear arms are an accepted means of national defense that the human race is threatened with potential extinction, or, at the very least, with the destruction of contemporary global society. In the next portion of this

heads, missiles and other delivery systems, through annual percentage reductions or other effective means. *See generally, Id.*

187. Bundy, Kennan, McNamara and Smith, *Nuclear Weapons and the Atlantic Alliance*, 60 FOREIGN AFF. 753 (1981). The "no first use" proposal would establish as United States strategic doctrine a policy of being "the first . . . to use nuclear weapons to defend against aggression in Europe." *Id.* at 754.

188. Sagan, *supra* note 41.

189. McNamara, *The Military Role of Nuclear Weapons: Perceptions and Misperceptions*, 62 FOREIGN AFF. 59, 78, 79 (1983).

190. *See generally, J. SCHELL, THE ABOLITION* 139 (1984). Schell proposes a "weaponless deterrence" which requires countries to disarm while retaining the capacity to rearm themselves in the event that a nuclear attack appears imminent. *See also, Kahn, Nuclear Proliferation and Rules of Retaliation*, 76 YALE L.J. 77 (1966) (calls for the creation of a multilateral nuclear force which would retaliate against any nation resorting to the use of nuclear weapons).

191. SCHELL, *supra* note 190, at 132-33.

192. *Id.*

Article it is argued that rather than viewing nuclear weapons as instrumentalities that should be or are capable of being regulated under bilateral and multilateral agreements, that the production, testing, possession, threat to use or use of nuclear weapons should be considered as violative of international criminal law. This shift in the perception and legal status of nuclear weapons would result in the production, testing, possession, threat to use or use of nuclear weapons being considered criminal conduct rather than being considered an exercise of state sovereignty.¹⁹³

V. THE LEGALITY OF NUCLEAR WEAPONS

Most international law scholars appear to have concluded that nuclear weapons are inevitable, necessary and legal.¹⁹⁴

The case for the legality of nuclear weapons is a negative one — any act which is not *explicitly* prohibited under international law by *implication* is permitted. Eugene Rostow's remarks reflect this point-of-view:

In regard to the legality of nuclear weapons, these have not been singled out by nations as illegal in treaties or other formal documents of international law. The weapon has been the subject of treaties which deal with the regulation of the weapon but which do not outlaw it as such. We must conclude that the possible use of nuclear weapons . . . remains legal . . .¹⁹⁵

McDougal and Schlei concur in Rostow's analysis. They state:

There is no express prohibition on the use of nuclear weapons in either customary or conventional international law, and the argument for prohibition is derived by "analogy" from prescriptions with respect to poisonous gas and arms and other weapons causing disproportionate suffering. In international law as in municipal law, however, analogies in prescription and decisions are relevant only for the policies which infuse them.¹⁹⁶

193. *But see* THE HARVARD NUCLEAR STUDY GROUP, *supra* note 130, at 18-19. "The danger of focusing on utopian objectives is that they can take attention away from practical and positive steps[.] . . . incremental steps matter." *Id.*

194. O'Brien, *Legitimate Military Necessity In Nuclear War*, 2 Y.B. WORLD POLITY 35, 98, 99 (1960).

195. E. Rostow, *Remarks, 75th Annual Meeting*, PROCEEDINGS OF THE AM. ASSOC. INT'L L. 25, 26 (April 22-24, 1982) (panel on Strategic Deterrence and Nuclear War). *See generally* The Case of the S.S. Lotus (Fr. v. Turk.), 1927 P.C.I.J., ser. A., No. 10 (Judgment of Sept. 7); The Antelope, 23 U.S. (10 Wheat.) 66 (1825).

196. McDougal and Schlei, *The Hydrogen Bomb Tests in Perspective: Lawful Measures for Security*, 64 YALE L.J. 649, 689 (1955).

Other scholars point out that the legality of nuclear weapons must be evaluated in light of the threat posed by the Soviet Union to the United States. For example:

For our contemporary world, the real question to be answered by the universal conscience of mankind is *not*, "Is nuclear warfare permitted?" More properly there are two elements in the question, ends as well as means. "Is nuclear warfare as a means of resisting Communism permitted?" Or, . . . "Is nuclear warfare against Communist armed attack a legitimate military necessity?"¹⁹⁷

Nuclear weapons, it is argued, have rendered the law of war and any discussion of restraints on weaponry obsolete. William V. O'Brien argues:

that the iron-clad principle of inviolability of so-called non-combatants and non-military objectives is no longer valid because both its philosophical and material bases have ceased to exist while practice has contravened its prescription so regularly that a definite change in customary international law has taken place.¹⁹⁸

United States Army Field Manual, 27-10, adopts the majority view that nuclear weapons are legal: "The use of explosive 'atomic weapons,' whether by air, sea, or land forces, cannot as such be regarded as violative of international law in the absence of any customary rule of international law or international convention restricting their employment."¹⁹⁹

Professor Richard Falk, in criticizing the view that nuclear weapons are legal, argues that it:

seems ludicrous to extend the reasoning of the Lotus case of 1927 [that what is not prohibited under international law is permitted], developed to assess a very narrow question of jusprudential competency in a criminal negligence controversy arising out of a collision on the high seas, to the drastically different circumstances surrounding the consideration of the legal status of nuclear weapons. For one thing, on a jurisprudential level, the issue of whether or not a given activity is prohibited by pre-existing rules is partly a

197. O'Brien, *supra* note 194, at 105.

198. *Id.* at 84.

