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## International Law: Implications of the Strategic Defense Initiative

Darlene Cypser

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## NOTES

### International Law: Implications of the "Strategic Defense Initiative"\*

On March 23, 1983, President Reagan announced his "vision of the future which offers hope,"<sup>1</sup> a program to develop new defensive technologies to "counter the awesome Soviet missile threat" and to eliminate the threat of nuclear war.<sup>2</sup> Officially this program is called the "Strategic Defense Initiative," but the American press corps has dubbed it "Star Wars."<sup>3</sup>

Such a system would make use of an assortment of surveillance, communication, and attack devices. Among the most controversial components of the Strategic Defense Initiative (SDI) are: (1) space-based laser systems, (2) the space-based hyper-velocity gun (or rail gun), (3) the space-based "kinetic kill vehicle,"<sup>4</sup> and (4) space-based particle beam weapons. While some may question the feasibility or the political wisdom of the development of a defensive system such as SDI,<sup>5</sup> this paper will only address the legality of SDI in the framework of international space law.<sup>6</sup>

\* This paper was written for an International Law course taught by Professor Yohannes Kassahun in the fall semester of 1985.

1. A transcript of the "Star Wars Speech" can be found at N.Y. Times, Mar. 24, 1983, at A20, col. 5.

2. *Id.*

3. Lin, *The Development of Software for Ballistic-Missile Defense*, 253 SCIEN. AM. 46 (Dec. 1985).

To achieve the goal of a comprehensive defense, the [Strategic Defense Initiative] organization is empowered by the Department of Defense to manage research programs that examine the feasibility of developing technology for a ballistic-missile defense. . . .Such a defense would destroy or incapacitate nuclear-warhead delivery systems on the way to their targets. . . .

The comprehensive defense system most often discussed . . . consists of four tiers. That is, the ballistic-missile defense would attack hostile missiles in each of the four phases of their flight. The phases are the boost phase. . . ; the postboost phase, during which nuclear warheads in reentry vehicles and . . . decoys are sequentially released . . . by a maneuverable "bus"; the mid-course phase, during which the reentry vehicles and the decoys traverse the greater part of their trajectory, and the terminal phase, during which the warheads in their reentry vehicle penetrate the atmosphere and detonate at their assigned targets.

4. The hypervelocity gun uses electromagnets to accelerate projectiles to high speeds and propel them at targets. The "kinetic kill vehicle" is no more than a satellite-based rocket or bullet to be launched at enemy missiles. 131 CONG. REC. H4397-8 (daily ed. June 18, 1985).

5. See generally Lin, *supra* note 3, at 46-53.

6. Some scholars suggested that international law did not apply to space, that space was a "legal vacuum." This view was not widely held; it is generally accepted today, especially since the Outer Space Treaty became effective, that international law does apply to space. G. ZHUKOV & Y. KOLOSOV, INTERNATIONAL SPACE LAW 14 (1984).

*Sources of Space Law*

The sources of international law are succinctly restated in article 38 of the Statute of the International Court of Justice:

- a. international conventions, whether general or particular. . . ;
- b. international custom, as evidence of a general practice accepted as law;
- c. the general principles of law recognized by civilized nations;
- d. . . .  
judicial decisions and teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.<sup>7</sup>

As suggested by article 38, the two elements of custom are "general practice" and "acceptance as law" (*opinio juris*). Universality of practice is not required for "general practice."<sup>8</sup> As Professor Brownlie has noted: "Frequently, individual states for various reasons could not have a practice on certain questions . . . or, although they could have a practice, do not have one (for example, states not taking part in Antarctic or space research have no practice on the respective issues)."<sup>9</sup> Thus all states need not participate in space activities in order to form a custom in international law. If the majority of states participating in space activities act in conformity, then a general practice is assumed.

For an activity to be a general practice, it must exhibit consistency and uniformity. Isolated incidences or erratic behavior will not constitute a general practice. "Provided that consistency and generality of a practice are proved, no particular duration is required: the passage of time will . . . be part of the evidence of generality and consistency."<sup>10</sup>

A practice of a state may be a mere courtesy or the result of a moral sense of obligation. A practice of this sort constitutes a "usage," but a custom requires more. To form a custom a general practice of states must be adhered to because the state feels a legal obligation. "Practice may not be general, but its recognition as a legal norm must be general. Of course, the wider the practice, the greater the basis for presuming that it has been generally-recognized as a norm of law."<sup>11</sup>

Soviet scholars contend that a custom is a tacit agreement that binds all existing states that do not protest its formation, but it does not bind new

7. 59 Stat. 1055, T.S. 993, 3 Bevans 1179. There has been some question whether United Nations General Assembly Resolutions are a source of space law. The dominant view is that resolutions, being nonbinding, do not create law but serve as a restatement or codification of the existing customary law. See Bridge, *International Law and Military Activities in Outer Space*, 13 AKRON L. REV. 649, 663-64 (1980).

