Raison d'État v. Raison de l'Humanité — The United Nations SSOD II and Beyond

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There is widespread agreement throughout the world that the most urgent task confronting mankind is the prevention of a nuclear war and the termination of the nuclear arms race. These issues dominated the Second Special Session of the U.N. General Assembly devoted to disarmament, held in 1982. Regrettably, in contrast to the First Special Session, which produced a comprehensive programme of action, the Second Session ended in a virtually complete failure. Not only have all the major recommendations of the First Session remained unfulfilled, but the arms race has escalated significantly, as has international tension and the fear of a nuclear war. The author reviews current negotiations between the U.S. and the U.S.S.R. on strategic and intermediaterange nuclear weapon systems, which have yet to show the slightest progress. Negotiations on the comprehensive nuclear test ban, on the prohibition of anti-satellite weapons and on the chemical warfare ban are also stalemated. Even some key arms limitation agreements now in force, such as the ABM Treaty and the Non-Proliferation Treaty, are thought to be in serious danger of collapsing if present trends in the arms race are not reversed soon. Concurrent with these developments is a perceptible decline in respect for the United Nations Charter, international law in general and the obligations arising out of international arms limitation agreements. A notable casualty of the arms race, in the author's opinion, has been the cause of human rights and civil liberties. The author argues that despite its limitations, international law does provide the indispensable framework for stability and order in a dangerous world and, in that context, he makes certain proposals including an appeal to jurists to promote more forcefully the goals of the Charter.

Il existe un consensus mondial selon lequel la tâche la plus pressante pour l'humanité est la prévention d'une guerre mondiale et la fin de la course aux armements nucléaires. Ces questions dominèrent la deuxième session spéciale de l'Assemblée générale de l'ONU sur le désarmement, en 1982. Malheureusement, contrairement à la première session spéciale, qui avait produit un programme d'action détaillé, la deuxième session se solda par un échec. Non seulement les principales recommandations de la première session restent-elles lettre morte, mais la course aux armements, la tension internationale et la crainte d'une guerre nucléaire se sont depuis intensifiées significativement. L'auteur révise les présentes négociations entre les États-Unis et l'U.R.S.S. sur les systèmes d'armes nucléaires stratégiques et à portée intermédiaire, où l'on attend encore un premier signe de progrès. Les négociations sur l'interdiction complète des tests nucléaires, des armes anti-satellite et de la guerre chimique en sont aussi arrivées à des impasses. Certains accords internationaux, tels les traités sur la limitation des armes stratégiques et sur la non-prolifération, risquent de s'effondrer s'il n'y a aucun revirement des orientations de la course aux armes. Ces développements se sont conjugués à un déclin perceptible du respect accordé à la Charte des Nations unies, au droit international généralement et aux obligations découlant d'accords sur la limitation des armes. La cause des droits et libertés de l'homme a été, selon l'auteur, une victime notable de la course aux armements. L'auteur soutient que malgré ses faiblesses, le droit international présente une structure essentielle à la stabilité et l'ordre dans un monde dangereux et, en ce sens, fait certaines recommandations, y compris un appel aux juristes de promouvoir avec vigueur les buts de la Charte.

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With more than \$600 billion *per annum* being expended on arms, it is difficult to believe that mankind will not achieve the goal upon which it seems set, namely, the launching of a global war of catastrophic dimensions.... That, unfortunately, is the main conclusion one must draw from SSD II.

- Carlos P. Romulo, Foreign Minister of the Philippines 1

We have many ideas and plans as to how to meet the growing needs of the large mass of humanity, but somehow such human considerations seem to take second place to the technology and funding of violence and war in the name of national security.... We are perilously near to a new international anarchy.

- Javier Perez de Cuellar, Secretary-General of the United Nations²

Introduction

It is regrettable that any examination of the proceedings and results of the Second Special Session of the United Nations General Assembly devoted to disarmament [SSOD II] 3 can only confirm the extreme pessimism of Messrs

¹As quoted in Jack, First (Disarmament) Committee Tries to Rescue SSD II Failure, Disarmament Times (November 1982) 1, 2.

²United Nations, Report of the Secretary-General on the Work of the Organization, 37 U.N. GAOR, Supp. (No. 1), U.N. Doc. A/37/1, reprinted in (1982) 21 I.L.M. 1136, 1137.

³ The acronym SSOD II stands for the Twelfth Special Session of the United Nations General Assembly which was devoted exclusively to disarmament. The session was held in New York from 7 June to 9 July 1982 and is referred to commonly as the Second Special Session because it was only the second time that the General Assembly met with solely the issue of disarmament

Romulo and de Cuellar, two of the most experienced contemporary statesmen and diplomats. The mood preceding the opening of the Second Session was in stark contrast to the spirit of guarded enthusiasm and expectation that characterized the start of the First Session, held in 1978. The Second Session commenced in an atmosphere of urgency and anxiety, reflecting the renewal of the cold war with the accompanying sharp escalation of the arms race. Although the prospects for a successful conference in these circumstances were not encouraging, not even the most pessimistic participants could have anticipated that the Session would end in virtually complete failure.

Primarily because of the heightened tension and the absence of a spirit of compromise between the major power blocs, the General Assembly, after five weeks of debate, was not only unable to agree on any measure of arms limitation, let alone disarmament, but it failed even to adopt a "final document". Agreement was reached on only two minor agenda items: the U.N. programme of disarmament fellowships and the World Disarmament Campaign. As the Concluding Document of the Second Session notes in remarkable understatement, "developments since 1978 have not lived up to the hopes engendered" by the First Special Session; the "objectives, priorities and principles" laid down in the 1978 Final Document "have not been generally observed"; the Programme of Action, the most important item on the agenda, contained in the Final Document "remains largely unimplemented"; many "important negotiations either have not begun or have beeu suspended, and efforts in the [U.N.] Committee on Disarmament and other forums have produced little tangible result"; arms competition, especially the nuclear arms race, "has assumed more dangerous proportions and global military expenditures have increased sharply". Since 1978, the Document concludes, "there has been no significant progress in the field of arms limitation and disarmament and the seriousness of the situation has increased".5

The Second Special Session did not fail for lack of preparation or specific proposals. Iudeed, the participating states had at their disposal not only a score of studies and recommendations covering every problem of the arms race, prepared for and by previous conferences, but possessed in

on its agenda. For the record of this session, see *Concluding Document* of the Twelfth Special Session, U.N. Doc. A/S-12/32 (1982) [hereinafter *Concluding Document*].

The acronym SSOD I refers in this article to the Tenth Special Session of the General Assembly (the first devoted entirely to disarmament), which took place from 23 May to 1 July 1978. The 1978 session adopted a 129-paragraph *Final Document* which provides a framework for the disarmament efforts of the international community in the years ahead. See United Nations G.A. Res. S-10/2, 10 (Special) U.N. GAOR, Supp. (No. 4) 3, U.N. Doc. A/S-10/2 (1978), reprinted in (1978) 17 I.L.M. 1016 [hereinafter *Final Document*].

⁴Concluding Document, ibid., para. 59.

⁵ Ibid.

addition a number of expert studies commissioned specially by the Secretary-General for the occasion. Most of this valuable documentation received little attention, the fate also of some seventy proposals dealing with various aspects of the arms race, including several versions of a nuclear "freeze" submitted during the session.⁶ After five weeks of often belligerent and inconclusive exchanges, the representatives of 157 nations decided in the end to refer unfinished business to the U.N. Committee on Disarmament. It was a display of "statesmanship" at its worst, even for a forum not accustomed to diplomatic niceties or high standards of achievement.

Like so many earlier attempts to halt the global arms race, the Second Special Session ended in failure primarily because of antagonism between the major power blocs. With scant concern for the fundamental goals of the U.N. Charter, governments of the countries charged with the principal responsibility of saving "succeeding generations from the scourge of war" and for promoting the "dignity and worth of the human person",7 chose the period between the two Special Sessions of the General Assembly to replenish their already formidable arsenals with new, more destructive and more destabilizing weapons. Plans for the quick "modernization" and massive expansion of armed forces obviously could not be implemented concurrently with a commitment to arms limitation. Under these conditions, the Second Session, rather than securing or even stimulating the slightest reduction in armaments, served only to exacerbate profound differences among the major powers, especially the superpowers, and to underscore their stubborn unwillingness to implement any of the measures agreed upon at SSOD I. The Committee on Disarmament, the principal negotiating body of the United Nations, has become virtually paralyzed through major power confrontation, and after three years of debates, it has not completed a single draft convention text.8 But the lack of any meaningful achievement in United Nations organs is not the only setback suffered recently by the cause of disarmament; negotiations on arms limitation conducted in all other forums have fared no better.

The sharp upturn in the East-West arms race, accompanied by greatly heightened cold war tensions, has already resulted in significant deterioration

⁶Draft resolutions on a nuclear-arms freeze were submitted by India, Sweden and Mexico. See *ibid.*, Annex II, 17-8.

¹United Nations Charter, Preamble.

^{*}The only arms limitation agreement concluded since SSOD I, the 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, U.N. Doc. A/CONF. 95/15 (1980), reprinted in (1980) 19 I.L.M. 1523 [hereinafter Conventional Weapons Convention], was signed by thirty-five states in April 1981. The Convention and the three Protocols annexed to it deal with weapons designed to injure by fragments that escape x-ray detection in the human body, as well as mines, booby-traps and other small-arm devices and incendiary weapons. Work on this Convention was largely completed before the 1978 Special Session.

of disarmament prospects, with adverse consequences extending far beyond SSOD II. These developments jeopardize seriously not only the modest advances made in the ongoing multilateral and bilateral arms negotiations, but also pose a fatal threat to some of the key arms control agreements already in force as well as to certain other undertakings which, although not ratified, are nevertheless honoured by the United States and the Soviet Union.⁹

On the following pages, the more salient aspects of the current strategic arms competition — as they appear to this observer — will be explored from perspectives of world public order, taking into account the legitimate security concerns of all states and the common interest of mankind in survival. The issues to be examined in some detail include: the impact of the escalating arms race, especially the effect of constant advances in weapons technology, both on the current disarmament negotiations and on existing arms control agreements; the nature of nuclear weapons, legality of plans for their use, and the strategy of "limited" and "protracted" nuclear conflict; pledges for "no-firstuse" of nuclear weapons and proposals for their total abolition; facts and myths relating to the elusive quest for "parity" of force levels and fool-proof verification systems; the desirability of setting up an independent international organ for an impartial assessment of competing arms limitation proposals and possibly for verification of compliance with agreed undertakings; the incompatibility of the arms race with the international law of human rights; and the potential role of international law and jurists in curbing the arms competition, particularly in nuclear weapons.

I. The Effect of the Arms Race on Disarmament Negotiations and on Existing Agreements

More than two years after the signing of SALT II in Vienna, ¹⁰ the United States and the Soviet Union began bilateral negotiations on intermediate nuclear force reductions [INF] in November 1981 and on strategic arms reduction [START] in June 1982. Because they deal with the major segments of the nuclear arsenal of the two superpowers, these negotiations are of overriding concern to the entire international community. As of 1 May 1983

⁹See infra, text accompanying notes 56 to 77.

¹⁰Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms, 18 June 1979, reprinted in United States Arms. Control and Disarmament Agency [ACDA], Arms Control and Disarmament Agreements [:] Texts and Histories of Negotiations, 5th ed. (1982) 246 [hereinafter Arms Control and Disarmament Agreements].

they remain in stalemate.¹¹ On the eve of the recent resumption of START negotiations, it was reported that instead of seeking compromise, the U.S. negotiating team would "now press for a list of Soviet concessions that has grown longer and more stringent than the measures...originally presented last summer".¹² Since the original American proposal was rejected by the Soviet Union as being utterly one-sided,¹³ prospects for an early agreement are minimal, unless both sides begin to negotiate in good faith.

INF negotiations similarly show no progress, with each side accusing the other of proposing "unilateral disarmament" for its negotiating partner. At a news conference held on 16 February 1983, President Reagan asserted that the United States "would negotiate in good faith any legitimate proposal" but "[s]o far no legitimate counterproposal has been offered [to his 'zero option' proposal] that would warrant negotiation or study". President Reagan rejected as unreasonable a Soviet counterproposal to reduce its intermediate range nuclear missiles in Europe to 162 (the number deployed by France and the United Kingdom) and he added that "the ball is still in their court".

Negotiations on "mutual and balanced force reductions" [MBFR] in central Europe, involving all member-states of NATO and the Warsaw Pact, have been under way since 1973. These talks, limited to conventional forces and confidence-building measures, have failed to result in any force reduction in Europe. Similarly unproductive in terms of disarmament have been the Helsinki follow-up conferences, conceived as a forum for enhancing mutual trust among the European states, Canada and the United States. ¹⁸

[&]quot;An editorial in Pravda of 12 May 1983, stated in reference to the U.S.-U.S.S.R. negotiations on intermediate nuclear weapons in Europe that after eighteen months of talks, the two sides had not drawn closer "even by a millimeter". Reported in Burns, *Moscow Predicts a Missile Impasse*, The New York Times (13 May 1983) A 5. The same observation is equally applicable to the START negotiations as of May 1983.

¹²A Tougher Stand for START, Time [Magazine] (7 February 1983) 22.

¹³ See, e.g., the speech of Soviet Foreign Minister Andrei A. Gromyko at SSOD II, on 15 June 1982, reprinted as *Brezhnev's Statement and Excerpts From Gromyko's Speech*, The New York Times (16 June 1982) A 20.

[&]quot;"[N]either the 'zero' nor the 'interim' options, designed to secure the unilateral disarmament of the Soviet Union and to give the United States military superiority in Europe, can serve as a basis for a just settlement acceptable to both sides." From a speech by the Soviet leader Yuri V. Andropov, reprinted as Excerpts From Arms Speech With Andropov's Proposal, The New York Times (4 May 1983) A 16.

¹⁵ President's News Conference on Foreign and Domestic Matters, The New York Times (17 February 1983) B 10.

¹⁶ Ibid.

¹⁷ See George, The new MBFR treaty proposal: an American perspective (1982) 30 NATO Rev. 8 (No. 5).

¹⁸Conference on Security and Co-operation in Europe, *Final Act*, 1 August 1975, reprinted in (1975) 14 I.L.M. 1292 [hereinafter *Helsinki Final Act*] (signed by thirty-five heads of state and government).

Strained East-West relations and the renewed arms competition now threaten to undo even the limited advances in disarmament negotiations achieved to date. Trilateral negotiations among the U.S., Britain and the Soviet Union on a comprehensive nuclear weapons test ban treaty [CTB], for two decades one of the highest priority items on the disarmament agenda of the United Nations, began in 1977.19 Because much research on the critical components of the treaty had been done earlier, 20 significant progress was made in the negotiations. A major breakthrough occurred when the U.S.S.R., for the first time since the beginning of arms reduction talks, accepted in principle the idea of allowing the installation on its territory of monitoring devices that would not be under Soviet control.21 Only the number of such devices and their location remained unresolved. However, following the U.S. elections of November 1980, the new Administration first requested a postponement of the talks for purposes of study, and in July 1982 decided not to resume negotiations for an indefinite period of time. According to a spokesman for the American Government, a comprehensive test ban remains a "long-term U.S. arms control objective".22

When the U.N. Disarmament Committee's ad hoc Working Group on the Nuclear Test Ban met in August 1982, China and France, both nuclear-weapon states and key members of the Committee, announced that they would not participate in the work of this body. China explained its action as follows: "When the superpowers possess huge nuclear arsenals, a mere cessation of nuclear testing would not lessen the threat of nuclear war, let

¹⁹ For a critical appraisal of these negotiations, see A. Myrdal, *The Game of Disarmament*, rev. ed. (1982) 208. Mrs Myrdal was awarded the 1982 Nobel Prize for Peace.

²⁰ As long ago as 29 February 1972, in his address to the Conference of the Committee on Disarmament, the U.N. Secretary-General asserted that "all the technical and scientific aspects of the problem have been so fully explored that only a political decision is now necessary in order to achieve final agreement. . . . When one takes into account the existing means of verification by seismic and other methods, and the possibilities provided by international procedures of verification such as consultation, inquiry and what has come to be known as 'verification by challenge' or 'inspection by invitation', it is difficult to understand further delay in achieving agreement on an underground test ban." United Nations, Report of the Committee on Disarmament, 37 U.N. GAOR, Supp. (No. 27), 23 U.N. Doc. A/37/27 (1982) [hereinafter Report of the Committee on Disarmament].

²¹ See *Report on CTB Negotiations*, presented on 31 July 1980 to the U.N. Committee on Disarmament by the United States, the Soviet Union and the United Kingdom. Complete text in (1980) 80 Dep't State Bull. 47.

²² Eugene V. Rostow, Statement to the 37th Session of the United Nations General Assembly in the First Committee, 27 October 1982, U.N. Doc. A/C1/PV.13, 29-30. In the absence of a CTB treaty, the two superpowers continue testing, with the United States leading the Soviet Union in the number of nuclear explosions by 740 to 480. See Eugene J. Carroll Jr, Deputy Director, Center for Defense Information, and a retired U.S. Navy Admiral, letter to the editor, The New York Times (12 April 1983) A 22.

alone eliminate it." ²³ France asserted that it would not participate in the drafting of a treaty which it "could not sign because the conditions for an undertaking on its part have not been met". ²⁴ The dissension in the Group prevented it from reaching agreement on a work programme and its ten meetings were devoted to procedural debates and an exchange of views "on general aspects of the question of verification and compliance". ²⁵ In fact, anyone reading the report of the *ad hoc* Group and unfamiliar with the twenty-year history of test ban negotiations, might easily conclude that its 1982 session marked the beginning of talks on this critical aspect of nuclear competition.

Negotiations on the prohibition of chemical weapons have fared no better.²⁶ In progress since 1976, they have been deadlocked for some time owing to unresolved problems of verification and the monitoring of compliance.²⁷ The prospects for an early agreement have not been enhanced by the decision of at least one major power to embark upon a massive build-up of its chemical warfare stocks,²⁸ nor by the imminent deployment of so-called

²⁷ Almost half of the latest Report of the Committee on Disarmament, supra, note 20, 38-92 deals with methods of verification for a chemical weapons convention, the most controversial part of the negotiations. For an excellent survey of both the issues at stake and the nature of modern chemical weapons, see Meselson & Robinson, Chemical Warfare and Chemical Disarmament, Sci. Am. (April 1980) 34. See also Lundin, Chemical weapons: too late for disarmament? (1979) 35 Bull. Atom. Scientists 33 (December).

²⁸ The U.S. budget appropriation for chemical weapons increased from U.S. \$532 million in 1982 to over U.S. \$700 million in 1983. Kalvin, "Yellow Rain": the public evidence (1982) 38 Bull. Atom. Scientists 15 (May). See also Morrissey, The Return of Chemical Warfare, The Progressive [Magazine] (February 1982) 25. In presenting his annual report to Congress, the U.S. Secretary of Defense was pessimistic about the prospects for a chemical ban convention: "Achieving a ban will not come easily, not only because the verification and compliance are so formidable, but also because the Soviets have little incentive to negotiate seriously so long as they perceive they have a significant advantage in CW capabilities. . . . To complete our deterrent posture, we must eliminate the prospect for such a Soviet advantage by reestablishing a retaliatory capability sufficient to make them recognize that they, too, would be forced to operate [in a contaminated environment] with similar encumbrances [i.e., in protec-

²³ Geneva Group Stymied, Disarmament Times (November 1982) 3.

²⁴ Ibid.

²⁵Report of the Committee on Disarmament, supra, note 20, 23.

²⁶The unanimously adopted *Final Document* of SSOD I, *supra*, note 3, para. 75, states that the "complete and effective prohibition of the development, production and stockpiling of all chemical weapons and their destruction represent one of the most urgent measures of disarmament". Under art. IX of the *Biological Weapons Convention*, parties have undertaken to continue negotiations in good faith on the ban of chemical weapons "with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction". *Convention on the Prohibition of the Development*, *Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction* 26 U.S.T. 583, T.I.A.S. 8062, reprinted in (1972) 11 I.L.M. 310 [hereinafter *Biological Weapons Convention*] (signed 10 April 1972; entered into force 26 March 1975).

"binary" chemical weapons whose characteristics defy reliable verification,²⁹ nor by allegations concerning the actual use of chemical and toxin weapons by the Soviet Union (in Afghanistan) and by Vietnam (in Laos and Kampuchea).³⁰ In common with other areas of disarmament talks, the protracted negotiations on chemical warfare agents have not kept pace with rapidly developing weapons technology. And, as experience shows, once new weapons become integrated into military forces and their production starts, it may be very difficult to achieve agreement on their total ban.³¹ Moreover, the military may be reluctant to part with weapons, such as binary nerve gas munitions, of extreme yet geographically-limited lethality, which are seen by some of their advocates as an effective and far less hazardous substitute for nuclear weapons.