199. Bright, *Nuclear Weapons as a Lawful Means of Warfare*, 30 MIL. L. REV. 1, 2, n.1 (1965), citing U.S. Dep't of Army Field Manual, no. 27-10, *The Law Of Land Warfare* (1956). An unpublished annotation to Field Manual no. 27-10 explains that "it [the Atom Bomb] has been used, it still exists, that the major powers are practically committed to use it in a future war, and that it has been accepted to the extent that it is spoken of in the context of disarmament rather than illegality." *Id.* at 1-2.

matter of how *general* is the level of appraisal chosen. For instance, while nuclear weapons are not the explicit subject of any agreement binding nuclear weapons states, the main instruments of the pre-existing laws of land warfare prohibit *all* methods of warfare having the characteristics associated with contemplated uses of nuclear weapons.²⁰⁰

Falk also points out that the use of the *Lotus* doctrine to establish the legality of nuclear weapons fails to recognize the dynamic nature of the law of war as reflected in the language of the Martens Clause of the Preamble to the Hague Convention (IV).²⁰¹ The Martens Clause provides that:

Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of international law, as they result from the usages established between civilized nations, from the laws of humanity, and the dictates of the public conscience.²⁰²

Professor Falk concludes that, based on the Martens Clause, the overwhelming normative consensus now operative in international society would legally condemn all contemplated roles for nuclear weapons, except roles for nuclear weapons, except 'possession', as a hedge against nuclear blackmail; not even a retaliatory use of nuclear weapons could be easily reconciled with most interpretations of the laws of war, given the properties of the weaponry and the difficulty of reconciling any actual use with such principles as 'necessity', 'proportionality', 'discrimination' and 'humanity'.²⁰³

200. Falk, *Towards a Legal Regime for Nuclear Weapons*, 28 MCGILL L.J. 519, 526 (1983) (explanatory material added).

201. *Id.* at 527-28.

202. Hague Convention (no. IV) Respecting the Laws and Customs of War on Land, 18 October 1907, 36 Stat. 2277, T.S. No. 539, 1 Bevans 631, Preamble.

203. Falk, *supra* note 200 at 527-28. The Geneva Conventions affirm that the laws of war do draw their authority from the moral consensus of the community as well as from positive law. Article 63 (4) of the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field provides:

The denunciation shall have effect only in respect of the denouncing Power. It shall in no way impair the obligations which the Parties to the conflict shall remain bound to fulfill by virtue of the principles of the law of nations as they result from the usages established among civilized peoples from the laws of humanity and the dictates of the public conscience.

Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, Aug. 12, 1949, 6 U.S.T. 3114, T.I.A.S. No. 3362, 75 U.N.T.S. 31. *See also*,

Various United Nations resolutions provide "evidence of a global normative consensus which considers the threat of use or use of nuclear weapons as a contradiction to the fundamental humanitarian principles upon which the international laws of war are founded."²⁰⁴ General Assembly Resolution 1653, *inter alia*, declares that "the use of nuclear and thermo-nuclear weapons is contrary to the spirit, letter and aims of the United Nations and as such, a direct violation of the Charter of the United Nations."²⁰⁵

Other instruments, while not directly condemning the use of nuclear weapons, urge that nation-states pursue disarmament. Article VI of the Nuclear Non-Proliferation Treaty, for instance, provides that:

[e]ach of the Parties to the Treaty undertake to pursue negotiation in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.²⁰⁶

Additional support for Falk's contention that nuclear weapons are contrary to the prevailing global normative consensus is found in the American Catholic Bishops' Pastoral Letter on War and Peace, *The Challenge of Peace: God's Promise and Our Response*, in which the Bishops criticize the nuclear arms race and conclude that it is necessary to "move . . . in a direction, toward a national policy and

Article 62 (4), Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, Aug. 12, 1949, 6 U.S.T. 3217, T.I.A.S. No. 3363, 75 U.N.T.S. 85; Article 142 (4), Convention Relative to the Treatment of Prisoners of War, 6 U.S.T. 3316, T.I.A.S. No. 3364, 75 U.N.T.S. 135; Article 158 (4), Convention Relative to the Protection of Civilian Persons In Time of War, Aug. 12, 1949, 6 U.S.T. 3516, T.I.A.S. No. 3365, 75 U.N.T.S. 287.

[Article one, paragraph two of Protocol I to the Geneva Convention provides that:]

In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from dictates of public conscience.

Additional Protocol to the Geneva Conventions of 12 August 1949 (relating to the protection of victims of international armed conflicts) (Protocol I) June 8, 1977. U.N. Doc. A/32/144, Annex 1, (1977), *reprinted in* 16 I.L.M. 1391 [hereinafter cited as Protocol Additional to the Geneva Conventions].

204. Meyrowitz, *The Laws of War and Nuclear Weapons*, 9 BROOKLYN J. INT'L L. 227, 255 (1983).

205. G.A. Res. 1653 (XVI), 16 U.N. GAOR Supp. (No. 17) at 4, U.N. Doc. A/5100 (1972). For an enumeration of General Assembly resolutions condemning nuclear weapons see Feinrider, *International Law as Law of the Land: Another Constitutional Constraint on Use of Nuclear Weapons*, 7 NOVA L. J. 103, 116, n. 46 (1982).

206. Treaty on the Non-Proliferation of Nuclear Weapons, *supra* note 79.

an international system which more adequately reflect the values and vision of the Kingdom of God."²⁰⁷

The acceptance of the legality of nuclear weapons is an implicit admission that the law of war has been rendered obsolete. Law, rather than limiting States' use of armed force, would be defined by the self-interest of powerful states. The Lawyers Committee On Nuclear Policy concludes that:

[I]f the goals of the law of war — to set limits on permissible violence — is to be realized to any serious degree, and if the fundamental principles of humanity are to be of continuing relevance to their interpretation, then it must be concluded that any threat of use of nuclear weapons is illegal. . . . As the law of war embody the minimum demands of decency, exempting nuclear weapons from that body of laws would be abandoning even this minimum standard.²⁰⁸

The starting-point for a discussion of the (il)legality of nuclear weapons is the developing area of international criminal law.

A. International Criminal Law

Since 1947, the United Nations has been in the process of drafting a Code of Offenses Against the Peace and Security of Mankind.²⁰⁹

207. National Conference of Catholic Bishops, *Pastoral Letter On War and Peace — The Challenge of Peace: God's Promise and Our Response*, 123, 142, quoted in B. Weston, *supra* note 181. The entire Pastoral is reprinted in J. CASTELLI, *THE BISHOPS AND THE BOMB* (1983).