8. I. BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 7 (3d ed. 1979).

9. G. TUNKIN, *THEORY OF INTERNATIONAL LAW* 118 (1974).

10. BROWNLIE, *supra* note 8, at 6.

11. TUNKIN, *supra* note 9, at 118.

states which subsequently emerge unless they also accept the practice as law.<sup>12</sup> Western scholars tend to consider a custom to be binding on all states, both those in existence and those which later emerge.<sup>13</sup> Persistent objectors are excepted from custom under both Soviet and Western jurisprudence.<sup>14</sup> Should a custom be applied to a state that neither objects nor recognizes the practice as law by word or deed? Brownlie suggests: "Silence may denote either tacit agreement or a simple lack of interest in an issue."<sup>15</sup>

Of the two main sources of international law, custom and conventions, conventions or treaties have been the dominant source of space law.<sup>16</sup> Unlike custom, treaties are usually only binding upon the signing parties.

However, provisions of a treaty may be simply declaratory of customary international law; or, although not a statement of international law at their inception they may become such with the passage of time through general acceptance by the other nations. Provisions of a treaty which are simply declaratory of international law do not lose their binding effect with abrogation of or withdrawal from the treaty by the parties thereto. But provisions which do not reflect established international law cease to be binding on the contracting parties when they cease to be bound by the treaty.<sup>17</sup>

There are four major multilateral treaties that govern activities in space: (1) the Outer Space Treaty,<sup>18</sup> (2) the Rescue and Return Agreement,<sup>19</sup> (3) the Space Liability Convention,<sup>20</sup> and (4) the Registration Convention.<sup>21</sup> Of these four, only the Outer Space Treaty is relevant to a discussion of space-based ballistic missile defense systems.

12. *Id.* at 128-29.

13. *Id.* at 126-28.

14. *Id.* at 124-26; BROWNLIE, *supra* note 8, at 10.

15. BROWNLIE, *supra* note 8, at 7.

[I]n those instances when the respective forming of a customary norm does not affect a state's interest at the . . . time, its silence cannot be considered to be tacit recognition. . . . But in those instances when an emerging rule affects the interests of a particular state, the absence of objections after a sufficient time can, as a rule, be regarded as tacit recognition of this norm.

TUNKIN, *supra* note 9, at 129.

16. Russell, *Military Activities in Outer Space: Soviet Legal View*, 25 HARV. INT'L L.J. 153, 159 (1984).

17. Bridge, *supra* note 7, 652-53.

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

19. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, done Apr. 22, 1968, 19 U.S.T. 7570, T.I.A.S. No. 6599, 672 U.N.T.S. 119.

20. Convention on International Liability for Damage Caused by Space Objects, done Mar. 29, 1972, 24 U.S.T. 2389, T.I.A.S. No. 7762.

21. Convention on Registration of Objects Launched into Outer Space, effective Sept. 15, 1976, 28 U.S.T. 695, T.I.A.S. No. 8480.

There also are two nuclear disarmament treaties that affect United States' activities in space. These are the multilateral Nuclear Test Ban Treaty<sup>22</sup> and the bilateral ABM Treaty.<sup>23</sup> Both of these treaties could have some impact on SDI and will be discussed.

### *Custom and SDI*

Space law, still in its infancy, has not had the luxury of centuries to develop customary law. The pressure of rapidly advancing technology has forced the swift and uncertain development of norms to control the space powers.

The first, and perhaps the only, universally recognized customary law of space was that of free access. This custom developed early in the space age when the United States and the Soviet Union began orbiting satellites. States did not complain that the satellites passing over their territory were violating their sovereign territory. While no boundary has ever been fixed between air space and outer space, the silent acceptance of the use of space by the U.S. and USSR gave rise to the custom that somewhere there existed a point beyond which state sovereignty did not extend and beyond which all states may have free access and use.<sup>24</sup> This custom was memorialized first in United Nations General Assembly Resolution 1962,<sup>25</sup> and later in article I of the Outer Space Treaty.<sup>26</sup>

There is no international custom that opposes the positioning of weapons in space, whether labeled "offensive" or "defensive."<sup>27</sup> The custom of free access does not prohibit any use of outer space that does not interfere with

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

23. Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, United States-U.S.S.R., 23 U.S.T. 3435, T.I.A.S. No. 7503.