Attempts to prevent the extension of the arms race to outer space were initiated by the United States and the Soviet Union in 1978, when the two superpowers opened informal talks aimed at outlawing the deployment of anti-satellite weapons in that environment.³² After three inconclusive meetings, the last held in June 1979, further bilateral negotiations were suspended and have not yet been resumed. Only in 1982 did consideration of this neglected aspect of the arms race begin in the U.N. Committee on Disarmament. Three separate proposals were submitted to the Committee. One suggested a "verifiable agreement to prohibit anti-satellite systems in the

tive equipment]." Quoted in Ulsamer, An In-Depth Look at the New Defense Budget, Air Force Magazine (April 1983) 66, 73.

²⁹ See, e.g., Meselson & Robinson, supra, note 27; Lundin, supra, note 27; and Myrdal, supra, note 19, 286-90.

³⁰ See Excerpts from State Department Report on Chemical Warfare, The New York Times (23 March 1982) A 14; Weinraub, New U.S. Document on Chemical War, The New York Times (14 May 1982) A 7; Weinraub, U.S. Assails Soviet for Reported Use of Toxin Weapons, The New York Times (30 November 1982) A 1; Vice-President Bush, "Advancing the Cause of Peace and Arms Control" in United States Dep't State, Current Policy (No. 448) (Address before the Committee on Disarmament, Geneva on 4 February 1983). In December 1982, Kenneth L. Adelman, speaking in the First Committee of the United Nations General Assembly on behalf of the United States, called for an investigation of reports, as yet unproven, that chemical weapons were used by Ethiopian forces in Eritrea. Pace, U.S. Raises Issue of Ethiopian Toxic Arms in U.N., The New York Times (9 December 1982) A 11.

³¹ Frank Blackaby, Director of the Stockholm International Peace Research Institute [SIP-RI], reports that the United States is building a special factory for making new binary nerve gas munitions. When completed in 1983, it will have a production capability of 20,000 155-millimetre rounds per month. Plans call also for the production of 500-pound binary-V.X. aircraft spray-bombs (the so-called "Big Eye"). Binary warheads are also being considered for various missiles, including the ground-launched cruise missile. World Arsenals 1982 (1982) 38 Bull. Atom. Scientists 21, 26 (June-July). See also Middleton, U.S. Chemical Warfare: A Plan to Match Soviet, The New York Times (5 February 1982) A 6.

³² For details, see Vlasic, *Disarmament Decade*, *Outer Space and International Law* (1981) 26 McGill L.J. 135, 159.

context of agreements aimed at preventing an arms race in outer space"; another urged the negotiation of "a treaty prohibiting the stationing in outer space of weapons of any kind"; and still another, submitted by a group of twenty-one states, recommended an agreement or agreements to "prevent an arms race in outer space in all its aspects".33 The Committee held only a few informal sessions and the debate never rose above general statements. Immediate prospects for the successful completion of a treaty banning weapons in outer space in this multilateral negotiating body are not promising. Despite the efforts of the group of twenty-one neutral and non-aligned countries to establish within the Committee a working group on outer space, a minority of member-states prevented that development by invoking the rule of consensus.³⁴ Meanwhile, despite growing objections from the majority of nations, the militarization of outer space continues unabated, subject only to the very limited restrictions of the Outer Space Treaty of 1967 35 and the Partial Test Ban Treaty of 1963.36 The best one can expect from the current talks would be a ban on anti-satellite weapons [ASAT], leaving the spacepowers a wide degree of freedom to use outer space for new generations of military spacecraft.³⁷ Yet, under the *Outer Space Treaty*, the U.S. and the U.S.S.R., the principal architects of the *Treaty*, pledged that they would use this environment for the "benefit and in the interest of all countries" (art. I) and in "accordance with international law, including the Charter.... in the interest of maintaining international peace and security and promoting international co-operation and understanding" (art. III).

³³Report of the Committee on Disarmament, supra, note 20, 101-2.

³⁴ Geneva Group Stymied, supra, note 23. In his recent address to the U.N. Committee on Disarmament, Vice-President Bush said, in reference to arms control measures in outer space: "Clearly conditions do not exist which would make negotiations appropriate." Advancing the Cause of Peace and Arms Control, supra, note 30, 4.

³⁵Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies 18 U.S.T. 2410, T.I.A.S. 6347, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty], reprinted in Arms Control and Disarmament Agreements, supra, note 10, 51 (opened for signature 27 January 1967; entered into force 10 October 1967).

³⁶Treaty Banning Nuclear Weapon Tests in the Atmosphere, In Outer Space and Under Water 14 U.S.T. 1313, T.I.A.S. 5433, 480 U.N.T.S. 43 [hereinafter Partial Test Ban Treaty], reprinted in (1963) 2 I.L.M. 889 (opened for signature 5 August 1963; entered into force 10 October 1963).

³⁷E.g., the Soviet proposal of a "Treaty on the Prohibition of the Stationing of Weapons of Any Kind in Outer Space", submitted to the United Nations on 10 August 1981, in its most important provisions, bans the launching of weapon-carrying spacecraft in outer space and any kind of interference with spacecraft of other states (arts 1 and 3). Other military uses of outer space are not prohibited explicitly in this draft proposal. Text in U.N. Doc. A/36/192 (1981) (Letter from the Minister of Foreign Affairs of the Soviet Union to the U.N. Secretary-General). For U.S. perspectives, see Garthoff, Banning the Bomb in Outer Space (1980-81) 5 Int'l Security 25 (No. 3); Hafner, Averting a Brobdingnagian Skeet Shoot [:] Arms Control Measures for Anti-Satellite Weapons (1980-81) 5 Int'l Security 41 (No. 3).

Four years ago, it seemed almost certain that the Committee on Disarmament would soon submit to the U.N. General Assembly, as its first completed disarmament text, a draft convention prohibiting the development, production, stockpiling, and use of radiological weapons. This optimism was based upon the fact that in 1979, the United States and the Soviet Union submitted to the Committee a joint draft convention. What helps to explain the uncharacteristically cooperative spirit of the superpowers is that the convention bans weapons which do not exist and have never existed, and which neither co-sponsor plans to develop in the foreseeable future.

In the 1950s, while the total number of nuclear weapons was still relatively modest, consideration was given by the military to the possible use of radioactive materials as an offensive instrument in radiological warfare. The idea was to contaminate with radioactive materials enemy territory, factories and equipment without causing the vast destruction that would result from exploding a nuclear warhead. The rapid growth of stockpiles of far more effective nuclear weapons led, however, to the abandonment of these plans.³⁹ The "radiological weapons" subject to the ban should not be confused with the tens of thousands of nuclear weapons currently in the arsenals of the major powers, not one of which is covered by the proposed agreement. Despite its very modest scope, even this draft convention failed to gain the necessary support for its submission to SSOD II for approval. The draft has been returned to the U.N. Disarmament Committee's Working Group on Radiological Weapons for further negotiations. The cause of the new stalemate is the request by certain states to include in the text a prohibition of attacks against nuclear facilities. 40 Although the immediate effect of this convention on the current arms race would likely be nil, the proposal does have some redeeming value because it might deter states from engaging in the development of weapons classified as "new types of weapons of mass destruction". In addition, an agreement on a radiological weapons convention might at this time be of some symbolic value, as evidence that East and West can cooperate on arms control measures even in a period of extreme hostility between the two power blocs.

³⁸United Nations, *The United Nations Disarmament Yearbook Volume 4: 1979* (1980) 253. At 248, the *Yearbook* defines radiological weapons as "those which make use of the dispersal of radioactive substances in the target area to cause injury to personnel independently of nuclear explosions". See also C. Flowerree, "Controlling Radiological Weapons [:] A Historical Perspective" in The Stanley Foundation, *Radiological Weapons Control: A Soviet and US Perspective* (Occasional Paper 29, 1982) 7; and V. Issraelyan, "Radiological Weapons [:] Possible New Types of Weapons of Mass Destruction" in The Stanley Foundation, *Radiological Weapons Control: A Soviet and US Perspective* (Occasional Paper 29, 1982) 17.

³⁹P. Noel-Baker, The Arms Race [:] A Programme for World Disarmament (1958) 317-8. ⁴⁰Report of the Committee on Disarmament, supra, note 20, 93 et seq.

Concurrent with these protracted attempts to limit the arms competition, new weapon systems, conceived and developed while the two adversaries were negotiating, are being deployed or are nearing the production phase.⁴¹ Without enhancing the security of either side, each such innovation compounds the already difficult, and sometimes insuperable, problems of verification. Some of the new missiles, such as the MX, Trident I and II, Pershing II, and the Soviet mobile SS-20, are extremely accurate, quick-reaction weapons which are therefore regarded generally as "first-strike" or "counterforce" systems, that is, weapons designed to attack the enemy's military and command targets so as to cripple its ability to retaliate. Others, such as "stealth" bombers and the nuclear-tipped cruise missiles which are capable of being launched from land, sea and air, are weapons systems that evade detection by radar sensors until near the target, when it is too late for any effective defence. Because of their small size (eighteen feet long and twentyone inches in diameter) and easy concealment (despite a 200-kiloton nuclear warhead), the monitoring of an arms reduction agreement aimed at limiting the number of permissible cruise missiles, or banning them altogether, could prove exceedingly difficult.⁴² Verification of their numbers, "or even their existence", notes an experienced American weapons designer, "is nearly impossible, because the nonnuclear missiles are identical to the nuclear ones from the outside and can be mounted interchangeably in the launchers". 43 To appreciate the probable impact of the cruise upon the arms control negotiations, one need only recall that the problems of verification have delayed for years — in the case of the comprehensive test ban, for two decades — any agreement on weapons considerably less demanding in monitoring inventiveness and technique. Yet thousands of such missiles are planned to enter the arsenals of the superpowers before the end of this decade.44

Similar verification difficulties caused by the development of "binary" nerve-gas munitions, are already being experienced in drafting a treaty to eliminate chemical weapons. Because binary weapons consist of two relatively innocuous components which become lethal only after the firing of a shell, the possibilities for clandestine production and stockpiling outreach any

⁴¹ For a comprehensive survey, see *The Military Balance 1982/83* [:] As Compiled by The International Institute for Strategic Studies, London, Air Force Magazine (December 1982) 61 [hereinafter The Military Balance].

⁴² See Brecher & Lindsay, *Keeping Everybody Honest*, Newsweek [Magazine] (31 January 1983) 20; Aldrich, *The Pentagon on the Warpath*, The Nation [Magazine] (27 March 1982) 361, 362.

⁴³ Aldrich, ibid.

[&]quot;President Reagan's strategic programme calls for the deployment of 3,400 air-launched cruise missiles and some 3,000 to 4,000 sea-based cruise missiles of all types by the early 1990s. See Paine, *Reagatomics*, or *How to 'Prevail'*, The Nation [Magazine] (9 April 1983) 423, 426 and 428.

known means of verification. In sum, every one of these new weapon systems represents another destabilizing addition to an already highly unstable political-military environment.

While arms control negotiations move at a snail's pace, if they move at all, the momentum of the arms race is accelerating constantly, creating new security threats, new weapons "assymetries" and "gaps", and new verification nightmares. The progression of nuclear missile technology from only one warhead per missile to missiles armed with up to fourteen warheads, each independently targetable, is widely recognized as having increased, rather than decreased, the vulnerability of the major military powers, in addition to complicating enormously verification procedures. With START and INF talks under way, it is now reported that the world is soon to "enter a new age of missile technology in which nuclear warheads will be designed to maneuver in flight, either to dodge enemy defenses or to home in on a target with unparallelled accuracy".45 This new manoeuverable warhead [MARV] is expected to be installed on the Pershing II missile, currently the subject of the INF talks. The implications of this innovation for the future of both disarmament and strategic stability cannot be overestimated. An allegedly "secret" Soviet proposal for a ban on MARVs was turned down by an American side reluctant to yield the advantage. 46 The reason for the refusal is all too reminiscent of the negotiating tactics practised since the beginning of postwar arms reduction negotiations; neither side is willing to reduce or eliminate the weapon system in which it knows it enjoys an advantage over its adversary. As George Kennan observes in reference to the SALT negotiations: "[E]ach side is obsessed with the chimera of relative advantage and strives only to retain a maximum of the weaponry for itself while putting its opponent to the maximum disadvantage." 47

Every major new weapon system is used in negotiations as a "bargaining chip" to extract a concession from the bargaining partner, a ploy that almost never produces either a meaningful arms reduction or enhanced security, but rather escalates the arms competition to a more dangerous and more destabilizing level. The observation that such negotiations "are not a way of escape from the weapons race" but are "an integral part of it" is not far from the truth. The futility of using weapons innovations as a bargaining chip and the adverse effects of this practice for both sides was identified with remarkable

 $^{^{45}}$ Boffey, New Generation of Warheads Just Around The Bend, The New York Times (15 February 1983) C 1.

⁴Ibid.

⁴⁷Kennan, Einstein Peace Prize Address, 19 May 1981, reprinted in Disarmament Times (June 1981 — Special Supp.) 1, 2.

⁴⁸ Ibid.

foresight by Jerome B. Wiesner, Science Adviser to Presidents Kennedy and Johnson, more than twenty years ago:

One of the most ironic aspects of the situation in which the United States and the Soviet Union find themselves is that each is running an arms race with itself. Because of the technical capabilities of both countries, neither will for long lag behind the other in developing any new weapon. As a consequence, we are forced to work harder and harder in the effort to maintain a given degree of security. Thus we create twin spirals of invention and production which, because of the nature of the weapons involved, appear to lessen, rather than enhance, the possibility of that security. ...[A]lmost any invention the weapons engineers can conceive of can now be built — and the logic of the arms race seems to require that any possible weapon be built, no matter how horrible.

The accuracy of this assessment of the dynamics of the arms race has been borne out by overwhelming evidence accumulated since the early 1960s. The military arsenals and defence budgets of the superpowers have multiplied many-fold; innumerable new weapons systems have been deployed; the number of strategic nuclear warheads has increased from under 7,000 to at least 15,000 ⁵⁰ and the number of nuclear-weapon states from three to seven, possibly eight if South Africa is included; the environment of outer space has been thoroughly militarized, with perhaps as much as seventy-five *per cent* of current space activities being defence-related. ⁵¹ The list could be expanded.

⁴⁹ Wiesner, "Foreword" in D. Brennan, ed., Arms Control, Disarmament, and National Security (1961) 13, 14.

⁵⁰The exact number of warheads and their yields are closely guarded secrets and therefore all estimates are subject to considerable uncertainty. A recent estimate credits the United States and its NATO allies with 9,670 strategic nuclear warheads and the Soviet Union with 8,135. See Alpern, Walcott & Martin, *The Nuclear Arms Race*, Newsweek [Magazine] (5 October 1981) 32, 33. According to London's International Institute for Strategic Studies, the total for the American arsenal alone is about 9,300 and for the Soviet about 7,300. In terms of destructive power (megatonnage — one megaton equalling one million tons of explosive), the Soviet strategic forces lead those of the U.S. by 6,100 megatons to 3,752 megatons. *The Military Balance*, supra, note 41, Table at 147.

⁵¹ On 22 September 1979, a U.S. reconnaissance satellite over the South Atlantic reported a flash of light off the coast of South Africa resembling an atmospheric nuclear explosion. In response to that discovery, and pursuant to a resolution of the U.N. General Assembly, a group of experts was appointed by the Secretary-General to investigate the matter. The experts reported in 1980 that "there is so far no undisputed scientific explanation" for the flash recorded by the U.S. satellite. However, they agreed that "there is no doubt that South Africa has the technical capability to make nuclear weapons and the necessary means of delivery." United Nations, South Africa's Plan and Capability in the Nuclear Field: A Summary (n.d.) 2-3 (U.N. Centre for Disarmament Fact Sheet No. 15).

Following a fifty-five-day fact-finding trip through South Africa, Samuel H. Day Jr, former editor of the Bulletin of the Atomic Scientists, concluded that South Africa does have its own atomic bomb and that the event of 22 September 1979 was, indeed, a nuclear weapon test. *The Afrikaner Bomb*, The Progressive [Magazine] (September 1982) 22. For a discussion of the militarization of outer space, see *infra*, text accompanying notes 115 to 119.

Reflecting on this record two decades later, Professor Wiesner found it "sobering to note that U.S. security has been diminished by each new round of weapons systems" and so has, he added, that of the Soviet Union.⁵²

Commitment to further re-armament rather than to disarmament, despite public rhetoric to the contrary, now threatens to undermine fatally all but one (the Partial Test Ban Treaty of 1963) of the major arms limitation agreements concluded during the last fifteen years. The pressures for deploying antiballistic defences [BMD] have been gaining momentum in the United States, ostensibly to protect the MX missile sites. Substantial increases in the budget for accelerating the development of BMD systems have already been approved, and it appears that Washington may seek modification of the 1972 Treaty on the Limitation of Anti-Ballistic Missile Systems 53 with Moscow when it comes up for review this year. The trend was authoritatively presaged by the Secretary of Defense, Caspar Weinberger, when in 1981, he stated before the U.S. Senate Armed Services Committee: "I am not one of those who feels that an active and effective ballistic missile defense system is destabilizing. The sooner we can get to it, the better I like it." 54 In March of 1983, President Reagan startled the world with his call for a massive national effort to develop an ABM defence system, based on futuristic weapons stationed in outer space, to "counter the awesome Soviet missile threat".55

⁵² Wiesner, The Case for Ending the Arms Race, Manchester Guardian Weekly (2 January 1983) 18 (review of G. Kennan, The Nuclear Delusion [:] Soviet-American Relations in the Atomic Age (1982)).

[&]quot;Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems 23 U.S.T. 3435, T.I.A.S. 7503 [hereinafter ABM Treaty], reprinted in (1972) 11 I.L.M. 784 (signed 26 May 1972; entered into force 3 October 1972). The ABM Treaty is subject to review five years after its entry into force, and at five-year intervals thereafter (art. XIV). The first and only such review was held in 1977. The most important obligation of the parties can be found in art. V(1): "Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based." The Protocol to the ABM Treaty, signed on 3 July 1974, permits each side one ABM deployment site (art. I(1)). Text found in Arms Control and Disarmament Agreements, supra, note 10, 162.

[&]quot;Quoted in Paine, MX: too dense for Congress (1983) 39 Bull. Atom. Scientists 4, 6 (February). Strong support for the deployment of an anti-ballistic missile defence system has also been expressed by George V. Orr, Secretary of the U.S. Air Force. He is reported to regard the ABM Treaty as "the funniest kind of treaty in the world. It's a treaty against defense. I would think that our treaties would be against offense." R. Brownstein & N. Easton, Reagan's Ruling Class [:] Portraits of the President's Top 100 Officials (1982) 473.

⁵⁵ Address to the Nation, 23 March 1983, reprinted as *President's Speech on Military Spending and a New Defense*, The New York Times (24 March 1983) A 20. The President announced, *inter alia*, that he has ordered a "comprehensive and intensive" effort to develop an ABM system as "the means of rendering these nuclear weapons impotent and obsolete". He admitted, however, that building such a system is "a formidable technical task, one that may not be accomplished before the end of this century". Nevertheless, the effort is worth

Any weakening of this most important bilateral arms control agreement in force between the two superpowers, let alone its abrogation,⁵⁶ would not only exacerbate seriously the tension between the NATO and Warsaw Pact countries and start a dangerous new round in arms competition, but would also signal in the clearest possible terms the abandonment of the doctrine of mutual vulnerability in favour of the strategy of the "winnable" nuclear war.⁵⁷

undertaking, the President asserted, because it demonstrates American "peaceful intentions", is "consistent with our obligations under the ABM Treaty", "pave[s] the way for arms control measures to eliminate the [nuclear] weapons", and holds the promise of "changing the course of human history". Since the obvious purpose of this system would be to destroy the enemy's missiles before they are on their trajectory toward their targets, its use, like so many other modern weapons, could be both defensive and offensive. Quite apart from the immense cost of the system and the serious uncertainty regarding its reliability, the President's plan is bound to stimulate the development of new weapons systems—such as satellite destroyers, space mines and laser guns—to neutralize the anti-missile defences. The result might well be a "whole new range of flashpoints that could trigger nuclear war". A New Nuclear Heresy, Newsweek [Magazine] (4 April 1983) 20, 21. See also Karas, The Star Wars Scenario, The Nation [Magazine] (9 April 1983) 444. Three former high U.S. officials who participated in negotiating the ABM Treaty have asserted that the President's plan would jeopardize seriously this agreement. John B. Rhinelander, legal adviser to the U.S. SALT delegation, argues that the Reagan proposal would "clearly require amendment of the ABM Treaty or its abrogation". Missile Defense Called ABM Treaty Violation, The New York Times (5 April 1983) A 7.

⁵⁶ Although of "unlimited duration", the ABM Treaty, supra, note 53, allows each party to withdraw from it — by giving a six-month notice — "if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests" (art. XV). On 9 May 1972, on behalf of the United States, Ambassador Gerard Smith made a "unilateral statement" reflecting the U.S. interpretation of art. XV. The key part of his statement reads: "If an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty." Arms Control and Disarmament Agreements, supra, note 10, 146. Although attached — with other agreed and unilateral "statements" and "understandings" - to the ABM Treaty, the Smith statement is not part of the binding provisions of the agreement. However, because decision on a withdrawal from the ABM Treaty may be made unilaterally, the statement provides an illustration of the "extraordinary events" that either party could invoke to lawfully abrogate the agreement. As neither SALT II nor its successor START, have been agreed upon within the period indicated in the Smith statement, the United States could invoke that fact to justify withdrawing from the ABM Treaty. General Edward Rowny, chief U.S. negotiator in the START negotiations, is reported to be "skeptical" about whether the U.S. should continue to comply with the ABM Treaty. He suggested that in 1972, both superpowers "agreed to throw away their shields" but that because the U.S.S.R. has continued to develop offensive weapons, the U.S.A. might have to pick up the shield again. Talbott, The Risks of Taking Up Shields, Time [Magazine] (4 April 1983) 20, 21.