208. Lawyers' Committee on Nuclear Policy, *Statement on the Illegality of Nuclear Weapons*, 146, 150 quoted in B. Weston, *supra* note 181. Article 36 of Protocol I to the Geneva Conventions, *supra* note 203, affirms the relevance of international law to means or methods of warfare:

In the study, development, acquisition or adoption of a new weapon, means or methods of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party.

209. Ferencz, *The Draft Code of Offences Against the Peace and Security of Mankind*, 75 AM J. INT'L L. 674 (1981).

The International Law Commission's initial draft is contained in U.N. Doc. A/CN.4/25 (1950), reprinted in [1950] 2 Y.B. INT'L L. COMM'N 253, 274. Nine international crimes were listed in the draft: aggressive war; invasion by armed groups; fomenting external civil strife; fomenting external organized terrorism; illegal weapons trafficking; violating arms limitation treaties; illegal annexation; hostile acts directed against national, ethnic, racial and religious groups; and violation of laws and customs of war. *Id.* at n.3.

The standard works on international criminal law include: 1 A TREATISE ON INTERNATIONAL CRIMINAL LAW: CRIMES AND PUNISHMENT (M. Bassiouni & V. Nanda ed. 1973); 2 A TREATISE ON INTERNATIONAL CRIMINAL LAW: JURISDICTION AND COOPERATION (M.

During the past 125 years over "100 treaties and conventions have been promulgated dealing with almost 30 different subjects relating to criminal law in an international context."²¹⁰

There is no consensus as to what conduct should be incorporated into an international criminal code.²¹¹ Professor Cherif Bassiouni has proposed four criteria for determining the scope of a Code of Offenses Against the Peace and Security of Mankind:

- (1) existing international conventions which consider the act in question an international crime; (2) recognition under customary international law that such conduct constitutes an international crime; (3) recognition under general principles of international law that such conduct is or should be deemed violative of international law and about which there is a pending draft convention before the United Nations; and (4) prohibition of such conduct by an international convention though not specifically stating that it constitutes an international crime and which is also recognized in the writings of scholars as such.²¹²

Bassiouni suggests that, in addition to meeting these broad legal criteria, an act must either "rise to the level where it constitutes an offense against the world community *delicto jus gentium* or the commission of the act must affect the interests of more than one state."²¹³

Arguably, no act threatens "the interests and security of all responsible members of the international community" to the same extent as do nuclear weapons.²¹⁴ However, as Professor Weston has noted in reference to the existing international instruments which explicitly address nuclear weapons, "it scarcely can be said that these

Bassiouni & N. Nanda ed. 1973); Schwarzenberger, *The Problem of an International Criminal Law*, 3 CURRENT L. PROB. 263 (1950); Wright, *The Scope of International Criminal Law: A Conceptual Framework*, 15 VA. J. INT'L L. 561 (1975).

210. Friedlander, *The Foundations of International Criminal Law: A Present Day Inquiry*, 15 CASE W. RES. J. INT'L L. 13, 17 (1983).

211. Bassiouni, *The Penal Characteristics of Conventional International Criminal Law*, 15 CASE W. RES. J. INT'L L. 27, 28 (1983). Bassiouni would include:

aggression, war crimes, unlawful use of weapons, crimes against humanity, genocide, apartheid, slavery and slave-related practices, torture, unlawful medical experimentation; piracy, hijacking, kidnapping of diplomats, taking of civilian hostages, unlawful use of the mails, drug offenses, falsification and counterfeiting, theft of archeological and national treasures, bribery of public officials, interference with submarine cables, and international traffic in obscene publications.

Id.

212. *Id.* at 28.

213. *Id.* at 28-29.

214. Hassan, *The Theoretical Basis of Punishment in International Criminal Law*, 15 CASE W. RES. J. INT'L L. 39, 56 (1983).

expressions of legal viewpoint, although certainly evidentiary of customary legal expectation, are themselves dispositive . . . Explicit content does not automatically spell legal prescription, however wise the content communication may be."²¹⁵ The Lawyers' Committee analysis concludes that "global survivability is so basic a moral imperative that the prohibition [of nuclear weapons] can be reasonably inferred from the existing laws of war."²¹⁶ It is the general principles of the law of war upon which the argument that nuclear weapons are illegal can most persuasively be based.

B. *The Existing Law of War and Nuclear Weapons*

An analysis of the humanitarian law of war suggests that nuclear weapons are incompatible with the legal limitation on the damage and destruction which is associated with armed conflict.

1. Unnecessary suffering

Article 22 of the Annex to the Hague Regulations states that "the right of belligerents to adopt means of injuring the enemy is not unlimited."²¹⁷ Article 23(e) adds that "it is especially forbidden . . . [t]o employ arms, projectiles, or material calculated to cause unnecessary suffering."²¹⁸

The Declaration of St. Petersburg emphasizes "that the only legitimate object which States should endeavor to accomplish during war is to weaken the military forces of the enemy . . . [and that] this object would be exceeded by the employment of arms which uselessly

215. Weston, *Nuclear Weapons Versus International Law: A Contextual Reassessment*, 28 MCGILL L.J. 542, 553 (1983). A Tokyo District Court concluded that the United States bombings of Hiroshima-Nagasaki violated international law. See *The Shimoda Case*, Judgment of 7 December 1963, District Court of Tokyo, reprinted in (1964) JAP. ANN. INT'L L. 212. See generally Falk, *The Shimoda Case: A Legal Appraisal of the Atomic Attacks upon Hiroshima and Nagasaki*, 59 AM. J. INT'L L. 759 (1965); Paust, *The Nuclear Decision in World War II — Truman's Ending and Avoidance of War*, 8 INT'L LAW. 160 (1974).