24. O'Neill, Jr., *The Development of International Law Governing the Military Use of Outer Space*, in NATIONAL INTERESTS AND THE MILITARY USE OF SPACE 170 (W. Durch ed. 1984); Vlastic, *Disarmament Decade, Outer Space and International Law*, 26 MCGILL L.J. 135, 168 (1981); Bridge, *supra* note 7, at 661. The only major challenge to this custom came December 3, 1976, when eight equatorial nations claimed sovereignty over portions of the geosynchronous orbit. They argued that geosynchronous orbit was a phenomena caused by the earth and was so closely associated with earth that sovereignty must extend to it. Bogota Declaration, reproduced at 6 J. SPACE L. 193 (1978). This is a weak argument because the same could be said about any other gravitational phenomena, including the presence of the moon. In truth, they were concerned that the geosynchronous orbit would be too crowded by the time they developed the technology to make use of their share of it. This is a valid concern, but the Bogota Declaration is not a legitimate solution and has been largely ignored.

25. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962, 18 U.N. GAOR, Supp. (No. 15) at 15, U.N. Doc. A/5515 (1963). The strength of the custom codified here is demonstrated by the fact that this resolution was unanimously adopted.

26. Treaty citation, *supra* note 18.

27. Vlastic, *supra* note 24, at 168. Some scholars have attempted to find customary space law by using analogies to the law of the sea and air law. While these analogies can be useful in providing a conceptual framework for analyzing what the law should be in space, they should not be used to determine what the law of space in fact is. See Bridge, *supra* note 7, at 662-63.

another state's use of outer space. Is a state free to station weapons in space to protect its interests in national security and self-defense? Is a launching state free to use outer space for the passage of intercontinental missiles, or is aggressive behavior excluded? Would destruction of those missiles be interference or self-defense? Custom leaves these questions unanswered.<sup>28</sup>

### *Treaties and SDI*

#### *Outer Space Treaty*

Some scholars consider the Outer Space Treaty to be merely a codification of generally accepted principles.<sup>29</sup> Others contend that the provisions of the treaty have become part of the "general international law" (that is, customary law), through their acceptance since the treaty has become effective.<sup>30</sup> In either case, the Outer Space Treaty is generally regarded to be applicable to even nonsignatories.<sup>31</sup>

The section of the Outer Space Treaty most directly applicable to military activities in space is article IV:

States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.<sup>32</sup>

28. Vlasic, *supra* note 24, at 168. The General Assembly Resolution on the Prevention of an Arms Race in Space merely urges states "to contribute actively to the goal of preventing an arms race in outer space and to refrain from any action contrary to that aim." G.A. Res. 97C, 36 U.N. GAOR, Supp. (No. 51) at 71, U.N. Doc. A/36/51 (1981). There is no assertion that there is any custom of international space law that would be violated by the stationing of weapons of any kind. In fact, consideration of treaties to prohibit the stationing of weapons in space suggests that there is a need for such a treaty precisely because there is no customary law on the subject. See G.A. Res. 99, 36 U.N. GAOR, Supp. (No. 51) at 76, U.N. Doc. A/36/51 (1981).

29. Bridge, *supra* note 17, at 655.

30. Cheng, *The Legal Status of Outer Space and Relevant Issues: Delimitation of Outer Space and Definition of Peaceful Use*, 11 J. OF SPACE L. 89, 92 (1983).

31. Bridge, *supra* note 7, at 655; Cheng, *supra* note 30, at 92. See also articles 34 and 37 of the Vienna Convention on the Law of Treaties, U.N. Doc. A/Conf. 39/27, (1969), 63 AM. J. INT'L L. 875 (1969).

32. Outer Space Treaty, done Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205.

*Peaceful Purposes.* The term "peaceful purposes" in paragraph 2 of article IV has drawn the most attention from legal scholars. This term is also used twice in the preamble of the treaty.<sup>33</sup>

There are two schools of thought on the meaning of "peaceful purposes." The official United States position is that peaceful purposes means "nonaggressive purposes."<sup>34</sup> The United States claims that the Outer Space Treaty did not create a new principle of space law with this term but merely recalled the prohibition of aggression contained in the United Nations Charter, which is made applicable to space by article III of the treaty.<sup>35</sup> Some opponents of this position argue that all military conduct is potentially aggressive and thus not peaceful. Proponents counter that some military conduct can be defensive and actually forestall aggression and promote peace.<sup>36</sup>

The USSR is the major advocate of the second school of thought, which holds that "peaceful purposes" means "nonmilitary purposes."<sup>37</sup> This interpretation is contrary to both the practice and intent of the parties at the time the treaty was signed. The Soviet Union and the United States had military satellites in orbit before, during, and after negotiating the treaty. The space powers clearly did not intend to outlaw this practice, and there has been no general outcry that its continuation violates the treaty. The Soviet Union's position is not strengthened by its practice of labeling satellites used for military purposes as "nonmilitary."<sup>38</sup> In practice there is only really one position: "Peaceful purposes" does not prohibit military uses of space that are not aggressive.