⁵⁷ A fairly typical comment on the probable consequences of abrogation of the *ABM Treaty* reads: "[a]brogating the treaty would mean an explicit repudiation of the doctrine of assured destruction that for better or worse has enabled the superpowers to escape nuclear war for the past 38 years. It would also cast aside the only example of mutual forbearance in the development of new strategic technology." *A New Nuclear Heresy, supra*, note 55, 21. When asked by a U.S. Congressman about the expiration date of the *ABM Treaty*, Richard Perle,

The consequences of such an act for the future of arms control and disarmament could be devastating. But a threat to the continuing viability of the SALT agreements is not limited to its ABM component.

Putting aside the claim by many informed Americans, including a number of Senators and Congressmen, that the United States does not need, at least not now, the MX missile, 58 it should be noted that SALT II does permit each party one new ICBM system. The U.S. choice is the MX, while the Soviet Union is reported to be testing already a comparable weapon. 59 If the U.S. proceeds with the deployment of the MX, Marshal Ustinov has warned: "[T]he Soviet Union will respond by deploying a new intercontinental ballistic missile of the same class, with its characteristics in no way inferior to those of the MX." 60 It appears that the United States has now linked progress in START negotiations directly with the fate of the MX missile. President Reagan has told the United States Congress that its refusal to "fund and deploy the MX would...handcuff our negotiators and require a reassessment of our START proposals". 61 Even if the Soviet Union accepted the U.S. proposals in toto, that would only result, according to the President, in a reduction in the number of MX missiles that would be installed. 62

Two other bilateral treaties concluded between the United States and the Soviet Union in the course of the SALT negotiations are also in jeopardy, namely, the 1974 Treaty on the Limitation of Underground Nuclear Weapon

Assistant Secretary of Defense for International Security Affairs, replied: "I am sorry to say that it does not expire. That is one of its many defects. ... I would hope that were we to conclude that the only way we could defend our own strategic forces was by deploying defense, we would not hesitate to renegotiate the treaty and, failing Soviet acquiescence... I would hope that we would abrogate the treaty." Quoted in Paine, Arms Buildup (1982) 38 Bull. Atom. Scientists 5, 6 (October).

⁵⁸ See, e.g., statement by McGeorge Bundy, Robert S. McNamara, Cyrus S. Vance, and Elmo R. Zumwalt Jr, all high defence officials in previous U.S. Administrations. Cut Defense Outlays, The New York Times (4 March 1983) A 31; Wiesner, MX, the Danger, The New York Times (12 April 1983) A 23; and Roberts, MX Opponents Call Basing Plan Too Costly and Short of Objective, The New York Times (13 April 1983) A 21 (reporting the fears of Members of Congress, Paul C. Warnke, former chief U.S. arms negotiator, and Herbert Scoville Jr, former Deputy Director of the CIA).

59 Smith, U.S. Sees New Soviet Arms Violation, The New York Times (12 May 1983) B 9. 60 Marshal of the Soviet Union DMITRY USTINOV, Minister of Defence of the USSR, Answers Questions from a TASS Correspondent [1983] Int'l Affairs [Moscow] 11, 15 (No. 1). See also Schmemann, Soviet Warns U.S. it Will Match MX, The New York Times (7 December 1982) B 17.

⁶¹ Quoted in Jackson, Reagan threatens to stop arms talks, Manchester Guardian Weekly (16 January 1983) 6.

⁶² Ibid. The President's Commission on Strategic Forces has recommended not only the deployment of MX missiles but also the development of a smaller single-warhead, possibly mobile, intercontinental missile — the "Midgetman". Full-scale development of the new missile would begin in 1987 with an initial operating capability in the 1990s. Excerpts From Report of the Commission on Strategic Forces, The New York Times (12 April 1983) A 18.

Tests ⁶³ and the 1976 Treaty on Underground Nuclear Explosions for Peaceful Purposes, ⁶⁴ both limiting such tests and explosions to 150 kilotons. Although the signatories continue to comply with these agreements, they remain unratified and are therefore subject to immediate renunciation by either party. While such a drastic step is apparently not being contemplated at this time, the U.S. Administration has been delaying the ratification of these Treaties on the ground that the verification provisions in both require improvements that can be achieved only through renegotiation. ⁶⁵ U.S. officials claim that there are technical uncertainties associated with determining the precise yield of nuclear explosions greater than the equivalent of 75 kilotons. For this reason, they assert: "Soviet tests estimated at 150 kilotons could actually be as low as 75 kilotons, or as high as 300 kilotons." ⁶⁶ Although no formal charges of a violation by the U.S.S.R. of either Treaty have been made, some members of the U.S. Government say that on fourteen occasions since 1974, Soviet tests seem to have exceeded the 150 kiloton limit. ⁶⁷

The revision of these agreements, especially of the 1974 *Treaty*, reportedly sought by the United States, would consist at the very least of allowing American monitoring devices to be installed on Soviet nuclear testing sites. According to a more recent report, the United States wants the Soviets to allow American inspectors on the test site before any explosion in excess of 75 kilotons is undertaken. Once there, the U.S. inspectors would "watch their Soviet counterparts place special sensors in the testing cavity" and these sensors would be "attached to a portable black box kept by the Americans".

⁶³ Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Underground Nuclear Weapon Tests, 3 July 1974, reprinted in Arms Control and Disarmament Agreements, supra, note 10, 167 [hereinafter Threshold Test Ban Treaty].

⁶⁴Treaty Between the United States of America and the Union of Soviet Socialist Republics on Underground Nuclear Explosions for Peaceful Purposes, 28 May 1976, reprinted in Arms Control and Disarmament Agreements, ibid., 173.

⁶⁵ According to U.S. Senator Charles Mathias, the Administration "has not produced any convincing evidence that they [i.e., these two treaties] require significant technical modification". Mathias, letter to the editor, The New York Times (23 February 1983) A 22.

⁶⁶Miller, Debate Over Nuclear Ban: Can U.S. Spot Cheats?, The New York Times (8 March 1983) C 1, C 6 [hereinafter Debate]. See also Miller, U.S. Panel Urges On-Site Atom-Test Checks, The New York Times (9 February 1983) A 7.

⁶⁷ Miller, Debate, ibid., C 6. These accusations have subsequently been repeated by U.S. Government officials, including President Reagan. See Smith, Panel Tells Reagan the Russians Seem to Have Broken Arms Pacts, The New York Times (21 April 1983) A 1; Transcript of Press Interview With President at White House, The New York Times (30 March 1983) A 14.

⁶⁸ Miller, ibid., C 6.

⁶⁹ Ibid.

Since the U.S.S.R. has traditionally resisted much less intrusive verification techniques. Soviet acceptance of these American proposals is highly doubtful, 70 especially because there is no convincing evidence that the present monitoring regime has failed. The likelihood of any major modification of these Treaties being acceptable to the Soviet Union is further diminished by the sharp differences of opinion within the U.S. scientific community as to the necessity for such modifications. A more ominous reason for seeking renegotiation of the Threshold Test Ban Treaty 11 could be, however, the mounting pressure of the nuclear weapons lobby, which seeks a resumption of tests beyond the yield permitted by the Treaty as part of a nuclear weapons expansion programme. With the planned addition of thousands of new nuclear warheads to the U.S. stockpile, the need for testing devices in excess of 150 kilotons prior to their deployment could indeed become a technical necessity. In either case, even though the Treaty allows for amendments and is subject after ratification to a unilateral withdrawal upon a six-month notice. 72 any unilateral attempt to renegotiate an agreement that both sides have honoured for a number of years would be a hazardous enterprise. Renegotiations could result in lengthy and acrimonious exchanges, might delay parallel negotiations on other arms control issues and, in the worst case, could bring about the Treaty's collapse.

The unsuccessful renegotiation of these agreements could have a particularly negative effect upon the 1968 Treaty on the Non-Proliferation of Nuclear Weapons. With over 100 states party to it, the Treaty is generally regarded as being, together with the Partial Test Ban Treaty, the most important multilateral arms limitation accord concluded since World War II. Its fundamental purpose is to prevent the horizontal spread of nuclear weapons and to provide assurance, through international safeguards, that the civilian nuclear activities of states not possessing nuclear weapons will not be diverted to the production of such weapons. In return for the renunciation by non-nuclear-weapon states of the nuclear-weapon states, have undertaken to assist the non-nuclear-weapon parties to the Treaty in developing nuclear energy for peaceful purposes (art. IV) and, most importantly, to

⁷⁰On 28 March 1983, in answer to a U.S. proposal to reopen negotiations on verification procedures in the two *Treaties*, the Soviet Embassy in Washington notified the State Department of the Soviet Government's belief that these procedures were satisfactory and did not need to be renegotiated. Gwertzman, *Reagan Foresees Offering to Share Antimissile Arms*, The New York Times (30 March 1983) A 1, A 15.

⁷¹ Supra, note 63.

ⁿIbid., art. V.

³² 21 U.S.T. 483, T.1.A.S. 6839, 729 U.N.T.S. 161 [hereinafter *Non-Proliferation Treaty*] (signed 1 July 1968; entered into force 5 March 1970).

pursue urgently and in good faith, negotiations on ending the nuclear arms race and on nuclear disarmament (art. VI). The fact that the United States and the Soviet Union, since the entry into force of the Non-Proliferation Treaty, have been increasing rather than reducing their nuclear weapon arsenals, has led many parties to the Treaty to question the continuing viability of the agreement. The extent of disenchantment with the non-performance by the superpowers of their obligations under art. VI became particularly evident at the second review conference held in 1980, when the participants failed to agree on a final document.

Because the termination of *all* nuclear weapon tests is regarded by the majority of states "as a *sine qua non* for preventing the emergence of additional nuclear-weapon states and for preserving the NPT regime", any weakening of the Soviet-American bilateral nuclear-explosion agreements could prove fatal to the *Treaty*. And with the collapse of the *Non-Proliferation Treaty*, the probability of an unrestricted proliferation of nuclear-weapon states would increase greatly, as would the likelihood of nuclear weapons being employed in some future conflict, not necessarily initiated by, or immediately involving, the major powers.

In view of the virtual stalemate in arms reduction negotiations, one cannot but wonder whether genuine disarmament is possible in a world which remains in profound disagreement over the shape of future human society. Despite the concern expressed by millions in every part of the world, despite

⁷⁴In 1968, both prior to and after the adoption of the *Non-Proliferation Treaty*, U.S. Ambassador to the United Nations Arthur J. Goldberg, as well as President Lyndon B. Johnson, referred unequivocally to art. VI of the *Treaty* as expressing legal obligations for their country. In his address of 12 June 1968 to the U.N. General Assembly, following the Assembly's approval of the *Treaty*, President Johnson said: "In keeping with our *obligations* under the Treaty we shall, as a major nuclear Power, *promptly and vigorously pursue negotiations* on effective measures to halt the nuclear arms race and to reduce existing nuclear arsenals. *It is right that we should be so obligated*. The non-nuclear States — who undertake with this Treaty to forego nuclear weapons — are *entitled to the assurance* that powers possessing them...will lose no time in finding the way to scale down the nuclear arms race." Quoted in Goldberg, "The Attitude of the World Community Toward the ABM" in A. Chayes & J. Wiesner, eds, *ABM* [:] *An Evaluation of the Decision to Deploy an Antiballistic Missile System* (1969) 206, 212 [emphasis added]. The *Final Document* of SSOD I, *supra*, note 3, para. 65, in reference to the threat of proliferation of nuclear weapons, also speaks of "obligations and responsibilities" on the part of nuclear-weapon states.

¹⁵ Arms Control and Disarmament Agreements, supra, note 10, 90. See also Epstein, On the second review of Non-Proliferation Treaty (1981) 37 Bull. Atom. Scientists 57 (May).

⁷⁶"A recent United States intelligence survey asserts that 31 countries, many of them engaged in longstanding regional disputes, will be able to produce nuclear weapons by the year 2000, according to military analysts." Halloran, Spread of Nuclear Arms is Seen by 2000, The New York Times (15 November 1982) A 3.

the ominous words of warning issued by rational and informed academics, scientists, physicians, clergy, statesmen, and indeed many enlightened military, despite the rhetoric of national governments imploring cooperation and the non-use of force — despite all these manifestations of fear and despondency, regrettably, many governments have not yet recognized the imperative and urgent need to negotiate for peace. While these problems and these fears are not new, their resolution seems ever more elusive, as the following account indicates.

II. The Problems of "Parity" and Verification: The Need for an Impartial Evaluation of Conflicting Claims and Proposals

No issues have caused more disagreement and delay in disarmament negotiations than the question what represents an "equitable and balanced" arms limitation, and the vexing problem of verification. The *Final Document*

"The list of those who have spoken publicly against current trends in arms competition, especially its nuclear dimension, is long and impressive. See, e.g., Feld, The year of appeals, (1982) 38 Bull. Atom. Scientists 6 (December); Miller, Doctors Assail Reagan Arms Reduction Plan, The New York Times (12 May 1982) A 21 (physicians and scientists including George Kistiakowsky, former Science Advisor to President Eisenhower); Reinhold, Scientists Urge More Effort to Cut Atom Risk, The New York Times (28 April 1982) A 15 (the National Academy of Sciences of the United States); Gailey, Military-Industrial Complex Assailed In Rickover Swan Song to Congress, The New York Times (29 January 1982) A 17 (Admiral Hyman G. Rickover, "father" of the U.S. nuclear Navy); Excerpts From International Panel's Report on Disarmament Negotiations, The New York Times (2 June 1982) A 10 (the Independent Commission on Disarmament and Security, chaired by Olof Palme, Prime Minister of Sweden); Harriman, et al., Nuclear Freeze: The Case for an American 'Yes', letter to the editor, The New York Times (31 October 1982) 20 (W. Averell Harriman; Clark Clifford, former Secretary of Defense; William E. Colby, former Director of the CIA; Paul C. Warnke); Kennedy, et al., Voters' Real Opportunity to Help Stop the Nuclear Arms Race, letter to the editor, The New York Times (1 November 1982) A 18 (U.S. Senators Edward M. Kennedy and Mark O. Hatfield, et al.); MPs from all parties call for arm-freeze summit, The [Montréal] Gazette (11 December 1982) C-1 (Canadian Parliamentarians); King, Labor Federation Council Urges Ratification of Arms Treaty, The New York Times (28 May 1982) A 11 (the A.F.L.-C.I.O. Executive Council); Stay out of arms race, church leaders tell PM, The [Montréal] Gazette (15 December 1982) B-1 (representatives of six major Canadian Christian denominations); Transcript of Pope John Paul II's United Nations Address, The New York Times (3 October 1979) B 4 (the Roman Catholic Pontiff); Kamm, Pope Assails Scientists' Stress on Arms, The New York Times (4 November 1982) A 3 (the Pope, more recently); Austin, Synagogue Council Endorses Nuclear Freeze, The New York Times (25 February 1983) A 17 (the Synagogue Council of America). A most powerful and broad-ranging statement against war and nuclear weapons is contained in the Pastoral Letter entitled The Challenge of Peace: God's Promise and Our Response, adopted on 3 May 1983, after two years of deliberations, by 238 American Roman Catholic bishops (with only nine opposed). For a partial text, see The New York Times (5 May 1983) B 16 [hereinafter The Pastoral Letter].

of SSOD I recognized the importance of these issues and suggested in general terms the principles that should govern states in their negotiations:

- 29. The adoption of disarmament measures should take place in such an equitable and balanced manner as to ensure the right of each State to security and to ensure that no individual State or a group of States may obtain advantages over others at any stage.
- 31. Disarmament and arms limitation agreements should provide for adequate measures of verification satisfactory to all parties concerned in order to create the necessary confidence and ensure that they are being observed by all parties. The form and modalities of the verification to be provided for in any specific agreement depend upon and should be determined by the purposes, scope and nature of the agreement.⁷⁸

Experience shows that, as a rule, what may appear to one side as an "equitable and balanced" arms limitation measure, will be regarded by the other side as an unreasonable attempt to achieve superiority. Similarly, verification proposals put forward by one side as indispensable to an effective agreement will be seen by the other side as exceeding grossly the requirements of an adequate monitoring regime. In the meantime, while the negotiating parties argue, equivocate and manoeuvre in the illusory quest for superiority and for a risk-proof agreement, ⁷⁹ military research and development continue uninhibited, thus creating new weapons, new inequities and new verification problems. An examination of the various claims and counterclaims will illustrate the point and, it is hoped, prove the urgent need for establishing an independent world community body to assess impartially arms control proposals involving "parity" and verification.

A. "Parity", "Superiority" and Related Issues

Terms such as "essential equivalence", "rough parity", "parity", "approximate equilibrium", "rough equality", "ambiguous equivalence", "rough balance", and "asymmetry", as well as the related terms of "superiority", "vulnerability" and "stable deterrent" (to be contrasted with "unstable deterrent"), are only too familiar to even casual readers of statements dealing with the respective military arsenals of the two superpowers and of the rival blocs they lead.

⁷⁸ Supra, note 3.

⁷⁹ Alva Myrdal, who had for twelve years participated in multilateral disarmament negotiations, describes her experience as follows: "There the superpowers have indulged in subterfuges and half-truths, with their closest and usually most dependent allies following suit or keeping silent. On balance, there has been no real advance towards limitation of armaments." Myrdal, *supra*, note 19, xxix.

The quantity (numerical strength) as well as the capabilities of the various weapons systems possessed by each negotiating party have always played a central role in arms limitation negotiations. In the context of the current START, INF and MBFR talks, they seem crucial. The outcome of these negotiations will depend upon securing a consensus between the negotiating parties on what constitutes a balanced and equitable reduction of their entire forces or of a particular segment. Since no two countries are armed identically, nor can they have equally powerful allies and adversaries or an identical geography, a decision on what is equitable in terms of arms reductions obviously will not be easy or simple. The task is made all the more difficult by the manipulative use of statistics designed to deceive rather than enlighten. These "statistics" often seem to be aimed at the public rather than the other negotiating party, so as to achieve the maximum propaganda effect. Exaggerated claims concerning, for example, the over-all strength of the opponent, or its superiority in certain critical weapons systems, or in the performance of a particular offensive or defensive weapon, 80 are common negotiating tactics that, whether by design or by accident, cause lengthy delays on the road to an agreement. Still further delaying the negotiating process is the tendency of each side to seek reductions or limits in precisely that segment of the adversary's arsenal where it is strongest, while preserving intact, or as little reduced as possible, the strongest part of its own forces. Claims that it is necessary to close "gaps" and correct "asymmetries" in order to establish "parity" are used commonly to justify an intensification of the arms build-up.81 It may not be far off the mark, therefore, to conclude that current arms "negotiations", in addition to exacerbating international tension, are in fact fuelling the arms race.

The catalogue of disagreements between the superpowers about data relating to their force levels and capabilities is singularly rich in examples which occasionally border on the absurd. The appeal made to member-states of the United Nations contained in the *Final Document* of SSOD I "to avoid dissemination of false or tendentious information concerning armaments" (para. 105) patently has been ignored. There is disagreement even about the existence of an arms race. The "truth is", asserts President Reagan, "that

⁸⁰ Particularly egregious examples of exaggerated claims and counterclaims can be found in U.S. Dep't of Defense, *Soviet Military Power* (1981), and the Soviet response — U.S.S.R. Ministry of Defence, *Whence the Threat to Peace* (1982).

⁸¹ The latest addition to the growing catalogue of "gaps" is the "perception gap", invoked by U.S. defence officials in support of the MX missile. Without the MX, they assert, the United States "could be perceived by its adversaries and allies as inferior in strategic arms". How MX Will Transform Nuclear Strategy, U.S. News and World Report [Magazine] (25 April 1983) 23.

while the Soviet Union has raced, we have not". 82 As the United States sees it. "Itloday, in virtually every measure of military power the Soviet Union enjoys a decided advantage". 83 This assessment has been challenged by many analysts and high officials of previous U.S. Administrations. Cyrus R. Vance, a former Secretary of State and one of the principal architects of the SALT II accords, argues that the two superpowers "are roughly equal in overall nuclear strength, with each side having differing advantages".84 A similar view has been expressed by Robert S. McNamara, a former Secretary of Defense: "Clearly, the nuclear balance — the essential equivalence of force...exists today." 85 According to the Soviet Defence Minister, Marshal D. Ustinov, "there exists, in all cases, an approximate parity between the two sides. There is no 'Soviet superiority' at all." 86 A comparable appraisal can be found in the draft resolution submitted by Mexico and Sweden to SSOD II on 2 July 1982. In the preamble to the resolution these countries expressed their "firm conviction" that the U.S. and the U.S.S.R. "are now equivalent in nuclear military power and it seems evident that there exists between them an over-all rough parity".87

The threat posed by intercontinental nuclear weapons is also subject to divergent assessments. The United States START proposals are said to be

Address to the Nation, 22 November 1982, reprinted as Reagan's Address to Nation on Nuclear Strategy Toward the Soviet Union, The New York Times (23 November 1982) A 12.
 Ibid. See also President's Speech on Military Spending and a New Defense, supra, note 55.