216. Lawyers' Committee, *supra* note 208, at 146, 150.

217. Laws and Customs of War on Land, Annex to the 1909 Hague Convention (No. IV) Respecting the Laws and Customs of War on Land, 18 October 1907, 36 Stat. 2277, T.S. No. 539, 1 Bevans 631 [hereinafter cited as Hague Rules]. See also, Convention On Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Apr. 10, 1981, U.N. Doc. A/CONF. 9515 (1980), reprinted in 19 I.L.M. 1523, 1524 (1980) [hereinafter cited as Conventional Weapons Convention]; Protocol I Additional to the Geneva Conventions, *supra* note 203, at art. 35; Hague Draft Rules of Aerial Warfare, Feb. 22, 1922, Articles 22-26 [never in force], reprinted in 17 AM. J. INT'L L. 245, 250-52 (supp.).

218. Hague Rules, *supra* note 217, at 1 Bevans 648.

aggravate the sufferings of disabled men, or render their death inevitable."²¹⁹

Suffering and injury are inherent in armed conflict. However, it "is less the fact of devastation and suffering than the needlessness, the superfluity, the disproportionality of harm relative to military result that is determinative of illegality."²²⁰ The limits on the destructiveness of warfare have been conceptualized as being comprised of the principles of humanity, military necessity and proportionality.

—The principle of *humanity* requires that war or hostilities should be conducted with the least possible destruction to human and material values and with the least possible expenditure of time, life and physical resources.²²¹

—The principle of *military necessity* limits destruction to that necessary for obtaining lawful military objectives.²²²

—The principle of *proportionality* requires that the loss of life must be in proportion to the value of the military objectives to be obtained.²²³

The consideration of these limiting principles "must take place before a specific weapon is employed."²²⁴

Nuclear weapons arguably are *inherently* incapable of being "directed at a specific military objective . . . and consequently, . . . are of a nature to strike military objectives and civilians or civilian objects without distinction."²²⁵ Elliot L. Meyrowitz concludes that:

[T]he use of nuclear weapons in populated areas would result in the indiscriminate and massive slaughter of civilians. Moreover, even if nuclear weapons were used only against an enemy's strategic nuclear forces, the annihilation and extermination of the civilian population would be an inevitable by-product. As the experiences of Hiroshima and Nagasaki amply demonstrate, the ef-

219. Declaration Renouncing the Use in Time of War of Explosive Projectiles Under 400 Grammes Weight, Dec. 11, 1868, 138 Parry's T.S. 297, 298 (Declaration of St. Petersburg) (author's trans.).

220. Weston, *supra* note 215, at 555.

221. Lee, *The United States' Nuclear First Strike Position: A Legal Appraisal of Its Ramifications*, 7 CAL. W. INT'L L.J. 508, 515 (1977).

222. *Id.*

223. *Id.* at 516. J. PICTET, *THE PRINCIPLES OF INTERNATIONAL HUMANITARIAN LAW* 52, 54, 55 (1966) refers to these principles as *ratione personae* (attacks limited to combatants); *ratione loci* (attacks limited to military objectives); and *ratione conditionis* (prohibition of attacks likely to cause excessive suffering).

224. *Id.* at 516.

225. Protocol Additional to the Geneva Conventions, *supra* note 203, at art. 51(4)(a),(b),(c).

fects of nuclear weapons because of their very awesome nature, cannot be limited to military targets. Consequently, the use of nuclear weapons would result in the commission of war crimes on an enormous scale.²²⁶

The use of nuclear weapons, unavoidably, would result in the destruction of peoples of a particular nationality, and the Lawyers' Committee On Nuclear Policy concludes that "the threat of nuclear weapons toward this end would violate at least the spirit of the Genocide Convention of 1948 — which make the destruction of groups on racial, religious or nationality grounds, an international crime."²²⁷

2. The prohibition of specific weapons

The United Nations has recognized that the development of weapons systems "that may cause unnecessary suffering or are indiscriminate call urgently for efforts by Governments to seek, through possible legal means, the prohibition or restriction of the use of such weapons and . . . through measures of disarmament, the elimination of specific weapons that are especially cruel or indiscriminate."²²⁸

The use of various weapons which potentially may create indiscriminate or unnecessary suffering has been legally limited or prohibited. It is prohibited, for instance, to use "any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays."²²⁹

Land-mines, "booby-traps and manually-employed munitions and devices designed to kill, injure or damage, and which are actuated by remote control or automatically after a lapse of time,"²³⁰ may not be directed "against the civilian population as such or against individual civilians."²³¹ The "indiscriminate use" of such weapons is also prohibited.²³² Incendiary weapons may not be used against "individual civilians or civilian objects . . . any military objective located within a concentration of civilians . . . forests or other kinds of plant

226. Meyrowitz, *Nuclear Weapons Policy: The Ultimate Tyranny*, 7 NOVA L.J. 93, 98 (1982).

227. Lawyers' Committee, *supra* note 208, at 149.

228. G.A. Res. 3076, 28 U.N. GAOR, Supp. (No. 30) 15, U.N. Doc. A/9030 (1973).

229. See Conventional Weapons Convention, *supra* note 217, at Protocol on Non-Detectable Fragments (Protocol I).

230. Conventional Weapons Convention, *supra* note 217, at Protocol II, Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, art. 2(3).

231. *Id.* at art. 3(2).

232. *Id.* at art. 3(3).

cover”²³³ The United Nations Conference on Prohibitions or Restrictions on Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects called upon “all Governments to exercise the utmost care in the development of small-calibre weapon systems, so as to avoid an unnecessary escalation of the injurious effects of such systems.”²³⁴

The prohibition and limitation on the use of these weapons lends credibility to the argument that nuclear weapons, with their vast destructive potential, are prohibited. The Lawyers’ Committee on Nuclear Policy points out that “to assume the legality of a weapon with the distinct capability to terrorize and to destroy an entire civilian population would make meaningless the entire effort to limit combat through the laws of war.”²³⁵

3. Poisonous gas

Arguably, the use of nuclear weapons would be barred by the prohibition on the use of poisonous gas. Article 23(a) of the Hague Regulations provides that “it is especially forbidden . . . to employ poison or poisoned arms.”²³⁶ Various scholars have argued that radiation constitutes a poison based upon the internal effects which radiation produces in the human body, such as genetic damage.²³⁷

233. Conventional Weapons Convention, *supra* note 217, at Protocol III, Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons, art. 2.

234. Conventional Weapons Convention, *supra* note 217, at Appendix E, Resolution On Small-Calibre Weapon Systems, para. 6.

235. Lawyers’ Committee, *supra* note 208, at 149.

236. Hague Rules, *supra* note 217, at Article 23 (a). *But see* O’Brien, *Legitimate Military Necessity In Nuclear War*, 2 Y.B. W. POLITY 35, 89 (1960) (O’Brien argues that this provision “seems clearly to be concerned with the poisoning of individuals in the manner of the Italian Renaissance or the contamination of food or water.”).

237. G. SCHWARZENBERGER, *THE LEGALITY OF NUCLEAR WEAPONS* 27 (1968); N. SINGH, *NUCLEAR WEAPONS AND INTERNATIONAL LAW* 156-60 (1959). Bright, *Nuclear Weapons as a Lawful Means of Warfare*, 30 MIL. L. REV. 1, 17, 18 (1961) (distinguishes between varieties of radiation, one type of which does not constitute poison). Bright explains that:

Initial nuclear radiation is an invisible traveler through the air. It is composed not of elements or substances, but principally of neutrons and gamma rays, neither of which can be called a substance. Just as its name connotes, initial nuclear radiation is a form of radiation, just as heat and light are, and, having no chemical structural formation, cannot be construed as an agent or as a poison.

Residual nuclear radiation, on the other hand, particularly radioactive fallout, consists of many solid particles of varying sizes, shapes and elements. Fallout is further divided into two categories: early and delayed. The early fallout consists of the particles reaching the earth within twenty-four hours after the explosion, whereas the delayed fallout is composed of the very fine particles present in the radioactive cloud which ultimately reach the ground more than twenty-four hours after the deto-

Professor Schwarzenberger defines poison as "any substance that when introduced into, or absorbed by, a living organism destroys life or injures health."²³⁸ He concludes that "a fairly strong case can be made for the assimilation of radiation and radioactive fallout to poison."²³⁹ Professor Singh, relying on the same definition of poison, concludes that both initial radiation and fallout constitute poison within the meaning of Article 23(a).²⁴⁰ He argues that "all atomic and thermo-nuclear devices, . . . insofar as they result in neutrons, gamma rays and radioactive fallout in large or small quantities, would produce contamination of air and earth, and hence run contrary to the recognized laws of war," regardless of the relative proportion of nuclear radiation, compared to the effects of blast and heat.²⁴¹

Meyrowitz concludes that, "[h]ence, because nuclear weapons cause radioactive fallout that contaminates people, property and the environment, the effect of such contamination seems sufficiently analogous to the effect of a poison or poisoned weapon. Thus, nuclear weapons should fall within the prohibition of Article 23(a)."²⁴²

Professor Weston concludes that

all nuclear weapons now deployed or planned . . . manifest radiation effects that for all intents and purposes are the same as those that result from poison gas and bacteriological means of warfare; and, in any event, the 1925 Geneva Gas Protocol is so comprehensive in its prohibition that it may be said to dictate the nonuse of nuclear weapons altogether²⁴³

nation of the weapon. The principle hazards from early fallout are from exposure of the body to gamma rays from sources outside the body and from beta particles which come directly in contact with the skin, causing burns. This type of injury results from radiation, just as initial radiation, emanating from agents outside the body, not from the introduction of a radioactive agent into an organism of the body. Consequently, early fallout does not come under the definition of poison.

Id.

For a summary of the debate as to whether nuclear radiation constitutes "poison," see *id.* at 20.

238. G. SCHWARZENBERGER, *supra* note 237, at 27.

239. *Id.* at 35.

240. N. SINGH, *supra* note 237.

241. *Id.* at 160.

242. Meyrowitz, *supra* note 200, at 235-37.

243. Weston, *supra* note 3, at 5. The Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (the Geneva Gas Protocol), *inter alia*, prohibits "the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices . . ." The Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 575, T.I.A.S. No. 8061, 94 L.N.T.S. 65 [hereinafter cited as Geneva Gas Protocol]. Castren, *The Illegality of Nuclear Weapons*, 1971 TOLEDO L. REV. 89, 95 (con-

4. The protection of non-combatants

Professor Jordan Paust notes that it is a generally recognized rule of international law that civilians must not be made the object of attack directed exclusively against them.

Similarly, it was recognized that a distinction must be made at all times between combatants and non-combatants, that non-combatants cannot be made the object of attack, that such peremptory norms also prohibit the intentional terrorization of the civilian population or the intentional use of a strategy which produces terror that is not "incidental" to lawful combat operations.²⁴⁴

The Protocols Additional to the Geneva Conventions provide comprehensive protections for non-combatants. Article 57(1) of Protocol I provides that "in the conduct of military operations, constant care shall be taken to spare the civilian population, civilians and civilian objects."²⁴⁵ Article 57(2)(a) states that those who plan or decide upon an attack shall:²⁴⁶

- (i) do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects . . . ²⁴⁷
 - (ii) take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects;²⁴⁸
 - (iii) refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.²⁴⁹
- (b) an attack shall be cancelled or suspended if it becomes apparent that the objective is not a military one . . . or that the attack may be expected to cause incidental loss of civilian life²⁵⁰

cludes that the "general wording" of the 1925 Geneva Gas Protocol "seems to indicate that the drafters wanted to eliminate all future weapons and to avoid loopholes").

244. Paust, *Controlling Prohibited Weapons and the Illegal Use of Permitted Weapons*, 28 MCGILL L.J. 609, 612 (1983).

245. Protocol Additional to the Geneva Convention, *supra* note 203, at art. 57(1).

246. *Id.* at art. 57(2)(a).

247. *Id.* at art. 57(2)(a)(i).

248. *Id.* at art. 57(2)(a)(ii).

249. *Id.* at art. 57(2)(a)(iii).