⁸⁴ See Vance & Hunter, Arms-Control Steps, The New York Times (27 December 1982) A 19.

⁸⁵McNamara, No Second Use — Until, The New York Times (2 February 1983) A 23. A particularly persuasive assertion of U.S. superiority over, rather than parity with, the U.S.S.R. came from Walter F. Mondale, former U.S. Vice-President: "Mr. Reagan ought to learn the facts about our military strength. I sat for four years on the National Security Council. I saw all the papers, worked with all our defense and intelligence agencies and took part in every military decision. I can say without doubt that today our defenses are second to none. It is true that the Soviets have more and bigger land-based missiles than we do. But in every other measure of strategic power, we are ahead. We have more warheads. We have more missiles at sea and in the air. Our nuclear submarines are less vulnerable and more reliable. Our anti-submarine techniques are better. Our strategic bomber force is superior and getting better. We have weapons like the cruise missile to which they yet have not effective response." Excerpts From Mondale's Address to Publishers, The New York Times (27 April 1983) A 16. According to President Reagan's Undersecretary of Defense for research and engineering, Richard de Lauer, the United States leads the Soviet Union by a fifteen-to-one margin in critical technologies that "have the potential for significantly changing the military balance in the next 10 to 20 years". He described the U.S. and the U.S.S.R. as equal in only four areas of basic technologies — "directed energy", nuclear warheads, aerodynamics, and mobile power sources. U.S. leading Soviets 15-1 in arms know-how: Report, The [Montréal] Gazette (3 March 1983) B-16.

⁸⁶ To Avert the Threat of Nuclear War [1982] Int'l Affairs [Moscow] 12, 15 (No. 9). ⁸⁷ Concluding Document, supra, note 3, 12.

aimed at reducing the "Soviet advantage in the most destabilizing class of weapons — those in ballistic missiles and especially intercontinental ballistic missiles (ICBMs)". These Soviet missiles are, according to Eugene V. Rostow, until recently head of the U.S. Arms Control and Disarmament Agency [ACDA], "swift, accurate, and extremely destructive first-strike weapons". Because land-based intercontinental missiles represent the main Soviet strategic deterrent (in contrast with the submarine-based deterrent of the U.S.), Soviet spokesmen, instead of measuring their ICBMs against the American ones, prefer to rebuff assertions of their superiority by claiming the existence of an overall parity in strategic weapons. The United States, reads a Soviet commentary, "intends to upset the present rough parity in strategic armaments and to ensure obvious advantages" for itself. Under the START proposal, the "Soviet strategic nuclear potential (in the number of warheads) would be three times smaller than that of the United States".

The nature and purpose of the new U.S. MX missile also produces sharp disagreements, even within the United States itself. The Administration describes this missile as a deterrent weapon that would be fired only in retaliation for a previous Soviet attack. However, the Soviets and many knowledgeable Americans as well see it as a "first-strike" weapon. According to TASS, the MX is "an instrument for unleashing nuclear aggression". Hours a former Director of the ACDA, and retired U.S. Admiral Noel Gayler, a former Director of the National Security Agency, have been reported to describe the missile as a "destabilizing system that runs counter to the idea of arms control". An editorial in *The New York Times* was even more explicit: "It [the MX missile] is a highly accurate first-strike weapon, carrying 10 warheads designed to destroy Soviet missiles in their silos." Herbert Scoville Jr, a former Deputy Director of the CIA, regards the MX as "a prostitution of the basic concept of deterrence". It is "designed specifically to

⁸⁵ President's Statement, 21 September 1982, reprinted in Dep't State Bull. (November 1982) 20.

⁸⁹ Rostow, Nuclear Arms Control and the Future of U.S.-Soviet Relations, Dep't State Bull. (November 1982) 16, 18.

^{*}What is Behind the U.S. "Readiness" for Nuclear Arms Reduction [1982] Int'l Affairs [Moscow] 63, 65 (No. 8).

⁹¹ Ibid.

⁹² See, e.g., President Reagan's Address to the Nation, supra, note 82.

⁹³ Quoted in Schmemann, *Moscow Calls MX Proposal Dangerous and Costly Move*, The New York Times (24 November 1982) A 19.

⁹⁴ Miller, Anti-Arms Groups Rebut Plan for MX, The New York Times (24 November 1982) A 19.

⁹⁵Dense Pack or Dense Think?, The New York Times (24 November 1982) A 22.

threaten the entire Soviet land-based deterrent" and, in consequence, is likely to "attract a Soviet attack, not deter one".96

The facts are also in dispute concerning intermediate-range nuclear weapons. According to President Reagan, the Soviet Union "now has 600 of the missiles considered most threatening by both sides — the intermediate range missiles based on land. We have none". Not unexpectedly, Soviet officials deny the existence of any such imbalance. On the contrary, they argue that the "present balance of medium-range nuclear forces in Europe was one favoring the United States and its allies". Therefore, they see no justification for adding to the NATO arsenal on the continent 572 Pershing II and cruise missiles. The Soviet assertion of balance in these weapons has been firmly rebuked by Eugene Rostow: "[T]his remarkable feat of arithmetic [has been achieved] by counting all British and French nuclear weapons with the American forces, treating American bombers, submarine-launched missiles and cruise missiles as equivalent to the [Soviet] SS-20, counting all American weapons as relevant, including dual-purpose aircraft located in the United States, and excluding many categories in the Soviet arsenal".

With respect to the role that should be assigned in these equations to the Franco-British nuclear forces, the two sides remain far apart. The Soviet Government insists that the missiles of the U.S. allies must be taken into account because they are aimed at the U.S.S.R. (approximately 162 missiles with 386 warheads). ¹⁰⁰ The Soviets remain unconvinced by the American counterargument that the "nuclear arsenals of Great Britain, France and China exist to protect the ultimate sovereignty of these nations. Those weapons are not under American control... and are entirely defensive in character; given their size, they could not be used for any conceivable act of aggression against the Soviet Union." ¹⁰¹ The Soviet announcement, in March 1982, of a moratorium on the additional deployment of SS-20 missiles in Europe, instead of improving the negotiating climate, has had the opposite effect. The United States claims that during the past year, many new missiles of that type have

^{*}Scoville, The MX Invites Attack, The New York Times (13 December 1982) A 23.

⁹⁷ Address to the Nation, supra, note 82.

⁹⁸ Burns, Soviet Rebuts 'Focus of Evil' Speech, The New York Times (13 December 1982) A 23.

⁹⁹ Rostow, supra, note 22, 18.

¹⁰⁰The modified Soviet proposal, made in May 1983 by Yuri V. Andropov, while expressing the readiness of the Soviet Union to establish equality of nuclear weapons in Europe by counting both delivery vehicles and warheads, continues to require that the nuclear forces of Britain and France be included in the agreement. See *supra*, note 14.

¹⁰¹ Rostow, supra, note 22, 21.

been deployed, in violation of the Soviet pledge. ¹⁰² In reply, Marshal Ustinov accuses the U.S. of "deliberate and malicious misinformation". ¹⁰³

After more than nine years of negotiations on a mutual and balanced force reduction [MBFR] in central Europe, which involve nineteen membercountries of NATO and the Warsaw Pact, "not a single line of a future agreement has so far been written". 104 The talks have been deadlocked, charges Marshal Ustinov, because of "a far-fetched 'discussion of figures'". 105 In his explanation of the new NATO draft treaty on MBFR, submitted to the Warsaw Pact on 8 July 1982, the Director of the U.S. ACDA said that the "primary Western objective in MBFR continues to be the establishment of parity at significantly lower levels of forces in central Europe". 106 Not surprisingly, the U.S.S.R. denies the existence of any material disparity. "[T]he NATO bloc," claims the Soviet Minister of Defence, "surpasses the Warsaw Treaty Organization in the total number of personnel." in the number of combat-ready divisions, in antitank systems, and has an approximately equal quantity of artillery and armour. NATO is somewhat inferior...in the number of tactical aircraft. On the whole, there is an approximate balance in conventional armaments as well." 107 Even when strategic and medium-range nuclear forces are taken into account, "there is an approximate parity between the two sides" adds the Soviet Minister.

The debate both on the "vulnerability" of various nuclear deterrent systems to a surprise attack, and the degree of threat they pose provides still another example of contradictory and confusing claims. Thus, the U.S. START proposal is aimed at a significant reduction (a fifty *per cent* cut) in land-based strategic missiles because they are "most destabilizing". ¹⁰⁸ At the same time, President Reagan is urging the quick deployment of 100 MX

¹⁰² See, e.g., President Reagan in his Address to the Nation, supra, note 55. The charge was repeated by U.S. officials in May of 1983. See Lohr, Japan Is Worried by Report on Soviet Missiles, The New York Times (9 May 1983) A 9.

¹⁰³ Supra, note 86, 20.

¹⁰⁴ Komlev, Eight Years of the Vienna Talks [1981] Int'l Affairs [Moscow] 21, 21 (No. 11). President Reagan's assessment: "nine long years of inconclusive talks". Address to the SSOD II, 17 June 1982, reprinted as Transcript of Reagan's U.N. Speech on the Nuclear Arms Race, The New York Times (18 June 1982) A 16.

¹⁰⁵ Supra, note 86, 20.

¹⁰⁶ Rostow, NATO Allies Table Draft MBFR Treaty (1982) 82 Dep't State Bull. 53 (August). See also Scott, MBFR — Western Initiatives Seek to End Deadlock (1982) 30 NATO Rev. 14 (September).

¹⁰⁷ Supra, note 60, 12.

¹⁰⁸ President's Statement, *supra*, note 88, 20. Eugene Rostow described these Soviet missiles as "swift, accurate, and extremely destructive first-strike weapons", *supra*, note 89, 18.

missiles, claiming *inter alia* that they are "survivable" ¹⁰⁹ and built to keep the peace (felicitously christened the "Peacekeeper"). The President's view on "survivability" was contradicted by his own Secretary of Defense, who testified in Congress that "there isn't any ground-based system that is survivable". ¹¹⁰ The issue became even more confused when the President's Commission on Strategic Forces recommended recently the basing of MX missiles in existing silos, thereby suggesting that the vulnerability of American land-based missiles may not be an urgent problem. ¹¹¹

It requires no great expertise to see that, if the U.S. ground-based missiles are vulnerable, so also are their Soviet counterparts. And since at least two-thirds of the Soviet strategic missile forces are land-based, against less than one-third for the U.S., it would seem that the principal Soviet deterrent at the present time is more vulnerable than the American one. ¹¹² Protracted debates can be expected as to the degree of vulnerability of each adversary's strategic missile forces before a political decision is made to

¹⁰⁹ Texts of Reagan and Pentagon Statements on MX Missile Basing Proposal, The New York Times (23 November 1982) A 14.

¹¹⁰ Quoted in Paine, Running in circles with the MX (1981) 37 Bull. Atom. Scientists 5, 10 (December).

[&]quot;Supra, note 62. The unreality of the current debate on the "vulnerability" of various existing and projected strategic nuclear systems sometimes borders on the absurd. For example, former U.S. Secretary of Defense, Dr Harold Brown, asserted recently that the Soviets "need only acquire 10,000 warheads with a one-megaton yield" to destroy in the 1990s all twenty-five American ballistic-missile submarines normally on station at sea. Quoted in Ulsamer, Clearly Not a Sunset Industry, Air Force Magazine (February 1983) 17, 17. These submarines, it should be emphasized, are regarded universally as the most invulnerable segment of the U.S. strategic forces and are destined to remain so for quite some time. Secretary Brown's hypothesis is flawed so fundamentally that any informed layman can challenge it successfully. First, it assumes that such a massive Soviet missile build-up would prompt no U.S. response, which is unthinkable. Second, it assumes that American submarine technology, which is considerably more advanced than that of the Soviet Union, will abruptly cease to make further gains, which is also unthinkable. Third, it discounts wholly the growing nuclear submarine fleets of U.S. allies. Fourth, it utterly ignores the likely catastrophic consequences for both the global and Soviet environment of such a massive use of nuclear weapons. Dr Brown's scenario presupposes that the Soviet leadership may one day decide to commit national suicide, for even if "successful" in eliminating the U.S. submarine threat, the environmental impact of such a nuclear barrage would almost certainly destroy the Soviet Union as an organized society. As one observer puts it, the "window of vulnerability can be, and has become, a venetian blind". Stone, Arms: We Should Talk Now, The Washington Post (14 April 1983) A 23.

¹¹²The U.S. START proposal had been described by Time Magazine as an improvement on the SALT II agreement and, at the same time, as "utterly non negotiable. It asks everything of the other side, gives practically nothing, and shows practically no flexibility." *Playing for the Future*, Time [Magazine] (18 April 1983) 14, 22. See also Krepon, *START on hold* (1983) 39 Bull. Atom. Scientists 7 (February).

compromise. And finding a compromise could be complicated by disagreement on other matters, such as the accuracy of opposing missiles, their "throweight", and their strategic role (first-strike or retaliatory weapons) which is yet another example of current contradictory assertions.

Related to the issues of strategic nuclear forces, though not included in any arms control negotiations, is the question of "civil defence". Some nuclear strategists believe that strong civil defence is indispensable, not only for purposes of deterrence, but also for national survival in a nuclear war. 113 The question touches the very essence of the doctrine of strategic deterrence because any major effort to shield one's own population against nuclear attack could be interpreted by the adversary as preparation for a nuclear first strike. In order to justify a large-scale national effort for the construction of shelters. American proponents of this view cite "elaborate" plans designed to protect the population of the Soviet Union against nuclear attack. However, Roy and Zhores Medvedev, two leading Soviet dissidents, report otherwise: "Despite periodic claims by NATO spokesmen, there is no planning in the U.S.S.R. for mass survival in a nuclear conflict; shelters are nonexistent in the new Moscow housing districts, while civil defense training in the provinces is confined to perfunctory bus trips into the forests." 114 This illustrates still another information gap in regard to easily ascertainable facts.

¹¹³ See, e.g., Gray, The Idea of Strategic Superiority, Air Force Magazine (March 1982) 62, 63 [hereinafter Superiority], where the author argues for civil defence, industrial hardening and, generally, for "robust" preparation for societal survival and recovery. See also Gray, Issues and non-issues in the nuclear policy debate (1981) 37 Bull. Atom. Scientists 47 (December) [hereinafter Issues]. Mr Gray is a member of the Advisory Board of the U.S. ACDA and advisor to the State Department. See also Teller, On facts and hopes (1983) 39 Bull. Atom. Scientists 42 (April); Man can survive an A-war: Teller, The [Montréal] Gazette (21 October 1982) A-20 (quoting Teller on Soviet civil defence planning which could keep Soviet casualties in a nuclear war to less than twenty million). Dr Teller is a principal scientific developer of the hydrogen bomb. And see Mohr, Preserving U.S. Command After a Nuclear Attack, The New York Times (29 June 1982) A 18 (reporting on existing U.S. Government plans to provide for "continuity of government" after a nuclear attack). An account of the views on civil defence held by some high officials of the present U.S. Administration can be found in R. Sheer, With Enough Shovels: Reagan, Bush & Nuclear War (1982). In March 1982, President Reagan approved a plan designed to evacuate to the rural U.S. up to two-thirds of the American population deemed to be "at risk" in a nuclear attack. It is estimated that the seven-year programme will cost U.S. \$4.3 billion. Miller, Despite Foes and Skeptics, Administration Presses Ahead on Civil Defense, The New York Times (10 June 1982) B 20. See also Clines, Rough Hearing for Reagan 'Crisis Relocation' Plan, The New York Times (17 June

¹¹⁴ A Nuclear Samizdat on America's Arms Race, The Nation [Magazine] (16 January 1982) 38, 38.

Activities of the two superpowers in outer space are also subject to contending claims and counterclaims. Three different assessments of the extent of military intrusion in this arena of great power competition are on record. Soviet Marshal Ustinov, for one, has charged that the United States "is unfolding an extensive programme of measures for militarizing outer space", which amounts to the "preparation of war in outer space". 115 Predictably, such claims are rebutted routinely by the United States with counter accusations blaming the Soviet Union for the initiation of the arms race in space. In one such recent rebuttal, Dr Hans Mark of NASA singled out orbital bombardment systems, anti-satellite weapons and space-based platforms as being uniquely Soviet contributions to the militarization of outer space. 116 In contrast, he asserted, American space doctrine is guided by international law; the U.S. "is not a player in the space weapons arena". 117 According to the Science Adviser to President Reagan, U.S. space activities are about fifty per cent military and fifty per cent civilian, whereas Soviet space programmes are "about ninety percent military". 118 It should be noted that, while accusing the U.S. of preparing space wars, the U.S.S.R. has never admitted unequivocally that it too possesses a military space programme. A third view, held by the majority of U.N. member-states, finds its expression in an important United Nations conference report:

The extension of an arms race into outer space is a matter of grave concern to the international community. It is detrimental to humanity as a whole and therefore should be prevented. All nations, in particular those with major space capabilities, are urged to contribute actively to the goal of preventing an arms race in outer space and to refrain from any action contrary to that aim. 119

Published statistics relating to defence budgets also prompt serious doubts regarding their veracity and are subject to differing interpretations. Many countries, including most major powers, habitually conceal their real

¹¹⁵ Supra, note 86, 16.

¹¹⁶Quoted in Ulsamer, Space: The Fourth Dimension, Air Force Magazine (November 1982) 102, 103.

¹¹⁷ Ibid.

¹¹⁸ Ibid., 102. For a comprehensive account of current and planned military space activity, see G. Stine, Confrontation in Space (1981). See also Karas, supra, note 55; and Halloran, U.S. Military Operations in Space To Be Expanded Under Air Force, The New York Times (22 June 1982) A 19.

¹¹⁹ United Nations, Report of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, U.N. Doc. A/CONF. 101/10 (1982), para. 13. For an American appraisal of the Conference, and particularly of the discussion of the militarization of outer space, see United States Congress, Office of Technology Assessment, UNISPACE '82 [:] A Context for International Cooperation and Competition (1983), especially Appendix A. See also Mohr, U.S. Urged to Seek Ban on Weapons in Space, The New York Times (19 May 1983) A 11 (concern expressed by a group of scientists, retired military officers and United States Senators).

military spending through the publication of misleading statistics. ¹²⁰ Particularly unreliable and uninformative are figures given by the Soviet Union for its defence budget which patently do not correspond to the massive military effort they support. ¹²¹ Hand-in-hand with the unreliable reporting of a country's own national defence expenditures go misrepresentations about defence spending by its adversary. It is quite common to over-estimate the adversary's military expenditures so as to create the impression of yet another gap that must be closed. For example, an eminent American economic analyst, having examined the much-publicized U.S.-Soviet military spending gap, concluded that when NATO countries are added to the United States, a ten-year "gap of \$420 billion in Moscow's favor becomes...a total East-West gap of about \$300 billion in our favor". ¹²²

The importance, for arms control purposes, of the accurate and systematic compilation and dissemination of information on military spending is recognized widely. Indeed, the U.N. General Assembly adopted, in 1981, a resolution which urged states to reach international agreement "to freeze, reduce or otherwise restrain military expenditures". ¹²³ Clearly, no such agreement would be either possible or useful without some assurance that each state-party is truthfully reporting its military spending.

The above survey, by no means all-inclusive, provides ample illustration of the alarming discrepancies in information disseminated by the principals in the global arms race about each other's strengths, weaknesses, strategic intentions, and defence expenditures. Because arms control negotiations are apparently conducted on the basis of this distorted data, although each side has a fairly accurate idea about the strengths and weaknesses of the other, such "negotiations" could well go on interminably in the absence of an impartial evaluation.

¹²⁰See, e.g., Thorsson, Armaments and Underdevelopment (1982) 5 Disarmament — A Periodic Rev. by U.N. 9 (May).

¹²¹ See, e.g., United States ACDA, World Military Expenditures and Arms Transfers 1970-1979 (1982) 19, et seq. See also Reisinger, East European military expenditures in the 1970s: collective good or bargaining offer? (1983) 37 Int'l Organization 143.

¹²² Holzman, A Gap? Another?, The New York Times (9 March 1983) A 23 (the author is a professor of economics at Tufts University). According to Rear Admiral G. La Roque, ret., Director of the Center for Defense Information (Washington, D.C.), the U.S. and its NATO allies have outspent the U.S.S.R. and the Warsaw Pact countries for many years—U.S. \$256 billion to U.S. \$202 billion in 1980 alone. U.S. No. 1 in weaponry: Report, The [Montréal] Gazette (7 September 1982) D-15.

¹²³ Resolution on the Reduction of military budgets, United Nations G.A. Res. 36/82A, 36 U.N. GAOR, Supp. (No. 51) 53, U.N. Doc. A/36/51 (1981). In his address to SSOD II, President Reagan proposed the convening of an international conference to review questions of reporting and verification of military budgets. See the Concluding Document of SSOD II, supra, note 3, Annex II, 14.