250. *Id.* at art. 57(2)(b).

3. When a choice is possible between several military objectives for obtaining a similar military advantage; the objective to be selected shall be that the attack on which may be expected to cause the least danger to civilian lives and to civilian objects.²⁵¹
5. No provision of this article may be construed as authorizing any attacks against the civilian population, civilians or civilian objects.²⁵²

The use of nuclear weapons inevitably would violate the prescription against injuring non-combatants. Meyrowitz notes that:

[T]he use of strategic nuclear weapons in populated areas would result in the indiscriminate and massive destruction of the civilian population If the stated threat and potential objective of nuclear weapons is the destruction of the enemy State — which is the central premise of assured destruction — then the terrorization of the civilian population is an inevitable by-product, and a partial annihilation or extermination of that population would likely result if nuclear weapons were used. In view of the capacity of such weapons to terrorize and destroy a civilian population, recognition of the legality of nuclear weapons would virtually eliminate the entire effort to constrain this mode of combat — at least in large-scale warfare — by means of the laws of war.²⁵³

In addition, the use of nuclear weapons would illegally “attack, destroy, remove or render useless objects *indispensable to the survival of the civilian population*, such as food-stuffs, agricultural areas . . . crops, livestock, drinking water installations and supplies and irrigation works”²⁵⁴ Nuclear weapons also would cause indirect harm to civilians by creating environmental damage in violation of Article 35(3) of the 1977 Geneva Protocol Additional which provides that “it is prohibited to employ methods or means of warfare which

251. *Id.* at art. 57(3).

252. *Id.* at art. 57(5).

253. Meyrowitz, *supra* note 1, at 240-41.

254. Protocol Additional to the Geneva Conventions, *supra* note 203, at art. 54(2) (emphasis added). Article 54(2) provides:

It is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as food-stuffs, agricultural areas for the production of food stuffs, crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population or to the adverse Party, whatever the motive, whether in order to starve out civilians, to cause them to move away, or for any other motive.

Id. See also arts. 52, 54(3)(4)(5), 56, 57, 58.

are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment."²⁵⁵

In summary, a nuclear exchange would make the panoply of human rights protections provided to individuals under international law meaningless. Professor Richard Bilder notes that:

Both human rights and humanitarian law are based on the idea that the individual is unique and entitled to respect; that the individual's life and dignity are valuable. Nuclear strategy incorporates a view of the individual as irrelevant and expendable, an abstract statistic. Human beings as *persons* have no place in the jargon of nuclear destruction, only megadeaths count. If a few officials are still free, by pushing a button, to decree the annihilation of millions of individuals or of an entire nation, then human rights have little meaning, then respect for individual worth and dignity is absent. . . . Neither human rights nor humanitarian law will be relevant in a post-holocaust world.²⁵⁶

The damage caused by the large-scale use of nuclear weapons may extend beyond the target State. The use of nuclear weapons likely would "wreak havoc and destruction among the populations of neutral States outside the theater of war which would be affected by nuclear weapons as if the States were located in the combat zone."²⁵⁷ The injury to non-combatants of neutral States, in the view of Professor Singh, "must be considered as a violation of international law and,

255. *Id.* at art. 35(3). See also art. 55; Declaration of the United Nations Conference on the Human Environment, in Report of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF 48/14 and Corr. 1, reprinted in 11 I.L.M. 1416 (1972). Principles 2 and 26 read:

Principle 2. The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

Principle 26. Man and his environment must be spared the effects of nuclear weapons and all other means of mass destruction. States must strive to reach prompt agreement, in the relevant international organs, on the elimination and complete destruction of such weapons.

Id. Professor Weston observes that "it probably is correct to say that the prohibition is in at least the incipient stage of becoming law, and certainly is a guide to desired conduct." Weston, *supra* note 214, at 557.

256. Bilder, *Distinguishing Human Rights and Humanitarian Law: The Issue of Nuclear Weapons*, 30 AM. U.L. REV. 959, 961 (1971). See also, Sajoo, *Human Rights Perspectives on the Arms Race*, 28 MCGILL L.J. 628 (1983); Nanda, *Nuclear Weapons and the Right to Peace Under International Law*, 9 BROOKLYN J. INT'L L. 283 (1983); R. LIFTON AND R. FALK, *INDEFENSIBLE WEAPONS: THE POLITICAL AND PSYCHOLOGICAL CASE AGAINST NUCLEARISM* 3-125 (1982).

257. Meyrowitz, *supra* note 204, at 241.

if it involves the killing of innocent neutrals, a clear war crime."²⁵⁸

Professor Castren summarizes the legal arguments against the use of nuclear weapons:

Thus, we have a conflict with some of the most important principles of the laws of war, such as the upholding of the difference between soldiers and civilians and military and non-military objects, and the duty to refrain from those measures whose effects will extend long into the state of peace. One may say that the use of nuclear weapons is a challenge to the very basis of most international law

If one wishes, one may cite in addition to the above-mentioned provisions of the Hague Regulations and the Geneva Conventions of 1949, several other treaty provisions which cannot be executed once nuclear warfare has begun. Among others, all those provisions on the treatment of the sick and wounded and war prisoners and civilian population would become impossible to carry out. The Convention for the Protection of Cultural Property, which was drafted at The Hague in 1954, could also be put into the wastebasket. All that would be left would be complete terror and chaos, and it is not difficult to imagine what the world would be like after a nuclear war. . . . In this connection many scholars and even military experts refer to the fact that nuclear weapons are inhuman — the word torture has been mentioned in this connection — and therefore their use is also against the so-called Martens clause in the preamble to the Fourth Hague Convention Nor have those who condemn nuclear weapons forgotten certain other parts in the . . . preamble to the St. Petersburg Declaration²⁵⁹

The above analysis suggests that the use of either tactical or strategic weapons would be illegal under international law.²⁶⁰

258. Singh, *supra* note 237, at 106.

259. Castren, *supra* note 243, at 96-97. The use of nuclear weapons also may violate United States constitutional law. See Miller, *Nuclear Weapons and Constitutional Law*, 7 NOVA L. J. 21 (1982); Miller, *The Constitutional Challenge of Nuclear Weapons: A Note on the Obligation to Ward Off Extinction*, 9 BROOKLYN J. INT'L L. 317 (1983); Stone, *Presidential First Use Is Unlawful*, 56 FOREIGN POL'Y 94 (1984).

260. See McDougal and Schlei, *supra* note 196, at 648, 689-90. McDougal and Schlei explain:

It would appear the most rational course is to withhold blanket judgement and to appraise each specific use of nuclear weapons, as most other weapons and destructive practices are appraised, in the total context of such specific use.

Id.

C. Nuclear Targeting Strategies

A countervalue²⁶¹ deployment of nuclear weapons in response to a conventional attack against American or allied troops arguably would constitute a legally disproportionate and unnecessary response. Nuclear weapons designed for countervalue or city-busting targeting generally possess 1,500 times the explosive power of the bombs dropped on Hiroshima and Nagasaki. These “dirty bombs” produce severe nuclear fallout and have a “circular error probable” (CEP) of between 0.3-and-2.5 kilometers (300-to-2500 meters) — “which is to say that they lack pinpoint accuracy.”²⁶² Thus, “in addition to violating the Rule . . . against chemical, biological, and ‘analogous’ means of warfare, their capacity for violating all the other prohibitory rules noted, and on a truly awesome scale, seems self-evident.”²⁶³ Professor Weston asks,

[w]here is the military necessity in incinerating entire urban populations, defiling the territory of neighboring and distant neutral countries, and ravaging the natural environment . . . for the purpose of containing or repelling a conventional attack? Surely a failure to provide for an adequate conventional defense or to develop alternative energy sources does not excuse these probable results. If so, then we are witness to the demise of Nuremberg, the triumph of *Kriegsraison*, the virtual repudiation of the humanitarian rules of armed conflict in at least large-scale warfare. The very meaning of “proportionality” becomes lost, and we come dangerously close to condoning the crime of genocide, that is, a military campaign directed more towards the extinction of the enemy than towards the winning of a battle or conflict.²⁶⁴

A counterforce nuclear strike in response to a conventional attack also would violate the “proportionality” principle. The deployment of nuclear weapons with inherently low levels of accuracy inevitably would injure or kill civilians. A 1979 United States congressional study suggests that “between two million and twenty million Americans would be killed within thirty days after a counter-silo attack on United States ICBM sites, due mainly to early radiation fallout from likely surface bursts. The test of proportionality is thus

261. Countervalue targeting refers to a nuclear attack directed against an adversary’s cities and industries. Counterforce targeting refers to a nuclear attack directed against an adversary’s armed forces.

262. Weston, *supra* note 3, at 6.

263. *Id.*

264. Weston, *supra* note 215, at 578.

greatly strained once again."²⁶⁵ The counterforce attack will probably fail to knock out the other side's nuclear arsenal and will lead to a retaliatory nuclear strike and to a cycle of nuclear escalation.

In fact, both countervalue and counterforce targeting strategies likely will lead to similar results. Professor Falk notes that:

Because of the magnitude and properties of current nuclear weapons . . . , and because of their contemplated use in and around cities (there are, for instance, sixty-two military objectives targeted within the city limits of Moscow!), the cumulative blast and fallout effects from multiple nuclear explosions, the number of targets regarded as "military", and the clustering of military targets near population centers, even an official policy that limits the use of nuclear weapons by reference to the military character of the target is not different in effect from an overtly indiscriminate targeting policy. Furthermore, the World War II experience with the unrestricted bombardment of cities and with unrestricted submarine warfare suggests that a self-limiting framework of policies and tactics confining deliberate destruction to the enemy's military targets gives way in war-time to considerations of battlefield effectiveness, understood to include strikes against cities to weaken the resolve of the enemy society.²⁶⁶

A country deploying nuclear weapons in response to a threatened nuclear attack also would have the burden of demonstrating that its anticipatory nuclear strike was proportional to the damage likely to result from the unexecuted threat. Article 51 of the United Nations Charter admonishes states to undertake minimally coercive and non-violent modes of conflict resolution and vests primary responsibility for conflict resolution in the United Nations Security Council.²⁶⁷ Professor Weston concludes that "it is difficult to conceive of any nuclear threat that could not be met by some lesser preemptive mode — ex-

265. CONGRESS OF THE UNITED STATES, OFFICE OF TECHNOLOGY ASSESSMENT, *THE EFFECTS OF NUCLEAR WAR* 84 (1979) cited in Weston, *supra* note 215, at 587.

266. Falk, *Toward a Legal Regime for Nuclear Weapons*, 28 MCGILL L.J. 519, 528 (1983).

267. Charter Of The United Nations, June 26, 1945, 59 Stat. 1031, T.S. No. 993, 3 Bevans 1153, 1976 Y.B.U.N. 10, 43, art. 51.

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

Id.

cept, of course, in the case of foreign policies lacking in creative imagination and insensitive to the magnitude of the human values at stake."²⁶⁸

A country employing a retaliatory nuclear strike also would have to demonstrate that its retaliatory attack was proportional to the initial enemy attack. A countervalue retaliatory nuclear strike would violate Article 51(6) of the 1977 Protocol to the Geneva Conventions which provides that "attacks against the civilian population of civilians by way of reprisals are prohibited."²⁶⁹ Such an attack would appear to serve a retributive rather than a defensive purpose and may lead to an escalating cycle of nuclear retaliation.