In theory, the concept of "balance" or numerical equivalence seems justified. In practice, however, any difference in the quantity or effectiveness of military forces tends to be used as a justification for the development and eventual deployment of new weapon systems. Furthermore, many analysts believe that the numerical equivalence of forces (or defence budgets) is not essential to a convincing deterrent. As Alva Myrdal, one of the most experienced disarmament negotiators, observes: "[I]t is obvious that military capacities do not need to be 'equal' or 'balanced' when the effective deterrence ceiling has long been surpassed. However 'balance' is counted, whether as some indefinable 'parity' or unknowable 'superiority,' the concept is irrelevant and false." 124

B. Verification of Compliance with Agreements

Verification is concerned with the techniques and procedures for ascertaining facts about compliance. ¹²⁵ While always an important dimension in the negotiation of all kinds of arms limitation agreements, the task of devising appropriate verification arrangements is regarded as crucial in the case of certain agreements. So as to "facilitate the conclusion and effective implementation of disarmament agreements", the *Final Document* of SSOD I urges states "to develop appropriate methods and procedures [of verification] which are non-discriminatory and which do not unduly interfere with the internal affairs of other States or jeopardize their social and economic development". ¹²⁶

The monitoring of compliance with agreements can be achieved by non-intrusive, technical means of verification, operated unilaterally by each party to an agreement, using photographic, electronic, radar, or seismic data collection methods; it can also be done by some form of "cooperative" measure, including on-site inspection. The latter form of verification, involving monitoring activities on the sovereign territory of the contracting parties, has posed a major obstacle to progress in disarmament negotiations. Almost from the very beginning of such negotiations, NATO countries, especially the United States, made it clear that they regarded the adoption of reliable verification methods and procedures as central to agreement. This would

¹²⁴ Supra, note 19, xix.

¹²⁵ A more comprehensive definition is that suggested by the Stockholm International Peace Research Institute [SIPRI]: "A process, specifically established or approved by a disarmament agreement, carried out by individual state parties to the agreement, either reciprocally or not, or by an international body established or empowered to carry out the process, by personnel or by technical means, in order to determine the degree to which the parties to the agreement have implemented its provisions and thereby observed or discharged their obligations under the treaty." SIPRI, Strategic Disarmament, Verification and National Security (1977) 13-4.

¹²⁶ Final Document, supra, note 3, paras 91 and 92.

"compensate for a lack of trust in the Soviet Union and would promote the public confidence and support necessary to sustain arms control efforts". 127 Although not providing for on-site inspection, adequate verification has been a key objective of SALT since the negotiations began in 1969 and is an essential feature of SALT II. 128

The Soviet Union, for its part, traditionally has resisted proposals for on-site inspection alleging that their primary purpose was either spying or an attempt to frustrate the attainment of agreement. It has also contended recently, without elaboration, that no verification system is "legitimate" unless based upon "such bedrock principles of international law, fixed in the UN Charter, as sovereign equality and non-interference in the internal affairs of a state". ¹²⁹ As a result of the inability of the major military blocs to agree upon mutually acceptable verification measures, negotiations on a comprehensive nuclear test ban and on a chemical weapons convention, for example, have suffered lengthy delays. Current negotiations on strategic and intermediaterange nuclear weapons systems, as well as the proposal for a nuclear freeze, ¹³⁰ if this should become the subject of negotiations, can for the same reason be expected to experience comparable difficulties.

As already mentioned, the lack of a consensus on effective measures of verification has delayed agreement on a comprehensive test ban for twenty years. In the meantime, the superpowers have continued to test nuclear weapons underground, which they are permitted to do under the 1963 Partial Test Ban Treaty and the 1974 (unratified) bilateral Threshold Test Ban Treaty. Yet the benefits of a comprehensive test ban agreement are self-evident: it would significantly slow down the arms race and, at the same time, reduce the temptation on the part of the non-nuclear-weapon states to "go nuclear". Moreover, a renunciation by the United States and the Soviet Union of further

¹²⁷ Einhorn, Treaty Compliance (1982) 45 Foreign Policy 29, 30.

¹²⁸ United States Dep't State, Verification of SALT II Agreement (Special Report No. 56; August 1979). Both SALT I and II Agreements provide for verification of compliance only by "national technical means". ABM Treaty, supra, note 53, art. XII; Treaty on the Limitation of Strategic Offensive Arms, supra, note 10, art. XV.

¹²⁹ Zheleznov, Monitoring Arms Limitation Measures [1982] Int'l Affairs [Moscow] 75, 77 (No.7).

¹³⁰Opponents of the freeze on the testing, production and deployment of nuclear weapons stress the "enormously complicated problems of what is to be frozen, how it is to be achieved and, most of all, verified". Reagan's Case Against the Freeze — In His Own Words, The New York Times (25 April 1983) 19. Canada's Ambassador for Disarmament, J. Alan Beesley, in explaining his country's opposition to freeze proposals, also emphasized unverifiability as their "fundamental flaw". XXXVII United Nations General Assembly: Little Real Dialogue, Disarmament Bull. 4 (February 1983) (a Canadian Dep't of External Affairs publication). But see Paine, Freeze Verification: time for a fresh approach (1983) 39 Bull. Atom. Scientists 6 (January); Carroll, A Freeze Can be Verified, The New York Times (3 June 1982) A 23.

testing would re-invigorate the moribund *Non-Proliferation Treaty* by demonstrating a willingness on the part of the superpowers to carry out their obligations under art. VI.

The urgent need for a comprehensive test ban has been pressed on many occasions by the U.N. General Assembly, most recently in three resolutions adopted in December 1982 by overwhelming majorities. ¹³¹ Despite numerous studies by governmental and private experts of many countries, all proving that currently available means of monitoring are entirely adequate to the task, ¹³² the United States, supported by some of its allies, continues to claim that satisfactory verification remains "a serious problem". ¹³³ Even the unexpected readiness of the U.S.S.R. to accept on its territory seismic monitoring devices under international control, ¹³⁴ and the assertion by some neutral states that with the presently available means of detection "no verification by inspection is needed for a credible comprehensive test ban", ¹³⁵ have failed to enhance the prospects of an early agreement.

One suspects that factors unrelated to verification are the real reason for a lack of progress toward a comprehensive test ban. The nuclear lobby, a highly influential group traditionally opposed to any restrictions on nuclear testing, claims that a complete ban on testing might result in a loss of confidence in the reliability of the nuclear stockpile. ¹³⁶ This, in turn, would create uncertainty as to whether "weapons in the nuclear arsenal [could] still work after 10 or 20 years in the absence of a testing program". ¹³⁷ If considerations of this kind indeed guide the policies of nuclear weapons states, no system of verification, no matter how fool-proof, can bring about a comprehensive test ban agreement. It would therefore seem that only through an impartial assessment by an

¹³¹ See Pace, U.N., in 3 Votes, Asks Ban on Nuclear Arms Tests, The New York Times (10 December 1982) A 7. See also Mathias, A call for ratification (1983) 39 Bull. Atom. Scientists 3 (May) (the plea of a United States Senator).

¹³²See, e.g., Sykes & Evernden, The Verification of a Comprehensive Nuclear Test Ban, Sci. Am. (October 1982) 47, 47, who claim that "the technical capabilities needed to police a comprehensive test ban down to explosions of very small size unquestionably exist; the issues to be resolved are political". The authors are eminent American geophysicists and experts on distinguishing underground nuclear explosions from earthquakes. But see Miller, Debate, supra, note 66.

¹³³ Rostow, supra, note 22, 29-30.

¹²⁴The Soviets, however, insist on the right to refuse on-site inspection should they feel that it is not justified. In such a case, according to the Soviet proposal of February 1983, the issue could be submitted to the Security Council. See *Soviet Seeks Talks on New Arms Plan*, The New York Times (18 February 1983) A 13.

¹³⁵ Myrdal, supra, note 19, 298-9.

¹³⁶ See Zimmerman, Quota Testing (1981) 44 Foreign Policy 82, 85.

¹³⁷ Ibid.

independent body can the world community learn whether these concerns are justified or merely an excuse designed to prevent the ending of all nuclear testing.

The unresolved issue of verification continues to hamper progress on the convention banning the development, production and stockpiling of chemical weapons. In contrast to the comprehensive test ban negotiations, this is one area where the necessity for the adequate verification of compliance is seen by all states as absolutely essential to the effectiveness of agreement. Quite apart from the usual East-West dispute concerning the scope of verification, negotiators are here facing some real difficulties in devising effective monitoring procedures. They stem from the very nature of modern chemical munitions; the same chemical substance can have civilian as well as military applications (the so-called "dual-purpose" chemical agents), just as an industrial chemical plant can manufacture chemicals for both civilian and military use. Still further complicating the problem, is the existence of "binary" chemical weapons consisting of two relatively innocuous components that become highly toxic only when mixed together. 138

However, despite these admitted technical difficulties, the major hindrance to agreement so far has been and remains the seeming impossibility of reconciling Western and Eastern perceptions of the scope of on-site inspection necessary for a viable accord. After prolonged resistance, the Soviet Union has agreed in principle to accept "systematic on-the-spot checks, such as on the basis of an agreed quota, as one measure of monitoring the destruction of chemical weapons and the manufacture of highly toxic lethal chemicals for allowed purposes". ¹³⁹ But when asked in the Committee on Disarmament to elaborate, the Soviet delegation, in the words of the U.S. representative, resorted to "equivocation and evasion". ¹⁴⁰ In presenting to the Committee, on 10 February 1983, an outline of their own convention banning chemical arms, the Americans again blained the Soviet refusal to accept international on-site inspection for the lack of progress on the treaty. ¹⁴¹ The

¹³⁸ See supra; note 31 and accompanying text.

¹³⁹Tomilin, Curbing the Arms Race: The Key Problem of Our Time [1982] Int'l Affairs [Moscow] 81, 88 (No. 11). The recent Soviet proposals are based upon a combination of national and international means of control, according to Ambassador Petrovsky. The U.S.S.R. "in principle... would not rule out the possibility of creating international machinery to verify the implementation of far-reaching [disarmament] steps." Statement of Ambassador Petrovsky to the 37th Session of the U.N. General Assembly in the First Committee, 4 November 1982, U.N. Doc. A/C.1/37/PV. 26, 32.

¹⁴⁰ Rostow, supra, note 22, 29-30.

¹⁴¹ U.S. Outlines Chemical-Arms Proposal, The New York Times (11 February 1983) A 3.

new U.S. proposal is reported to provide, *inter alia*, for a systematic international on-site inspection, not only of military chemical warfare facilities, but also of a limited number of industrial "chemical plants that could be diverted to military ends". ¹⁴² At the same time, the American spokesman declared that "an acceptable verification and compliance framework must first be negotiated" before the text of the treaty is drafted. ¹⁴³ Because the Soviet Union has always insisted that agreement upon the specific measure of disarmament should precede discussion upon, as well as determine the scope of, verification, prospects for an early agreement seem worse today than they were several years ago.

Recent charges leveled by the United States against the Soviet Union and Vietnam, alleging violation of the *Geneva Protocol* of 1925 ¹⁴⁴ and the 1972 *Biological Weapons Convention*, ¹⁴⁵ underscore again the desirability of having an independent international authority free to conduct on-site inspections to verify these and similar allegations. Although the U.S. claims to have conclusive evidence to support its accusations, ¹⁴⁶ a United Nations group of experts convened to examine the incident submitted an inconclusive report. ¹⁴⁷ The Soviet Union has not only denied the accusations, but has responded with countercharges of its own. It has accused the U.S. of supplying "gangs of interventionists in Afghanistan" with chemical weapons, of carrying out in Pakistan experiments in biological warfare and of probable clandestine germ

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, 17 June 1925, 26 U.S.T. 575, T.I.A.S. 8061, 94 L.N.T.S. 65 [hereinafter Geneva Gas Protocol]. The U.S.S.R. has been a party to the Geneva Gas Protocol since 5 April 1928, and the U.S. since 10 April 1975. The Biological Weapons Convention, supra, note 26, in its Preamble, reaffirms the adherence of the contracting parties to "the principles and objectives" of the Protocol and calls upon states "to comply strictly with them".

¹⁴⁵ Ibid.

¹⁴⁶President Reagan, in his speech to SSOD II, *supra*, note 104. See also Vice-President Bush, *supra*, note 30.

through "timely access to the areas of alleged use", the team reported, could it be established whether poisonous substances had been employed. Nossiter, U.N. Team in Doubt on 'Yellow Rain', The New York Times (24 November 1981) A 7. Because of the restrictions placed upon the U.N. team's access to the countries involved, and its "self-defeating standards of proof", the U.S. Government has reportedly decided to allow the mandate of the U.N. experts to expire. Nossiter, U.S. Said to Give Up on a U.N. Inquiry, The New York Times (25 November 1982) A 17. The claims of the U.S. Government have been challenged recently by Harvard Professor Matthew S. Meselson, a leading expert on toxic warfare. See Boffey, Source of 'Yellow Rain' Linked to Waste of Bees, The New York Times (1 June 1983) A 16.

warfare against the people and agriculture of Cuba. 148 Short of on-site inspection, these accusations too will remain unsubstantiated.

Additional evidence of contradictory claims, directly attributable to the absence of appropriate verification procedures, can be found in charges that the Soviet Union has violated both SALT agreements and its pledge of a temporary moratorium on the deployment of the SS-20 missiles. 149 An American publication, with close ties to the Administration, has accused the U.S.S.R. of developing four new ICBMs and testing two of them, although only one new missile of this type is allowed under the SALT II agreement. 150 Moreover, it is claimed, "these tests involve such flagrant violations of SALT's prohibition against encryption, meaning the concealment of telemetered test data on which the US depends for assessing the performance of the missile and hence Soviet compliance with the terms of SALT II, that even staunch US SALT supporters [unidentified in the report] believe the USSR has scuttled this accord". 151 Although not formally made, these accusations are extremely serious, especially because they were subsequently repeated, in considerable detail, on the Senate floor. 152 Even if proven groundless, they cannot fail to undermine still further what little is left of the mutual trust

¹⁴⁸ Fyodorov, *To Ban Chemical Weapons* [1982] Int'l Affairs [Moscow] 77, 82 (No. 8). See also Chernikov, *The Pentagon's Chemical Weapons* [1983] Int'l Affairs [Moscow] 96 (No. 2). ¹⁴⁹ See *supra*, text accompanying notes 102 and 103.

¹⁵⁰ Ulsamer, Will Economic Weakness Increase Soviet Militancy?, Air Force Magazine (March 1983) 40, 40.

¹⁵¹ Ibid. [emphasis added]. For a comprehensive analysis of Soviet compliance with the SALT I treaties, see Levitt, Problems in the Verification and Enforcement of SALT Agreements in Light of the Record of Soviet Compliance With SALT I (1981) 22 Harv. Int'l L.J. 379. See also Einhorn, supra, note 127.

¹⁵² Senator James A. McClure, Republican from Idaho, in an "extremely detailed and carefully prepared speech" charged the Soviet Union of many "militarily significant violations or circumventions" of SALT agreements. He and other conservative Senators were "considering a resolution calling for an end to American compliance with the strategic arms treaty". Smith, Panel Tells Reagan the Russians Seem to Have Broken Arms Pact, The New York Times (21 April 1983) A 1, A 15. A few days earlier, the Senator is reported to have said: "To save his defense budget and undercut the nuclear freeze movement, President Reagan soon will have to accuse the Soviets publicly of violating arms control agreements with the United States". Wilson, Reagan Reportedly Ready to Accuse Soviets, The Washington Post (16 April 1983) A 13. At his press conference of 15 May 1983, President Reagan gave additional credence to accusations of Soviet violations by stating: "[W]e have a very great suspicion but... you can't go to court without a case and without the solid evidence; and it's just too difficult and we don't have that." Reported in President's News Conference on Foreign and Domestic Matters, The New York Times (18 May 1983) A 20. See also Smith, U.S. Sees New Soviet Arms Violation, The New York Times (12 May 1983) B 9 (U.S. seeking explanations from the U.S.S.R. through "private" diplomatic approaches).

Under the provisions of the SALT I Agreement, a Standing Consultative Commission was set up on 21 December 1972, specifically for the purpose of verifying *Treaty* compliance by

between the two superpowers. Such accusations also indicate the need to complement verification based exclusively on "national technical means" with a more reliable method of monitoring.

C. A Plea for an Independent Assessment of Conflicting Claims

The protracted controversies outlined above, especially those involving "parity" of force levels and verification requirements, point clearly to the urgent need for an alternative to what has been for too long a two-power dialogue about matters of vital concern to all nations. The negotiating positions of the superpowers are so far apart as to seem irreconcilable. Their assessment of each other's strengths and weaknesses is so much at variance even when facts are relatively easy to ascertain, that it suggests both a lack of serious commitment to end the arms race and scant regard for the intelligence of the public. One way of securing more reliable information on these issues of overriding importance could be the establishment at an early date of an autonomous international group, unaffiliated with the U.N., composed of highly respected individuals acting on behalf of the world community, as an impartial and informal arbiter of conflicting claims and counterclaims relating to the control of armaments [hereinafter the "Group"]. More specifically, the principal function of the Group would be to provide, whenever possible, an independent evaluation of various disarmament proposals, including an assessment of the factual bases for claims relating to "balanced" force reduction, and a judgment on the fairness and effectiveness of the various verification schemes advanced by the participants in disarmament negotiations.

Because the composition and the might of the military arsenals of most countries, including those of the superpowers and their allies, is by-and-large a matter of public knowledge, especially their strategic weapons component, the proposed Group should have no great difficulty in making a reasonably accurate appraisal of comparative military strength, even without the cooperation of the major powers. The Group could thus fulfill the highly important function of providing the world community with information that would reflect reality more accurately than the biased and self-serving information that so often emanates from the parties to disarmament negotiations. Such an

both sides. In Arms Control and Disarmament Agreements, supra, note 10, 138, it is reported that during the past decade, both the U.S. and the U.S.S.R. "have raised a number of questions in the Commission". In every case "raised by the United States, the Soviet activity in question has either ceased or additional information has allayed U.S. concern". See also Cahn & Leonard, Don't Accuse Moscow, The New York Times (26 April 1983) A 23.

independent body might also be employed, upon invitation by the states concerned, in a fact-finding capacity to conduct on-site inspections for the purpose of investigating allegations of disarmament treaty violations. It is not inconceivable that states would be more forthcoming in allowing access to their territory to a non-governmental inspection team, consisting of highly respected private individuals, than to officials of governments, or even of the U.N. Secretariat.

The composition of the Group would obviously be of the utmost importance; it would largely determine its credibility and public acceptance. Members should be recruited from the ranks of the most highly qualified technical experts (scientists, engineers and retired military), former high government officials, especially those with experience in disarmament negotiations and foreign affairs, prominent public figures (such as religious leaders and Nobel Peace Prize laureates), and eminent jurists. To assure expeditious functioning, membership in the Group should be limited to a maximum of twentyfive. Ideally, all nuclear-weapon states should have at least one of their nationals in the Group, but that should by no means be the criterion for appointment. Rather, the overriding considerations should be the proven commitment of the candidate to the cause of arms reduction and a high level of competence and integrity. Because the Group is envisaged as an informal body, there is no reason for preventing more than one national of the same state from serving on it, provided that the multinational character of the membership is preserved.

No less important than the composition of the Group would be the question who should make the appointments. Whoever undertakes the task should enjoy a reputation for integrity, possess broad experience in international affairs and be known for his dedication to the achievement of the goals enunciated in the *Final Document* of SSOD I. The only person equal to or close to satisfying these criteria is the Secretary-General of the United Nations. However, it is doubtful that, under the literal interpretation of the *Charter*, he could, on his own initiative, and acting in his formal capacity, create such a group. Only the General Assembly, it would seem, could empower the Secretary-General, by way of a resolution, to establish such a group for the purpose of advising him on disarmament matters.¹⁵³ That approach was taken by India and Mexico at SSOD II when they co-sponsored a draft resolution requesting the Secretary-General "to appoint a representative group of public persons of great eminence" to act as his advisers "on special measures and procedures — practical, political and legal — designed

¹⁵³ United Nations Charter, arts 10, 11, 13, and 14.

for the collective control, management and resolution of critical confrontational situations which could escalate to nuclear war".¹⁵⁴

A potentially fatal flaw in this proposal is that it would establish a formal link between the Group and the United Nations. That link would deprive the Group of its political and financial independence and would make it merely another U.N. "group of experts" preparing studies that, regardless of their excellence, find few readers. Another possible way of using the services of the Secretary-General would be for him to make the appointments in his private capacity. However, unless assured of support by all the permanent members of the Security Council, which is most unlikely, such an undertaking would be politically very hazardous. Although the Secretary-General would be the ideal choice for selecting the members of the Group, the initiative should not be abandoned because of his inability or unwillingness to act. The obvious alternative is to have the governments of a few interested pro-disarmament neutral states undertake the task of setting up such a group. These and other states supportive of the idea should also assume the financing of the Group, not a heavy burden considering the limited scope of the Group's mission and its small membership. But individual remuneration should be high, given the extremely high responsibility of each member. It hardly needs to be emphasized that, once set up, the Group should have complete independence for the duration of its mandate and should be answerable to no one except its collective conscience.