A retaliatory counterforce attack against the attacking country's nuclear arsenals would appear to be a proportionate, defensive measure. However, as pointed out earlier, nuclear weapons are inaccurate and it is doubtful whether the damage resulting from a retaliatory nuclear attack could be limited to military targets. "Additionally, there is the customary injunction that reprisals be taken only as measures of last resort. In the context of nuclear war, this injunction is all the more imperative."²⁷⁰

What of the legality of a limited, tactical nuclear strike against a designated target? It appears that it is legal to deploy a low-yield, relatively "clean" and accurate nuclear weapon as a defensive measure against enemy troops or missile installations.²⁷¹ However, "no such option is available among existing intermediate-range theater weapons."²⁷² "[A] fission weapon must be regarded as 'dirty'. . . . its explosion in the air and, of course, at ground-level still would result in some radioactive contamination, albeit not as extensive as when nuclear technology as less 'tailored' than it is today."²⁷³ Sixty percent of the "theater" or "battlefield" weapons employed by NATO and Warsaw Pact countries are above the thirteen-to-twenty-two-kiloton range of the Hiroshima and Nagasaki bombs²⁷⁴ and the deployment of these weapons inevitably would cause collateral damage beyond their designated target.

The deployment of *tactical* nuclear weapons also may lead to a

268. Weston, *supra* note 215, at 579.

269. Protocol Additional to the Geneva Conventions, *supra* note 203, at Article 51(6).

270. Weston, *supra* note 215, at 586.

271. *Id.* at 583.

272. *Id.*

273. *Id.*

274. *Id.* at 582.

series of nuclear exchanges culminating in the deployment of *strategic* nuclear weapons. The inaccurate and destructive character of tactical nuclear weapons, when combined with the likelihood that the use of such weapons will escalate into a strategic nuclear exchange, leads Professor Weston to conclude that the deployment of tactical nuclear weapons violates the proportionality principal.²⁷⁵

[T]actical nuclear warfare, at least at theater level, would result in hundreds and thousands of nuclear explosions and, consequently, untold immediate and long-range, long-term collateral harms. In addition, once unleashed, the probability that tactical nuclear warfare could be kept at theater or battlefield level would be small. A crisis escalating to the first use of even relatively small nuclear weapons would bring us dangerously close to the ultimate state, a "strategic exchange", particularly if one of the two sides saw itself at a disadvantage in a drawn out "tactical exchange". In sum, once out of the bottle, likely as not even the tactical nuclear genie would quite literally cause "all hell to break loose". This fact . . . would seem by any rational analysis to run hard up against the principle of proportionality upon which the doctrine of military necessity is premised.²⁷⁶

Analysts should be wary of conceding that nuclear weapons may be legally deployed under any circumstances (e.g. a retaliatory strike) since such exceptions may be subject to abuse. As Professor Falk observes:

[P]olitically congenial uses of force are routinely characterized as "defensive", whereas politically hostile uses of force are condemned as "aggressive". To some extent, this incoherence flows from polemical uses of the law to serve the interests of state power, but to some extent, it also genuinely reflects a "misperception" that follows from the diversity of perspectives of different states, with different accesses to information, and different ideologies, cultures and worldviews.²⁷⁷

VI. CONCLUSION: A DECLARATION ON THE PREVENTION AND PUNISHMENT OF THE CRIME OF NUCLEAR HUMANCIDE

It has been argued that there is doctrinal support for the proposition that the use of nuclear weapons is prohibited under international law. Any scheme of legal *regulation* of nuclear weapons is likely to

275. *Id.* at 583-84.

276. *Id.*

277. Falk, *supra* note 266, at 534.

fail since "international law cannot hope to regulate the pursuit of decisive military state interests, and nuclear weapons are manifestly weapons of military decisiveness."²⁷⁸ As Professor Bilder has argued, "the first step is to go back to the idea, proposed at the beginning of the atomic age, that the use of such weapons be expressly outlawed, or at least, that any first use of such weapons be renounced and banned."²⁷⁹

A Declaration on the Prevention and Punishment of Nuclear Humancide, at a minimum, should define as international crimes, the production, testing,²⁸⁰ possession, use and threat or advocacy of the use of nuclear weapons.²⁸¹ Particularly severe sanctions should be applied to individuals who deploy nuclear weapons against civilians or against targets where civilians are likely to be injured.²⁸² Individuals and political officials should be liable for violations of the declaration even if they have been authorized by the state to act.²⁸³

The drafting of a Convention on the Prevention and Punishment of the Crime of Nuclear Humancide would likely be opposed by the superpowers and their allies. It therefore appears to be a utopian proposal. However, such a Convention arguably would reflect the collective consciousness, morality and aspirations of the peoples of the world; its drafting and ratification should not be frustrated by nation-state self-interest. Professor Martin Feinrider argues that:

Despite the elitist assumptions normally associated with governance and the present nation-state system, consensus and law — even on the international level — can be built from the bottom up. In fact, given the failure of the world's leaders to respond effectively to the challenge of nuclear weapons, we may have no choice but to rely on the efforts and consciousness of the people of the United States, the Soviet Union and all other nations.²⁸⁴

The translation of popular aspirations into an international legal instrument prohibiting and preventing nuclear humancide can serve

278. *Id.* at 531.

279. Bilder, *supra* note 256, at 959.

280. See, *Disarmament for a Just World: Declaration of Principles, Proposals for a Treaty, and Call for Action* (issued on the occasion of the International Workshop on Disarmament, 27-31 March 1978, New Delhi, India) reprinted in TOWARD A JUST WORLD ORDER 284 (R. Falk, S. Kim, and S. Medlovitz eds. 1982).

281. Falk, *supra* note 266, at 537-38.

282. *Id.*

283. *Id.*

284. Feinrider, *International Law as Law of the Land: Another Constitutional Constraint on Use of Nuclear Weapons*, 7 NOVA L.J. 103, 112 (1982).

as an effective mechanism for curbing the nuclear arms race and for limiting the use of nuclear weapons.

[International law] can help limit or even prevent future use of nuclear weapons by defining considerations of policy-makers, swaying public dialogue, providing ammunition for anti-nuclear populist movements, and demonstrating to all willing to listen the complete incompatibility of nuclear weaponry with virtually the entire thrust of the post-World War II effort to create structures and norms supportive of international peace and security. Should these ends be accomplished, they could well become means to the creation of law, and no small feat will have been done.²⁸⁵

285. *Id.*