If established, the Group could well produce the following benefits: first and foremost, it would assure the wide dissemination of reliable and objective information on the vital issues of the arms race and disarmament; second, its reports would almost certainly generate powerful public and moral pressure in favour of arms reduction on the governing elites of the major powers, especially because these reports could not easily be dismissed as "propaganda"; third, it might cause the process of negotiating arms reduction agreements to be accelerated; and, fourth, it would provide invaluable experience for an international disarmament agency, a step that must be taken in the future.

¹⁵⁴ Concluding Document, supra, note 3, 11. A similar proposal was made at SSOD II by France. It called for the establishment of a "Universal Conscience Council" to provide "general information on the various aspects of the problems relating to disarmament and arms control". Appointed by the U.N. Secretary-General, the Council would consist of eminent persons of science, culture, philosophy, and principal religions, as well as former heads of state or government no longer active in national politics. Jack, Machinery — and Conscience, Disarmament Times (2 July 1982) 4.

III. Prevention of Nuclear War: The Overriding Moral and Legal Obligation

The issue of nuclear weapons has been on the priority agenda of the United Nations since the very beginning of the Organization. The General Assembly, in its first resolution, adopted on 24 January 1946, set up an Atomic Energy Commission and charged it with the task of preparing specific proposals for the "elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction". The question of the legality of nuclear weapons, however, was not central to the work of this United Nations body; its main objective was to prevent the spread of these weapons by the establishment of an international authority to control all uses of atomic energy. After three years of unproductive debates, the Commission ceased to function in July 1949 and never met again. By that time, the Soviet Union had succeeded in developing its own nuclear weapon and was soon engaged with the United States in what came to be known as the nuclear arms race.

Alarmed by the frequency of nuclear weapon tests and by the growth of nuclear weapon arsenals, and seeing no prospect of an early arms limitation agreement by the major powers, the U.N. General Assembly on 24 November 1961, issued an historic declaration. In Resolution 1653 it declared 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" as well as "a crime against mankind and civilization". Without explicitly stating so, that declaration appears consistent with the *Charter* and the Judgment of the (Nuremberg) International Military Tribunal. 159

The threat to mankind posed by the nuclear weapons race was also of great concern to the participants at the United Nations environment conference held in Stockholm in 1972. The Stockholm Declaration on the Human Environment, adopted unanimously at the conference, reflects this concern in Principle 26: "Man and his environment must be spared the effects of nuclear

¹⁵⁵Text in United Nations, *The United Nations and Disarmament 1945-1970* (1970) 11-2. ¹⁵⁶Ibid. 23.

¹⁵⁷For an excellent account of early efforts to control atomic weapons and the reasons why they failed, see G. Herken, *The Winning Weapon* [:] *The Atomic Bomb in the Cold War 1945-1950* (1980).

¹⁵⁸Declaration on the Prohibition of the Use of Nuclear and Thermo-nuclear Weapons, United Nations G.A. Res. 1653, 16 U.N. GAOR, Supp. (No. 17) 4, U.N. Doc. A/5100 (1961).

¹⁵⁹The Charter and Judgment of the Nuremberg Tribunal — History and Analysis, U.N. Doc. A/CN.4/5 (1949); Judgment of the International Military Tribunal at Nuremberg, reprinted in (1947) 41 Am. J. Int'l L. 172.

weapons and all other means of mass destruction. States must strive to reach prompt agreement...on the elimination and complete destruction of such weapons." ¹⁶⁰

In recent years especially, with nuclear war no longer perceived as a remote possibility, the General Assembly has stepped up its condemnation of nuclear weapons and strategies contemplating their use. The issue of the nuclear arms race was, predictably, the dominant concern of SSOD I: The participating states saw the elimination of "the threat of a world war — a nuclear war" as "the most acute and urgent task of the present day". ¹⁶¹ In the four years between the First and Second Special Sessions of the General Assembly, the sense of urgency rose to a new height, as expressed in the Concluding Document of SSOD II: "Taking into account the aggravation of the international situation and being gravely concerned about the continuing arms race, particularly in its nuclear aspect, the General Assembly expresses its profound preoccupation over the danger of war, in particular nuclear war, the prevention of which remains the most acute and urgent task of the present day." ¹⁶²

The explanation for the worldwide alarm is simple. One need not be an expert to realize that there is a vast qualitative difference between nuclear war and any other war ever fought in the long history of warfare. According to all reliable estimates, a nuclear war involving the two superpowers would cause instant devastation of unprecedented magnitude, with potentially incalculable long-term ecological consequences for the entire planet. For the first time in modern history, a war would be directed not only, or even primarily, against the military, administrative and industrial targets of the adversary, but against its large population centres. Its purpose and likely effect would be not merely to disarm and compel surrender of the adversary, but rather to end it as a functioning society. That is the meaning, not only of the doctrine of "Mutual Assured Destruction" [MAD], which has for some fifteen years dominated the strategic thinking of the United States and the Soviet Union, but also of its more recent variations. ¹⁶³ In the apt observation of Lord Solly Zuckerman,

¹⁶⁰ Stockholm 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 (1972) 11 I.L.M. 1416.

¹⁶¹ Final Document, supra, note 3, para. 18.

¹⁶²Concluding Document, supra, note 3, para. 62. The same concerns were reiterated in several resolutions adopted by the General Assembly at its 37th Session. See Review of the Implementation of the Recommendations and Decisions adopted by the General Assembly at its Tenth Special Session, U.N. Doc. A/RES/37/78 (1983) [hereinafter Review].

¹⁶³ For an eminently readable account of the evolution of U.S. nuclear strategy from 1945 to the present, including nuclear targeting, see Powers, *Choosing a Strategy for World War III*,

nuclear war is "a way of erasing in a flash centuries of human achievement". 164 This apocalyptic assessment of the probable consequences of an all-out nuclear war between the superpowers is shared universally, even by the majority of those professionally concerned with the planning of nuclear strategy.

At least partly in response to the sense of impotence created by the paradox of possessing immensely powerful instruments of mass destruction which are of negligible war-fighting utility except as tools of national suicide, a new doctrine for the employment of nuclear weapons in war has emerged in recent years — the doctrine of a "limited", "controlled" or "protracted" nuclear conflict. ¹⁶⁵ It envisages the use of nuclear weapons in different types of hostilities, not only in retaliation against a nuclear attack. Apart from its highly dubious and unprovable military value, the doctrine presupposes a readiness and ability on the part of the opponent to act rationally in conditions of supreme stress and to admit defeat if it wishes to avoid total destruction. While the details of this strategy are kept secret, in at least one published scenario for a "limited" war, after a gradual escalation culminating in the nuclear obliteration of Minsk and Birmingham, the Soviet Union is forced to surrender and in consequence disintegrates of its own internal weaknesses. ¹⁶⁶

The Atlantic Monthly [Magazine] (November 1982) 82. U.S. Administration officials admitted to the American Roman Catholic bishops that "even with [nuclear] attacks limited to 'military' targets, the number of deaths in a substantial exchange would be almost indistinguishable from what might occur if civilian centers had been deliberately struck." *The Pastoral Letter*, supra, note 77.

¹⁶⁴Nuclear Sense and Nonsense, The New York Rev. Books (16 December 1982) 19, 26. For a comprehensive, well-reasoned and humane assessment of the nuclear peril, see J. Schell, The Fate of the Earth (1982).

165 See Burt, Carter Said to Back a Plan for Limiting Any Nuclear War, The New York Times (6 August 1980) 1; Powers, supra, note 163; Paine, supra, note 44; Arkin & Pringle, C³I: Command Post For Armageddon, The Nation [Magazine] (9 April 1983) 434; Halloran, Weinberger Confirms New Strategy on Atom War, The New York Times (4 June 1982) A 10; Halloran, New Weinberger Directive Refines Military Policy, The New York Times (22 March 1983) A 18 (explicit references to the objective of "prevailing" in a "protracted" nuclear war had been eliminated in this new "Defense Guidance" directive, but the policy remains the same); Rostow, supra, note 89, 18. ("While we in the West have been primarily concerned with deterring both conventional and nuclear attacks, Soviet doctrine and forces emphasize the ability to fight and win a nuclear war.") The updated version of Soviet Military Power (1983), a U.S. Defense Department publication, claims that Soviet military doctrine contemplates both a "pre-emptive strike" and "protracted nuclear war-fighting, along with civil defense measures". Summarized in Ulsamer, Soviet Military Power, Air Force Magazine (May 1983) 46. But see Simes, Deterrence and Coercion in Soviet Policy (1980-81) 5 Int'l Security 80 (No. 3).

¹⁶⁶ J. Hackett, et al., The Third World War: August 1985 (1979). Sir John Hackett is former Deputy Chief of the British General Staff and Commander of the Northern Army Group in NATO. In both capacities he had nuclear forces under his command. In 1982, Sir John published a sequel to his 1979 bestseller, entitled The Third World War: The Untold Story. In

The message is fairly clear: limited nuclear war is feasible and winnable at a relatively modest cost (from the scenario writers' perspectives) when compared to the end result.

Discussion of this doctrine provides an opportunity to highlight another salient and unprecedented aspect of nuclear weapons — the enormous fear that no other instrument of warfare has ever been able to generate. One must assume that the launching of a nuclear weapon, even against a military target, would signal the breach of the psychological divide between nuclear warfare and conventional warfare. The resulting hatred of the enemy and demands for instant retribution in kind might well be uncontrollable. The urge to unleash on the enemy the entire available nuclear arsenal would be overwhelming, even if it meant the destruction of one's own society. The same uncontrollable emotions would be even greater if the target of the initial nuclear attack were a major population centre. It is most improbable that the launching of even a single medium-size nuclear weapon would fail to escalate immediately into an all-out nuclear exchange.

What compounds immeasurably the threat of holocaust is the availability of diverse, extremely swift means of delivering nuclear weapons on target. "Strategic" weapons systems, such as the intercontinental ballistic missile [ICBM], require a maximum of only thirty-five minutes after launching to strike a target thousands of miles away; the so-called "theatre" intermediate range missiles (the Soviet SS-20 and the U.S. Pershing II) can reach their destination in Western Europe or the European part of the U.S.S.R. in a mere four to ten minutes. It is this characteristic of modern nuclear-tipped missiles, leaving no time for hesitation or calm appraisal, that may make it almost imperative to "launch on warning" (rather than "launch on attack"), the moment the defence surveillance system signals the approach of hostile missiles. In view of the near-total mistrust of the adversary prevailing currently in East-West relations, it would be both irresponsible and extremely naive to expect coherent action from a government in emergency session, especially one that believes itself to be under imminent threat of nuclear attack and destruction. In contrast to all past conflicts, there would probably be no opportunity for a negotiated cease fire, or even an offer of total surrender.

Finally, developments in nuclear weapons, long-range ballistic missiles and naval technology have combined to create the nuclear-powered and nuclear-armed submarine, a unique instrument of mass destruction. Today,

Time Magazine's restrained review, the General's new message is summed up as follows: "[C]ivilian blathering about disarmament is infantile, and the West's only hope is to trust its stalwart military men and give them whatever costly whizbangs they ask for." Skow, SADARM to the Recovery, Time [Magazine] (13 September 1982) 96.

both superpowers possess a large number of such submarines, each capable of delivering a devastating blow against the homeland of the adversary. A single nuclear-armed submarine can destroy 160 cities and cause millions of casualties, possibly terminating the target state as a functioning society. Hence, no matter how advanced its defences and regardless of its overall military superiority, no nation or alliance can rationally expect, even by launching a pre-emptive attack, that all enemy submarines will be detected and prevented from firing their nuclear warheads before being destroyed. It is, therefore, difficult to disagree with Lord Zuckerman when he says that "[o]nly desk warriors who have never seen action, only computer specialists who can trade the deaths of millions in war games between the NATO and Warsaw Pact powers, can devise the world of fantasy where nuclear weapons have a role in active warfare, as opposed to being weapons which, because of their limitless and suicidal destructive power, deter states with nuclear weapons from taking military action against each other". 168

There are, however, influential people who do not share Lord Zuckerman's fears and who argue that even an all-out nuclear war is "survivable" and therefore "winnable". What is needed to "prevail", in their opinion, is more nuclear weapons, an ABM system to protect at least the more important of these weapons and an appropriate civil defence. 169 Essentially the same view,

¹⁶⁷ According to the International Institute for Strategic Studies, the United States has thirty-two such submarines and the Soviet Union at least sixty-two. See *supra*, note 41, 64 and 68.

¹⁶⁸ Supra, note 164, 24. The Earl Mountbatten of Burma, former Chief of the British Defence Staff, was equally explicit: "I repeat in all sincerity that as a military man I can see no use for any nuclear weapons which would not end in escalation, with consequences that no one can conceive...[T]he nuclear arms race has no military purpose. Wars cannot be fought with nuclear weapons. Their existence only adds to our perils because of the illusions which they generate." Perspective (1979) 35 Bull. Atom. Scientists 1 (October). No less firm in his rejection of nuclear weapons as an instrument of warfare is Admiral Noel Gayler, ret., former Director of the National Security Agency and former Commander-in-Chief of U.S. forces in the Pacific: "[T]here is no sensible military use for any of the three categories of nuclear weapons" [strategic, theatre or tactical]. How to Break the Momentum of the Arms Race, The New York Times Magazine (25 April 1982) 48. See also, e.g., Bundy, Kennan, McNamara & Smith, Nuclear Weapons and the Atlantic Alliance (1982) 60 Foreign Affairs 753. These former high U.S. Government officials write: "Given the appalling consequences of even the most limited use of nuclear weapons and the total impossibility for both sides of any guarantee against unlimited escalation, there must be the gravest doubt about the wisdom of a policy which asserts the effectiveness of any first use of nuclear weapons by either side." American Roman Catholic bishops state emphatically in their Pastoral Letter, supra, note 77, that "[t]here should be a clear public resistance to the rhetoric of 'winnable' nuclear wars or unrealistic expectations of 'surviving' nuclear exchanges and strategies of 'protracted nuclear war'."

¹⁶⁹ See, e.g., Gray, Superiority, supra, note 113; Gray, Issues, supra, note 113. See also sources cited supra, note 165.

although seemingly more restrained, is advanced in the guise of agnosticism. It is "conceivable"—admits one of its proponents—that a nuclear war might threaten the survival of mankind, "but we have no evidence to that effect". And since "studies show that civil defense measures could save tens of millions of lives" (in America), contrary to the "uncritical acceptance of many currently popular...but largely emotional arguments", the United States should continue developing its nuclear "war fighting doctrines and enhanced strategic defenses". Although the advocates of these strategic doctrines presumably envisage "victory" as resulting from a massive surprise attack on the adversary, even they concede that the price of prevailing would be extremely high — millions of dead and injured on the "victor's" side. 172

What nuclear war-fighting strategies fail to take into proper account, however, are the many unknown factors which could alter significantly the desired outcome. Nuclear weapons have so far been used only twice, on both occasions against a virtually defenceless enemy. Yet Hiroshima and Nagasaki have shown the magnitude of devastation that can be caused by only two atomic bombs with an aggregate power of thirty kilotons. The inventories of the two superpowers contain today some 15,000 to 18,000 strategic nuclear warheads, whose explosive force measures thousands of megatons, in addition to at least 30,000 intermediate and tactical nuclear weapons.¹⁷³ It bears

¹⁷⁰ Kahn, Bishops And The Bomb, The New York Times (9 December 1982) A 27.

¹⁷¹ Ibid. See also H. Kahn, Thinking About the Unthinkable (1962) 81-100.

¹⁷² With "nation-wide civil defense, plus some ballistic missile and air defense, the United States could very well insure the possibility of 200 million American survivors". Absent such defences, "the casualty rate could easily be 100 million". Gray, Issues, supra, notc 113, 49. An estimate drawing upon official U.S. documentation suggests that the probable consequences for the U.S. of a "limited" nuclear war with the Soviet Union, with both sides striking only at each other's ICBM bases, would be enormous. In the first thirty days, fatalities would range from two million to twenty million; agricultural resources would suffer "staggering losses"; effects on the ecosystem would linger for decades; and "even in the unaffected states and cities, survivors might lose all trust in authority and legal and financial systems". Soviet casualties in such an exchange would range from four million to twenty-eight million, according to this conservative estimate. Scenario for a Limited War, Newsweek [Magazine] (5 October 1981) 36-7. A nuclear war would be particularly devastating to the life-sustaining environment. "[E]ven a limited nuclear war", wrote two American professors, "using some 2,000 to 3,000 megatons for an attack on military targets, is likely to result in an irreversible lowering of the earth's climate [sic], accompanied by a reduction in rainfall in the mid-latitudes. That would destroy the wheat-producing areas of North and South America, Europe, Russia and China, areas on which the world's population depends for survival." Sternglass & Land, letter to the editor, The New York Times (18 May 1983) A 26. For an estimate of the possible effects upon Canada of a nuclear war, see Bates, Briskin, et al., "What Would Happen to Canada in a Nuclear War?" in E. Regher & S. Rosenblum, eds, Canada and the Nuclear Arms Race (1983).

¹⁷³ Estimates of the total number of nuclear weapons in the arsenals of states vary between 50,000 and 70,000. See, e.g., Barnaby, War-fighting weapons for Europe (1980) 36 Bull. Atom. Scientists 8, 10 (March) (by the former Director of SIPRI); Carver, No first use: a view

repeated emphasis that doctrines espousing a "winnable", "limited" or "protracted" nuclear war are based entirely on computer simulations for there is only minimal empirical knowledge available. In such circumstances, the possibility of gross miscalculation, even in regard to the performance of one's own forces, is so great and the penalty for error so cataclysmic, that only a reckless gambler could find the odds acceptable. 174 As Lewis Mumford put it. the consequences of misjudgment would be "irretrievable"; they would admit "no belated confession of error, no repentance and absolution". 175 With no possibility of correcting the initial error once the first nuclear shot is fired, the necessity of preventing the use of nuclear weapons of any calibre and in any circumstances is as imperative as it is self-evident. Regrettably, this view was not shared by all states attending SSOD II and as a result, the conference was unable to agree on a text designed to prevent the outbreak of nuclear war. 176 But an argument can be made that current nuclear war-fighting strategies contravene both the norms of general international law and bilateral undertakings of the superpowers as well.

The lessons of the Nuremberg trials seem to be pertinent in this context. Article 6 of the *Charter of the International Military Tribunal* included among war crimes "wanton destruction of cities, towns or villages or devastation not justified by military necessity", and among crimes against humanity "extermination...and other inhumane acts committed against any civilian

from Europe (1983) 39 Bull. Atom. Scientists 22 (March) (Field Marshal Lord Michael Carver was Chief of the Defence Staff of the United Kingdom from 1973-76). NATO powers and the Sovict Union are believed to have in Europe about 6,000 tactical nuclear wcapons each. See chart in The New York Times (28 May 1983) A 17. An informed official of the U.S. Government has placed the number of nuclear warheads in the American arsenal at over 35,000. Reported in Day, *The Numbers Game*, The Progressive [Magazine] (February 1982) 24

¹⁷⁴ Steinbrunner, *Nuclear Decapitation* (1981) 45 Foreign Policy 16, 23, warns that "under conditions of intense crisis, the existing U.S. command system is subject to strains powerful enough to trigger an unintended war". Despite great advances in modern technology, neither superpower, notes this author, at 24-5, is "immune to the confusion, miscalculation, failure of coordination, and unintended consequences historically associated with military forces in crisis and war. Given their inherent vulnerability, they may in fact be more prone to such occurrences."

¹⁷⁵ "The Morals of Extermination" in S. Melman, ed., No Place to Hide [:] Fact and fiction about fallout shelters (1962) 193, 203.

¹⁷⁶However, at its 37th Session, the U.N. General Assembly adopted, with large majoritics, several resolutions condemning the "new doctrine of limited or partial use of nuclear weapons" and the "concept of a protracted nuclear war" and pointedly reminded the Soviet Union and the United States that they should "bear constantly in mind that not only their national interests but also the vital interests of all the peoples of the world are at stake in this question". *Review*, *supra*, note 162.

population".¹⁷⁷ Conspiracy to commit these crimes — e.g., "planning, preparation...of...a war in violation of international treaties, agreements or assurances" — was also held to be a punishable offence.¹⁷⁸ In *The Justice Case*, one of the Nuremberg trials conducted under the authority of the Allied Control Council, the Tribunal cited genocide as "the prime illustration of a crime against humanity under C.C.Law 10, which by reason of its magnitude and its international repercussions has been recognized as a violation of common international law".¹⁷⁹ The Convention on the Prevention and Punishment of the Crime of Genocide, ratified by all the present nuclear powers, enunciates in its Preamble that "genocide is a crime under international law, contrary to the spirit and aims of the United Nations and condemned by the civilized world".¹⁸⁰

Because genocide is, according to these authoritative sources, a most serious crime under the law of nations, planning the use of nuclear weapons which could result in the annihilation of millions of human beings, even in the destruction of whole societies, and which could cause unprecedented ecological catastrophe as well, must be viewed as being opposed fundamentally to the *raison d'être* of international law. Yet inflicting upon the adversary intolerable losses, and, if necessary or possible, ending it as a "functioning society", is routinely publicized as the objective of nuclear war targeting. It is difficult to escape the conclusion that planning the use of nuclear weapons, at least against population centres, is not only contrary to the elementary standards of morality, accepted by all societies and religions, ¹⁸¹ but also a grave offence against a peremptory norm of international law.

¹⁷⁷ Supra, note 159.

¹⁷⁸ Ibid., art. 6(a).

¹⁷⁹The Justice Case is excerpted in L. Henkin, R. Pugh, O. Schachter & H. Smit, eds, International Law [:] Cases and Materials (1980) 248, 251.

¹⁸⁰ Convention on the Prevention and Punishment of the Crime of Genocide 78 U.N.T.S. 227 (adopted by the U.N. General Assembly 9 December 1948; entered into force 12 January 1951).

¹⁸¹ The Pastoral Letter, supra, note 77, of the U.S. Roman Catholic bishops is quite explicit: "A justifiable use of force must be both discriminatory and proportionate. Certain aspects of both U.S. and Soviet strategies fail both tests"; "Under no circumstances may nuclear weapons or other instruments of mass slaughter be used for the purpose of destroying population centers"; "We do not perceive any situation in which the deliberate initiation of nuclear warfare, on however restricted a scale, can be morally justified"; "It would be a perverted political policy or moral casuistry which tried to justify using a weapon which 'indirectly' or 'unintentionally' killed a million of innocent people because they happened to live near a 'militarily significant target'". See also excerpts in Bishops Endorse Stand Opposed to Nuclear War, The New York Times (4 May 1983) A 1: "In simple terms, we are saying that good ends, defending one's country, protecting freedom, etc., cannot justify immoral means, the use of weapons which kill indiscriminately and threaten whole societies." See also Margolick, Law Panel Sees Atom Arms as Illegal, The New York Times (7 June 1982) B 2.

The nuclear arms race and nuclear war-fighting strategies also contradict the primary objective of the SALT process, namely the prevention of war, especially nuclear war, between the United States and the U.S.S.R. To help achieve this objective, the two countries concluded on 22 June 1973 an agreement on the *Prevention of Nuclear War*. While not specifically an arms limitation compact, the Treaty was intended to affect and alter the military policies and strategies of the parties. The two countries, "[c]onscious that nuclear war would have devastating consequences for mankind" and aware of "their obligations under the Charter", agreed to make "an objective of their policies" the removal of the danger of nuclear war and the use of nuclear weapons, and to "act in such a manner as to prevent the development of situations capable of causing a dangerous exacerbation of their relations, ...[and] to avoid military confrontations". 183

In the *Threshold Test Ban Treaty*, the U.S. and the U.S.S.R. not only expressed their "determination" to seek a ban on "all test explosions of nuclear weapons for all time", but also declared "their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms [and] nuclear disarmament". ¹⁸⁴ Essentially the same ideas guided the two parties in the conclusion of the *Treaty on the Limitation of Strategic Offensive Arms* [SALT II]. ¹⁸⁵ "Mindful of their obligations under Article VI of the [1968] Treaty on the Non-Proliferation of Nuclear Weapons", the signatories undertook to "limit strategic offensive arms quantitatively and qualitatively, [and] to exercise restraint in the development of new types of strategic offensive arms". ¹⁸⁶

When these formal pledges, and comparable but less formal undertakings given at various times by the leading world powers, are measured against performance, one is left to wonder about the continuing viability of the fundamental principle of the law of treaties — pacta sunt servanda. 187 Scant regard by the two superpowers for their obligations in the context of bilateral arms limitation agreements cannot but produce an adverse effect upon treaty compliance by other states, and thus undermine confidence in the sanctity of treaty obligations, regardless of the nature of the undertaking.

¹⁸² 24 U.S.T. 1479, T.I.A.S. 7654, reprinted in (1973) 12 I.L.M. 896 (signed 22 June 1973; entered into force 22 June 1973).

¹⁸³ Ibid., Preamble and art. I.

¹⁸⁴ Supra, note 63, Preamble.

¹⁸⁵ Supra, note 10.

¹⁸⁶ Ibid., Preamble and art. I.

¹⁸⁷The Vienna Convention on the Law of Treaties, U.N. Doc. A/CONF. 39/27, 289 (1969), reprinted in (1969) 8 I.L.M. 679, merely reaffirms an old principle of customary law when it declares: "Every treaty in force is binding upon the parties to it and must be performed by them in good faith."

Viewed from contemporary perspectives there is an air of unreality in the continuing efforts, dating back to the nineteenth century, to draft treaties for the purpose of protecting civilians and combatants from the excessive suffering that would be caused by particularly "inhumane" weapons. In pursuit of this goal, states have at different times agreed to prohibit, for example, the use of expanding bullets, 188 poison gas and booby-traps, 189 and are now negotiating a ban on radiological and chemical weapons. Furthermore, shortly after the end of World War II, genocide was unanimously declared to be the gravest crime against humanity and international law. Yet nuclear weapons, which are incomparably more destructive, which can in an instant obliterate a large city, which kill more indiscriminately than any other weapon, and which can cause prolonged suffering for the surviving victims and possibly irreversible ecological damage, apparently remain beyond the explicit sanction of international law. Thus the "dum-dum" bullet is outlawed for being an excessively inhumane instrument of combat, but not a twenty-megaton nuclear weapon that can cause in an instant several million civilian casualties. Surely these obvious contradictions merit at the very least a more searching inquiry by governments and by international jurists than they have received to date.

As any reasonably well informed and realistic observer of the world scene knows, the total elimination of nuclear weapons from national armouries lies in the distant future. Proposals occasionally advanced by the British Labour Party for unilateral nuclear disarmament by Great Britain, even if implemented some day, would be unlikely to find followers among the other major powers. One cannot seriously expect either of the superpowers, or China, to divest themselves in the near future of all nuclear weapons, which they have come to regard as their principal instrument of deterrence and self-defence. The universal renunciation and destruction of nuclear weapons appears feasible only as the last phase in a process of "general and complete disarmament". Indeed, a convincing argument can be made in support of these countries retaining for quite some time a portion of their nuclear armaments as a means of preventing a major war or a world war. A sense of realism, therefore, dictates the adoption of a seemingly paradoxical position: While condemning the planning for, and the mere threat of, the use of nuclear

¹⁸⁸See Hague Declaration [No. IV, 3] Concerning Expanding Bullets, 29 July 1899, reprinted in J. Scott, ed., The Hague Conventions and Declarations of 1899 and 1907 (1915).

¹⁸⁹ See supra, note 8. For a summary account, see Goldblat, The convention on 'inhumane' weapons (1983) 39 Bull. Atom. Scientists 24 (January). See also Paust, Controlling Prohibited Weapons and the Illegal Use of Permitted Weapons (1983) 28 McGill L.J. 608. To this body of law, one might also add the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 18 May 1977, reprinted in Arms Control and Disarmament Agreements, supra, note 10, 193 (entered into force 5 October 1978). Such techniques are almost entirely theoretical and have no role in current military planning.

weapons against population centres as immoral and contrary to international law, one is compelled to accept them, temporarily and at significantly lower levels, as a necessary deterrent. The claim that possession of these weapons has so far prevented the outbreak of a war between great powers cannot be dismissed as mere propaganda by the "military-industrial complex".

Gaining momentum in recent years is the doctrine of "no-first-use" of nuclear weapons, seen by many as holding great promise for lessening the risks of a nuclear war. At SSOD II, on 15 June 1982, Soviet Foreign Minister Andrei A. Gromyko read the statement of President Leonid Brezhnev in which the latter "solemnly" declared that the U.S.S.R. "assumes an obligation not to be the first to use nuclear weapons", the undertaking becoming "effective immediately". ¹⁹⁰ At the same session of the General Assembly, the chairman of the Chinese delegation assured "the world that at no time and under no circumstances will China be the first to use nuclear weapons and that it undertakes unconditionally not to use such weapons against non-nuclear states". ¹⁹¹ Despite growing worldwide support for the doctrine of "no-first-use", the United States and its nuclear-armed NATO allies have so far refused to endorse it.

The proponents of the doctrine argue that a declaration pledging the Soviet Union and the United States not to be first to use nuclear weapons would have the effect of making nuclear powers change their military strategy by placing greater emphasis on conventional forces; that it would likely end nuclear proliferation, reduce international tension and chances of accidental nuclear war; and that it could give strong impetus to meaningful disarmament negotiations. ¹⁹² The opponents of "no-first-use" contend that comparable declarations issued by the Soviet Union in the past have not reduced the West's sense of insecurity; that a reciprocal declaration might encourage Soviet "adventurism" because of the perceived Soviet superiority in conventional forces; and that a "no-first-use" pledge could undermine the confidence of the European NATO allies in the U.S. resolve to defend them against possible Soviet attack. ¹⁹³

¹⁹⁰ Brezhnev's Statement, The New York Times (16 June 1982) A 20.

¹⁹¹ Quoted in Wang, China's nuclear programs and policies (1983) 39 Bull. Atom. Scientists 18 (March).

¹⁹² See, e.g., Myrdal, supra, uote 19, 182-4; McNamara, No Second Use — Until, The New York Times (2 February 1983) A 23; Carver, supra, note 173; Ravenal, No first use: a view from the United States (1983) 39 Bull. Atom. Scientists 11 (April); and Weiler, No first use: a history (1983) 39 Bull. Atom. Scientists 28 (February). See also sources cited supra, note 77.

¹⁹³ The Soviet pledge of no-first-use has been rejected by the U.S. Administration also on the ground that it is "unverifiable and unenforceable". *U.S. Says Soviet Pledge on Nuclear War Is Empty*, The New York Times (17 June 1982) A 8. See also Ulsamer, *The Right Freeze and the Wrong Freeze*, Air Force Magazine (October 1982) 82, 84. However, the most important

Even to one who abhors the mere existence of nuclear weapons, let alone the prospect of their use, the "no-first-use" proposal, for all its appeal, seems to contain too many potential hazards to recommend it at this time as a desirable policy. To begin with, in a climate where the leader of one superpower refers (in the midst of arms control talks) to the other superpower as "the focus of evil in the modern world" that must be opposed "with all our might", 194 a pledge of "no-first-use" even if given by both sides will not be taken seriously by either. It would be most unlikely that following a joint pledge, the superpowers would proceed with the rapid elimination of their nuclear inventories, the logical sequence to the obligation never to use them. As long as the two military blocs retain in their possession thousands of nuclear warheads, as they would despite the pledge, the risk that these weapons might be employed in a major conflict will always be present. Absent additional and concurrent disarmament steps, each side would have to guard against the possibility that the adversary might do so, particularly when facing defeat in a war fought with conventional weapons. 195 Thus the practical short-term effect of the "no-first-use" pledge would be minimal: it would not eliminate a single nuclear weapon nor reduce their further development and production. At present, unaccompanied by tangible measures of self-restraint and arms reduction, a joint "no-first-use" pledge could result only in giving the world community a false sense of security without improving prospects for genuine disarmament. But the greatest harm that could result from a

reason for the U.S. objection to any declaration promising not to use nuclear weapons first is stated clearly in the recent report of the President's Commission on Strategic Forces: "The Soviets must continue to believe what has been NATO doctrine for three decades: that if we or our allies should be attacked — by massive conventional means or otherwise — the United States has the will and the means to defend with the full range of American power...[E]ffective deterrence requires that early in any Soviet consideration of attack or threat of attack, with conventional forces or chemical or biological weapons, Soviet leaders must understand that they risk an American nuclear response." Excerpts From Report of the Commission on Strategic Forces, supra, note 62.

¹⁹⁴ President Reagan, in his speech to the National Association of Evangelicals on 8 March 1983. *Excerpts*, The New York Times (9 March 1983) A 18. The biblical drift of present Soviet-American relations was also assisted by Soviet Foreign Minister Andrei Gromyko, who, in the U.N. General Assembly, referred to the Reagan Administration as the "apostles of the arms race", planning a nuclear war with the "cold-blooded composure of gravediggers". *U.S. officials 'apostles of arms race' : Gromyko*, The [Montréal] Gazette (2 October 1982) B-7. For an authoritative ecclesiastical viewpoint on the "cosmography" of contemporary evil, see *infra*, note 227.

¹⁹⁵ See, e.g., U.S. General Backs First Use, The New York Times (17 June 1982) A 8. Gen. Bernard W. Rogers, commander of NATO forces, would recommend first use of mediumrange nuclear weapons in Europe if the alliance faced defeat in a conventional war. There can be no doubt that the Soviet leadership would act in the same way if its forces were losing the war with NATO.

premature adoption of the "no-first-use" proposal is its ability to make a major conventional war between the antagonistic military alliances a distinct possibility. "By abolishing, or appearing to abolish, nuclear weapons," warns an eminently qualified expert, "we should be making World War III more likely; and if [it] started as a conventional one and lasted any length of time, there is no doubt that the nuclear weapon would reappear". ¹⁹⁶ Even without the employment of nuclear weapons, another large-scale war fought in Europe would almost certainly cause more devastation and more casualties than World War II. ¹⁹⁷

It is also worth recalling that the U.N. *Charter*, in art. 2(4), stipulates that member-states "shall refrain in their international relations from the threat or use of force", an obligation which clearly applies to any force, whether nuclear or conventional. There is no evidence of a compelling need to "re-enact the *Charter*", as Canadian Prime Minister Pierre E. Trudeau observed, "by seeking to set an order of precedence among the various manifestations of the use of force". ¹⁹⁸ In brief, potentially negative consequences of the "no-first-use" pledge, on balance, seem to outweigh its hoped-for benefits.

However, the termination of the development, production and deployment of new nuclear weapon systems, followed by a gradual reduction of existing nuclear stockpiles are desirable and feasible objectives, and it is toward these goals that efforts to curb the nuclear arms race should be directed. The widespread support that this approach to the nuclear dilemma enjoys among the peoples of the world, including the nationals of major nuclear powers, enhances materially its chances of success. High priority should also be given to the object of preventing the further proliferation of nuclear-weapon states, an immensely important objective and for many nations, including the United States and the Soviet Union, a legal obligation. Any further addition to the number of states possessing nuclear weapons cannot but reduce the security of all, a truism often voiced by major powers but not acted upon in practice with appropriate determination. 199

¹⁹⁶ Field Marshal Lord Carver, supra, note 173, 25.

¹⁹⁷Recent revolutionary innovations in conventional armaments are outlined in Klare, *The Conventional Weapons Fallacy*, The Nation [Magazine] (9 April 1983) 438.

¹⁹⁸Technological Momentum the Fuel that Feeds the Nuclear Arms Race, address to SSOD II, 18 June 1982, reprinted as Dep't External Affairs Canada, Statements and Speeches (No. 82/10) 1.

¹⁹⁹ Weltman, *Managing Nuclear Multipolarity* (1981-82) 6 Int'l Security 182, 182 (No. 3) writes: "The significant spread of nuclear weapons is probable over the next few decades because technological and economic constraints against their acquisition have declined, and because political and strategic incentives favoring the acquisition of nuclear weapons have increased." See also Nye, *Nuclear proliferation in the 1980s* [:] *Political solutions* (1982) 38 Bull. Atom. Scientists 30 (August-September); and Halloran, *supra*, note 76.

IV. Human Rights and the Arms Race: The Forgotten Link

The escalating arms race threatens more than the security of all nations; it also poses a grave threat to the fundamental legal rights of each member of human society. The existence of an international law of human rights. consisting of firm legal obligations, not merely idealistic aspirations, is no longer in doubt.²⁰⁰ The overriding purpose of this body of law is to protect the individual human being against violations of the integrity of his person, including most importantly the right to life. It bears repeated emphasis that the international law of human rights sprang into existence in direct response to acts of unprecedented barbarism committed against the life and dignity of human beings during the Second World War. At the risk of redundancy, it is worth reiterating the key provisions of the controlling texts. The U.N. Charter, in its Preamble, expresses the determination of member-states "to reaffirm faith in fundamental human rights, in the dignity and worth of the human person,...to promote social progress and better standards of life in larger freedom". Article 1 calls upon member-states to cooperate "in promoting and encouraging respect for human rights and for fundamental freedoms for all", and art. 2 directs the Organization and its members to "fulfil in good faith the obligations assumed by them in accordance with the present Charter". Article 55 reiterates the commitment of the United Nations to the goals of "universal respect for, and observance of, human rights and fundamental freedoms" while in art. 56, "members pledge themselves to take joint and separate action...for the achievement" of these goals. The Universal Declaration of Human Rights, adopted in 1948, the Magna Carta of human rights, stresses in its Preamble that the "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world".201 The 1972 Stockholm Declaration on the Human Environment represents still another milestone in the development of the law of human rights.²⁰² Principle 1 of the Declaration is particularly relevant in the present context: "Man has the

²⁰⁰ For a comprehensive and policy-oriented approach, see M. McDougal, H. Lasswell & L. Chen, *Human Rights and World Public Order* [:] *The Basic Policies of an International Law of Human Dignity* (1980). See also R. Lillich & F. Newman, *International Human Rights* [:] *Problems of Law and Policy* (1979).

²⁰¹ The basic rights enunciated in the *Declaration* have been subsequently reiterated, and in some instances amplified, in two treaties. See the *International Covenant on Civil and Political Rights*, United Nations G.A. Res. 2200, 21 U.N. GAOR, Supp. (No. 16) 52, U.N. Doc. A/6316 (1967), reprinted in (1967) 6 I.L.M. 368; and the *International Covenant on Economic, Social and Cultural Rights*, United Nations G.A. Res. 2200, 21 U.N. GAOR, Supp. (No. 16) 49, U.N. Doc. A/6316 (1967), reprinted in (1967) 6 I.L.M. 360. The former entered into force on 23 March 1976, and the latter on 3 January 1976.

²⁰² Supra, note 160.

fundamental right to freedom, equality and adequate conditions of life in an environment of equality that permits a life of dignity and well-being".

Historical experience provides convincing proof that conditions of international tension and high expectation of violence — characteristic of all arms races — are inconsistent with respect for, and the promotion of, human rights. The increased police surveillance of citizens, growing censorship, restrictions on foreign travel, trade, tourism, cultural exchanges, and contacts with aliens (especially with nationals of "hostile" states), limitations on the free exchange of ideas, and the vilification and "demonization" of the adversary — are all the inevitable companions of a climate of tension generated and fuelled by the arms race. ²⁰³

The recent branding, by the U.S. Department of Justice, of three documentary short films produced by Canada's National Film Board as "political propaganda" provides an example of the growing intolerance for the free exchange of ideas. Two of the offending films dealt with acid rain and the third, If You Love This Planet, with the consequences of a nuclear war. John Roberts, the Canadian Environment Minister, described the Justice Department's action as an "extraordinary interference with freedom of speech". Quoted in U.S. Orders Disclaimers on 3 Canadian Films. The New York Times (25 February 1983) C 4.

²⁰³That democratic societies are not immune to such assaults on basic freedoms is documented by Sissela Bok: "Never, except in wartime, has America experienced such a rapid, extensive buildup of Government secrecy as in the last few years. ... In the name of national security, Federal officials have moved to bring about not only sweeping increases of secrecy about Government activities but also new forms of control over the private sector. They have sought to curtail access to information in several ways: by limiting the scope of the Freedom of Information Act, by giving administrators greater power to classify documents as secret and by expanding covert activities by the Central Intelligence Agency and Federal Bureau of Investigation both at home and abroad. The Government has also moved to exercise greater control over scientists, educators, students and business employees. ...[T]he Pentagon last summer blocked the presentation of about 100 papers at an international convention on optical engineering". The author recalls that the invocation of national security was used in the past to cover up "military blunders, cost overruns, White House 'plumbers,' [and] enemies' lists". Secrecy Vs. Security, The New York Times (23 February 1983) A 23. See also Kalven, Security and secrecy (1982) 38 Bull. Atom. Scientists 16 (October); Jackson, Cold war demonology (1982) 38 Bull. Atom. Scientists 52 (October); Gerjuoy, Embargo on ideas: the Reagan isolationism (1982) 38 Bull. Atom. Scientists 31 (November); Reinhold, Inman Bids Academics Monitor Own Security, The New York Times (30 March 1982) A 13. Constitutional law aspects of this trend are explored in Miller, Reason of State and the Emergent Constitution of Control (1980) 64 Minn. L. Rev. 585; and Paust, Is the President Bound by the Supreme Law of the Land? - Foreign Affairs and National Security Reexamined (1982) 9 Hastings Const. L.Q. 719. A fuller account of the corrosive effects of the arms race on the American political, economic and social system is given in F. Cook, The Warfare State (1962); and R. Lapp, The Weapons Culture (1968). Dr Lapp participated in the production of the first atomic bomb and in the early post-war nuclear weapons tests. On the ascendancy of the military, and their impact upon Soviet society, see Simes, The Military and Militarism in Soviet Society (1981-82) 6 Int'l Security I23 (No. 3).

During the past three decades, no other issue of direct concern to international law, with the exception of the control of force, has received more attention than the cause of human rights. At least one government (President Carter's Administration) declared respect for human rights to be the determining factor in shaping its foreign policy;²⁰⁴ on countless occasions many other governments have expressed their dedication to the ideals of the *Charter* and the *Declaration* and have pledged to work for their implementation.

The improvement of human rights in Europe, Canada and the United States was one of the most important reasons for convening the Helsinki Conference in 1975, and the advancement of these rights is an essential goal of the *Helsinki Final Act*.²⁰⁵ Yet the acrimonious debates at the follow-up conferences in Belgrade (1977-78) and Madrid (1980-83), convened to review the implementation of the *Final Act*, seem to have done more harm to the principles that all the parties pledged to honour — human rights principles especially — than would have been the case if this document had not existed. The continuing Madrid conference, according to an observer, "has turned into an exchange of accusations and counteraccusations reflective of the unravelling of détente, which eight years ago produced the Helsinki accords".²⁰⁶

The original intention of the thirty-five participating nations, to promote human rights in a stable and secure political-military environment, appears to have been wholly abandoned and the conference has become yet another forum for fierce East-West confrontation. The idea of the intrinsic unity of these two goals of military security and human rights, and the conviction that one cannot meaningfully prosper without the other, no longer seems to guide the policies of either power bloc. The NATO participants stress almost exclusively the human rights clauses of the accords, urging the Warsaw Pact countries to allow free trade unions and to permit member-states the right of political self-determination and their citizens freedom of emigration. The Soviet-led bloc, deaf to human rights concerns, insists on the follow-up conference on disarmament in Europe. Attempts by neutral participating states to reconcile the opposing approaches and to move the conference away from confrontational patterns toward cooperation for common benefit are routinely ignored. The causes and consequences of this attitude are not

²⁰⁴ In his address at the University of Notre Dame on 22 May 1977, President Jimmy Carter stressed "commitment to human rights" as the first of five cardinal principles of America's foreign policy. The address was reprinted, in part, in J. Boyd, ed., *Digest of United States Practice in International Law 1977* (1979) 166.

²⁰⁵ Supra, note 18.

²⁰⁶ Darnton, East-West Session Reopens in Madrid, The New York Times (9 February 1983) A 3.

difficult to discern: reduced international tension would serve neither those with a vested interest in the perpetual escalation of the arms race nor the stability of repressive regimes. The inevitable result is diminishing human rights and declining security for all.

While no accurate yardstick exists for measuring the impact upon human rights of the arms race, surely the current military build-up in Eastern and Western Europe and North America cannot be helpful to the implementation of the principles of the Helsinki accords or the *Universal Declaration*.²⁰⁷

It is hardly necessary to add that, in view of the enormous and growing expenditures of many of the participating states on armaments, the Helsinki follow-up conferences have not seen fit to discuss the relationship between human rights, peace and development. Indeed, the major nations participating in the conference have shown minimal concern for the appalling conditions of widespread deprivation observable in so many developing countries and authoritatively documented in a recent report prepared by the World Bank. According to this report, an estimated 850 million people live in absolute poverty, a condition of life so "characterised by malnutrition, illiteracy and disease as to be beneath any reasonable definition of human decency". ²⁰⁸ The report goes on with its grim statistics: 300 million permanently unemployed, 600 million illiterate, 700 million suffering from serious undernourishment, and 1,200 million with no drinking water or sanitation. ²⁰⁹

To these statistics, recording the extent of human misery thirty-five years after the adoption of the *Universal Declaration*, one should add the millions of dead, permanently incapacitated and uprooted human beings, the victims of countless wars fought since 1945, mainly with armaments supplied by the leading protagonists of the global arms race who also happen to be the principal exporters of weapons.²¹⁰ At least some of these wars were caused

²⁰⁷ One foreseeable consequence of the militarization of East-West relations is the sharp decline in the number of Soviet Jews permitted to emigrate. From a high of 51,320 in 1979, their number had fallen to 2,688 in 1982. *Jews to discuss Soviet emigration*, The [Montréal] Gazette (15 March 1983) A-13; Shipler, *Protests Backed at Conference on Soviet Jews*, The New York Times (17 March 1983) A 8. The persecution of human rights activists in Eastern Europe can, at least in part, be attributed to the same cause.

²⁰⁸ Quoted in the "Second Report of the Committee on Legal Aspects of a New International Economic Order" in International Law Association, *Report of the Sixtieth Conference* (1983) 183, 189 [emphasis added].

²⁰⁹ Ibid.

²¹⁰ According to Washington's Center for Defense Information, 45 of the world's 164 nations are currently involved in some kind of armed conflict, with the number of people killed during the last three years ranging from one million to five million. Reported in Reston, What's Going On?, The New York Times (23 March 1983) A 27. A recent report to the U.N. Human

directly or indirectly by gross economic disparities, which continue to divide nations and societies.²¹¹ It is a truism that the conditions described by the World Bank often lead to social unrest and revolutionary violence, and result in additional suffering and denial of human rights.²¹²

The consequences of the intoxication with national "security" expressed through the relentless accumulation of armaments by the more affluent nations, have not spared citizens of those countries either. Despite the record number of unemployed in every NATO state, and the continuing and growing shortages of consumer goods and decent housing in Eastern Europe, all these nations have, in recent years, increased significantly their defence budgets. As one eminent American observer noted pointedly in reference to his own

Rights Commission provides additional horrifying statistics: "At least two million people have been put to death during the last 15 years without a fair trial, their own lawyer or the right to appeal"; "Officially inspired executions, ranging from scattered murders to mass purges of political opponents, have been reported in 37 countries". 2 mln. executed without fair trial says U.N. report, The [Montréal] Gazette (17 February 1983) B-14. Most of these assaults on human life have occurred in the developing countries.

²¹¹ As Inga Thorsson notes: "The arms race and development are thus to be viewed in a competitive relationship. Or to put it another way: the arms race and underdevelopment are not two problems; they are one. They must be solved together, or neither will ever be solved." *Supra*, note 120.

However, it appears that so far, the most tangible result of the so-called North-South "dialogue" has been an increase in the transfer of weapons from industrialized countries to Third World nations, rather than increased assistance for civilian purposes. Thus, while the U.N. Conference on Trade and Development [UNCTAD] finds an alarming drop in aid by rich countries to the Third World, trade in arms is at an all-time high. See U.N. Reports Alarming Drop in Aid to Third World Nations, The New York Times (30 March 1983) A 10. A study by the Library of Congress reports that between 1975 and 1982, the U.S.S.R. delivered to Third World countries armaments valued at U.S. \$50.1 billion, the United States U.S. \$45.7 billion and France U.S. \$14.5 billion. During the same period, the four major European countries transferred to the developing countries arms valued at about U.S. \$33.6 billion. According to this study, in 1982, the U.S. reached a record high in arms sales agreements with the developing nations, with a value of U.S. \$15.3 billion. Eight-Year Study Finds U.S. Tops in Arms Sales Contracts, Aviation Week & Space Technology [Magazine] (2 May 1983) 90. It should also be pointed out that the people and the land of developing countries provide arms-supplying nations with a convenient testing ground for new weapons. The underlying philosophy was summed up accurately by T. P. Shoesmith, Deputy Assistant Secretary of State for East Asian and Pacific Affairs: "[W]e do not believe that a line should be - or can be drawn between human rights interests and strategic interests". Balancing Strategic Interests and Human Rights in Asia (1983) 83 Dep't State Bull. 9, 10 (February).

²¹²Furthermore, as Professor Stanley Hoffmann observes, "widespread domestic conditions of misery and tyranny...incite external intervention", and tempt leaders "to find external diversions". Quoted in Farer, book review (1982) 76 Am. J. Int'l L. 888, 892. Because domestic violence in any part of the world today threatens to involve major powers, self-interest, if not compassion, suggests that concern for human rights, both political and economic, should be an important ingredient in the foreign policy of every advanced nation.

country: "Now after eight successive presidents have given in to demands for new weapons systems, the nation is naked to devastation, and handcuffed largely by weapons it has pioneered, and is on the verge of bankruptcy as well." ²¹³ The only agreed part of the *Concluding Document* of SSOD II, merely records the obvious when, in para. 61, it declares in reference to the economic consequences of the arms race that "in a world of finite resources there is an organic relationship between expenditures on armaments and economic and social development"; that the development and acquisition of "new types of weapon systems represent a huge and growing diversion of human and material resources"; and that current and "planned military programmes constitute a colossal waste of precious resources which might otherwise be used to elevate living standards of all peoples". ²¹⁴

The incessant cry of threats to national security, emanating from the ranks of the national defence complex, is seldom accompanied by expressions of genuine concern for human rights at home or abroad, which are so obviously affected by massive military preparations. To the extent that human rights are invoked, they are routinely used as an instrument for propaganda warfare against the adversary, rather than in a genuine attempt to bring about the redress of alleged injustices.²¹⁵ The degree of indifference shown by nuclear war planners to even the most basic human rights can, perhaps, best be illustrated by the kind of society that would likely result if their recommendations were implemented. To make the population safe from nuclear attack, they urge massive "civil defence" programmes, which, to be perceived as effective, would force citizens to spend their nights frequently in crowded shelters or to run for them as a drill, while awaiting the ultimate

²¹⁵ See, e.g., Henkin, Rights: American and Human (1979) 79 Colum. L. Rev. 405, 421, asserting that international human rights have been by and large "for export only" and "in criticism of others".

^{· &}lt;sup>213</sup> Wiesner, *supra*, note 52. Four equally eminent Americans — McGeorge Bundy, Robert S. McNamara, Cyrus R. Vance, and Elmo R. Zumwalt — issued more recently a public warning along the same lines: "We wish to emphasize that the economic foundations of our national security, which are every bit as important as the defense component, have been undermined." *Supra*, note 58. Yet the projected defence budget in 1988 for the United States alone is set at U.S. \$424.2 billion, a sum which equals total *world* military expenditures in 1976 (U.S. \$427.7 billion). Halloran, *New Weinberger Directive Refines Military Policy*, *supra*, note 165. See also United States ACDA, *supra*, note 121, 43.

²¹⁴Supra, note 3. See also C. Sanger, Safe and Sound [:] Disarmament and Development in the Eighties (n.d.); and Regehr & Watkins, "The Economics of the Arms Race" in Regehr & Rosenblum, supra, note 172, 63. "The whole world must summon the moral courage and technical means," urge American Roman Catholic bishops, "to say 'No' to an arms race which robs the poor and the vulnerable". The Pastoral Letter, quoted in Bishops Endorse Stand Opposed to Nuclear War, supra, note 181 [emphasis added].

catastrophe.²¹⁶ Such a society would have to be highly regimented, a totalitarian society, with iron discipline and few civil liberties — paradoxically, a society that nuclear weapons and nuclear war are supposed to protect us against.²¹⁷ The result would also make a mockery of art. 28 of the *Universal Declaration* which prescribes: "Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized."

The perception of national security isolated from human rights, so common to all of the defence establishments, is not surprising; the military, the internal security police, intelligence and counter-intelligence agencies, the arms merchants, and the burgeoning community of "defence analysts" can hardly be expected to champion human rights or to approve the diversion of national resources from "defence" to the improvement of living conditions at home or abroad. What is surprising is the apparent willingness of so many governments, especially those that pioneered the cause of human rights and which were the principal architects of the *Universal Declaration*, to shape their national policies according to the interests of a constituency that has been traditionally least concerned with, if not openly hostile to, both human rights and civil liberties.

Only slightly less surprising has been a lack of interest among international jurists, particularly among those professionally involved in the field of human rights, to call the attention of decision-makers as well as the public, to the intimate link between the effective protection of these rights and the arms race. It is almost incomprehensible that no scholarly studies can be found in the vast literature on the international law of human rights analyzing the causal relationship between global arms competition and the poor record of compliance with the obligations arising from that body of norms. The com-

²¹⁶ A rather bizarre aspect of this programme was revealed to a reporter for The Los Angeles Times by Thomas K. Jones, Deputy Under-Secretary of Defense in the Reagan Administration. "Dig a hole, cover it with a couple of doors and then throw three feet of dirt on top," he recommended. "It's the dirt that does it... If there are enough shovels to go around, everybody's going to make it." Quoted from Sheer, *supra*, note 113 in *A Critique and a Caricature*, Time [Magazine] (27 December 1982) 66.

²¹⁷For a discussion of political, military and moral issues relating to civil defence in a nuclear age, see Melman, *supra*, note 175. No experimental situation could ever remotely resemble the combination of stresses that life in shelters would likely produce. Just to get people into the shelters "would require regimentation to a degree far beyond anything America has experienced." J. Frank, *Sanity and Survival* [:] *Psychological Aspects of War and Peace* (1968) 155. The author goes on to report on a study done in the early 1960s on the attitude of ordinary Americans facing an imminent nuclear attack which concluded that "[c]itizens in shelters *will kill to stay in* and others...will kill to get in" [emphasis original]. See also Schell, *supra*, note 164, 67 et seq.

mand of the *Universal Declaration* that "every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms" 218 has not been extended to the arms race. By reminding governments and the public "constantly" that the goals of both the Charter and the Declaration cannot be achieved as long as the world remains an armed camp, as long as limited resources are channelled increasingly into the development and acquisition of ever more destructive means of violence, international jurists could make a material contribution to the cause of human rights enunciated in these texts. The prospect of a nuclear war and the dismal record on human rights, which are abused to the point of denial in many regions of the world, underscore the urgency of the task. The link between peace and human rights, expressed by the late President John F. Kennedy in his address at the American University twenty years ago, bears repeating: "[I]s not peace," he asked, "in the last analysis, basically a matter of human rights — the right to live out our lives without fear of devastation, the right to breathe air as nature provided it, the right of future generations to a healthier existence?" 219

Conclusion: A Role for International Law and Inrists

Few analysts of world power politics doubt that the influence of international law on the conduct of states is at its weakest when matters of national security are involved. And because armaments, especially their strategic component, are regarded as the backbone of national security, governments resist international law considerations most when it comes to the size, composition or use of their armed forces. This perception of the interaction between international law and power politics, based largely on historical experience, helps to explain the reluctance of many jurists to concern themselves with the arms race, including its nuclear aspects. The predominant view seems to be that these political-security issues are best left to political leaders and military experts. The lawyer's role is seen in practice to begin at a lower, technical level, where his drafting skills can most usefully be employed. This view, it is submitted, reduces unnecessarily the proper function of law in shaping and governing the conduct of states; at the same time, it impairs law's potential influence upon that conduct. As C.W. Jenks, the

²¹⁸ Preamble [emphasis added].

²¹⁹ Address delivered 10 June 1963. Full text reprinted in United States Senate, Committee on Foreign Relations, Hearings on Executive M, 88th Congress, 1st Sess. (12-27 August 1963) 1001, 1005 (regarding the *Nuclear Test Ban Treaty*).

²²⁰ A.Chayes, *The Cuban Missile Crisis* [:] *International Crises and the Role of Law* (1974), provides an insider's view by a participant in a major international incident.

eminent British jurist, noted: "The regulation of armament is not to be dismissed as a question unfit for lawyers. Within the State the law plays a significant part in limiting the indiscriminate keeping, carrying and use of weapons. In the world community it must play a similar part in regulating the possession, testing and use of arms." ²²¹

Although many lawyers hold responsible positions in their national governments, with quite a few involved directly in decision-making on questions of national defence and arms control, it is to be regretted that the policies they help to shape or implement do not always advance, or even reflect concern for, the cause of peace and a stable world order. Witness, for example, the distressing absence of any constructive reference to the role of international law in virtually all policy statements of the major powers on arms limitation issues. The contributions of academic jurists to these goals have been more noticeable, though still far from significant. As a group, the international legal community, potentially quite influential at both national and global levels, has not been particularly forthcoming, either in analyzing the legal aspects of the arms race or in recommending solutions aimed at defusing international tension and strengthening the rule of law through a negotiated arms reduction. With few exceptions, international lawyers have shied away from playing a part in efforts to end the arms race and to direct national resources toward goals consistent with the principles of the Charter.

Is there anything jurists can do to assist these efforts and to influence governments to live up to their legal and moral obligations? Admittedly, not a great deal can be done at this time, although considerably more should be attempted than has been in the past. First and foremost, jurists should match the vigour and conviction of the advocates of the arms race and assert and re-assert the continuing and overriding importance of international law in the maintenance of global peace and security. All rational governments, regardless of their ideological bent or military power, recognize that in the long run, international anarchy does not and cannot serve their national interest. This fact is more compelling today, when mutual immolation is a distinct possibility, than at any other time in history. Even such a stalwart practitioner of real-politik as Henry Kissinger, has admitted that "a just international order cannot be built on power but only on restraint of power" and that "order can be neither stable nor just without accepted norms of conduct". 222 He warned that

²²¹ A New World of Law? [:] A Study of the Creative Imagination in International Law (1969) 33.

²²² Address to the annual convention of the American Bar Association, 11 August 1975, reprinted in E. McDowell, ed., *Digest of United States Practice in International Law 1975* (1976) 1, 2-3.

"[i]n an age of awesome weapons of war, there must be accommodation or there will be disaster".223

Obviously, there can be no such accommodation as instruments of violence relentlessly accumulate and as a continuing, indeed growing, emphasis is placed on raw power in relations between states. It is axiomatic that a major arms reduction can be achieved only in a more stable world and that stability cannot be secured except through national conduct based upon the principles of the Charter and international law. Despite its limitations, international law provides the indispensable framework for stability and order in a dangerous world. When high government officials and the Secretary-General of the United Nations speak today of a "break down" of international law, 224 of the "disintegration of world public order" 225 and of a "new international anarchy", 226 the legal profession surely cannot remain unconcerned and unresponsive. Merely because suggestions for arms limitation and non-violent means of conflict resolution based upon international law have at the present time only a modest chance of influencing the policies of states, this is no reason for abdicating the traditional role of jurists — that of analyzing, recommending, educating, and informing. If they achieve nothing else, individual and group efforts should contribute to a greater awareness, both of the beneficial role that international law can play in protecting the genuinely vital interests of each country, and of the consequences of any further erosion of world public order. Success in this endeavour will, however, depend in no small measure upon the ability of international lawyers to temper their tendency to act as advocates for their own country's cause with a sense of responsibility for humanity as a whole.227

²²³ Ibid., 2. William O. Douglas, Associate Justice of the U.S. Supreme Court was even more emphatic: "The rule of law is versatile and creative. It can devise new remedies to fit international needs as they may arise. The rule of law has at long last become indispensable for men as well as for nations. Now that the instruments of destruction have become so awesome that war can no longer be tolerated, the rule of law is our only alternative to mass destruction."

²²⁴ Government of Canada, Prime Minister's Address to the House of Commons on Canadian Foreign Policy (15 June 1981) 3 (an undated pamphlet).

²²⁵Rostow, "Foreword" in ACDA, supra, note 121, ii.

²²⁶United Nations Secretary-General, Javier Perez de Cuellar, supra, note 2.

There is much in the present arms race of professional concern to an international lawyer. The list of problems calling for imaginative thinking, new initiatives and continuing inquiry is lengthy and varied: the legality of modern weapons, both those of mass destruction and those regarded as particularly inhumane; the arms race and its impact upon human rights; legal perspectives on the militarization of the common domain of the oceans and outer space; improvements in existing international institutions for the maintenance of peace and in the machinery and procedures for the peaceful settlement of security-related disputes; methods of verification of arms limitation agreements and sanctions for non-compliance; the structure and jurisdiction of future verification and disarmament organizations; the relevance of the principles of the Nuremberg Charter and the Judgment of the International Military Tribunal to current nuclear strategies; and the limitations, if any, in international law upon "propaganda" that, by design or effect, incites international violence. These are some of the issues that jurists could analyze with a view to making recommendations designed to serve the objectives of a world order based on fairness and justice.

The overriding and urgent challenge facing all international lawyers regardless of their nationality — still best expressed in the philosophy of the Charter — is to "preserve succeeding generations from the scourge of war" and to "reaffirm faith in the dignity and worth of the human person". Unless the methodical accumulation and use of coercive power that passes today for military-political strategy gives way soon to the principles enshrined in the Charter, not only will the fundamental aspirations of all human beings for personal security and decent living conditions remain unfulfilled, but the very survival of the human species will be brought into question. Should the mounting prophecies of a nuclear war come to pass, the indifference of jurists will have been partly to blame.

found and immediate sense of the actual consequences of nuclear war, we would be much more willing to confront and challenge national leaders of all nations when they present narrow and self-serving arguments for the continuation of mutual nuclear terror." To preserve a world graced by life (1983) 39 Bull. Atom. Scientists 2, 3 (January). Most recently, in a courageous and profoundly humane message addressed to "all men and women of good will", American Roman Catholic bishops have stated: "To pretend that as a nation we have lived up to all our own ideals would be patently dishonest. To pretend that all evils in the world have been or are now being perpeptuated by dictatorial regimes would be both dishonest and absurd. . . . Like the Soviet Union, this country now possesses so many weapons as to imperil the continuation of civilization. Americans share responsibility for the current situation, and cannot evade responsibility for trying to resolve it." And even more pointedly: "As American Catholics, we are called to express our loyalty to the deepest values we cherish: peace, justice and security for the entire [human] family." In a passage specifically aimed at educators, the bishops said: "To teach the ways of peace is not to 'weaken the nation's will,' but to be concerned for the nation's soul." The Pastoral Letter, supra, note 77.