But what of military uses that are *potentially* aggressive? An unused space-based antisatellite or antiballistic missile device is not "aggressive" if aggression is defined as requiring an attack.<sup>39</sup> But such a "defensive" device could be an essential part of a plan of aggression. The question then arises whether the device is aggressive by just existing or only if the plan is executed.

Perhaps a better definition of "peaceful purposes" would ignore whether a use is military or aggressive in theory and focus on the essential purpose of the use. In this way the uses of space can be divided into two broad

33. "Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes, . . . Desiring to contribute to broad international cooperation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes." 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205.

34. Smith, *Legal Implications of a Space-Based Ballistic Missile Defense*, 15 CAL. W. INT'L L.J. 52, 72 (1985); Bridge, *supra* note 7, at 658.

35. Art. III: "States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations." 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205; Bridge, *supra* note 7, at 659; Charter of the United Nations, art. 3(4), 59 Stat. 1031, T.S. 993, 3 Bevans 1153.

36. C. CHRISTOL, *THE MODERN INTERNATIONAL LAW OF OUTER SPACE* 26 (1982).

37. D. WADEGAONKAR, *THE ORBIT OF SPACE LAW* 104-05 (1981).

38. *Id.* See Bridge, *supra* note 7, at 658.

39. Smith, *supra* note 34, at 73. See also the "Definition of Aggression" Resolution, U.N.G.A. Res. 3314, 29 U.N. GAOR, Supp. (No. 31), U.N. Doc. A/9631, (1974), at 142.

categories: information gathering (whether military or scientific) and strategic positioning of weaponry.<sup>40</sup>

Information gathering can generally be considered a peaceful purpose. The information that results from this activity can be used for many nonmilitary and nonaggressive purposes. The information can also be used for military purposes. Reconnaissance satellites provide data on the military activities of other states and aid in verification of arms agreements. Information from these satellites can also be used to station troops strategically or to guide missiles, but these acts of aggression are only indirectly related to the activities of the satellite and are independently prohibited. Satellites devoted exclusively to information gathering are not the direct source of any form of aggression.<sup>41</sup> These uses of space have been widely accepted and are subject to international regulation.<sup>42</sup>

Weapons, on the other hand, have no "peaceful purpose." They are meant to attack or to deter through the threat of attack. A state has a right to defend its territory,<sup>43</sup> but generally no right to station even defensive weapons outside its own territory. The positioning of weapons in space has never been sanctioned either in treaty or practice. Thus it could be argued that since outer space is the province of mankind,<sup>44</sup> and "mankind" has not given its permission for the stationing of weapons in outer space, no weapons may be placed there.

Perhaps too much attention has been paid to "peaceful purposes" in reference to space-based missile defense systems because, unless there are plans to install them on the moon or other celestial bodies, the term has no application.<sup>45</sup>

*Partial/Total Demilitarization.* There are two independent clauses to article IV of the Outer Space Treaty. The first clause prohibits the placing of "objects carrying nuclear weapons or any other kinds of weapons of mass destruction . . . in orbit," "on celestial bodies," or "in outer space." There is no mention of "peaceful purposes." The second clause limits the use of "the moon and other celestial bodies" to exclusively "peaceful purposes," and prohibits the establishment of military bases, the testing of weapons, and military maneuvers on celestial bodies.<sup>46</sup> Neither "outer space" nor "earth orbit" is mentioned.

40. It is unnecessary at this time to discuss other potential uses of space, such as habitation, mining, and manufacturing as they are not within the scope of this paper.

41. The Soviet Union at one time considered the activities of spy satellites to be aggression, but that was before they had their own.

42. Disarmament treaties in recent years have based verification on the "national technical means" (i.e., reconnaissance satellites).

43. Charter of the United Nations, art. 51, 59 Stat. 1031, T.S. 993, 3 Bevans 1153. See also Bridge, *supra* note 7, at 660; Russell, *supra* note 16, at 175.

44. Art. 1, Outer Space Treaty.

45. Cheng, *supra* note 30, at 103-04.

46. See *supra* text and citation of treaty at note 18. These prohibitions do not apply to man-made objects in space, only natural celestial bodies. Bridge, *supra* note 7, at 657. One writer even suggested that asteroids were not celestial bodies. Almond, Jr., *Arms Control, International*

Both clauses apply to celestial bodies, including the moon, and affect a total demilitarization of these bodies.<sup>47</sup> Total demilitarization, according to Piradov, bans "all military aims in peacetime."<sup>48</sup> The total demilitarization of celestial bodies of article IV(2) of the Outer Space Treaty has been compared to article I of the Antarctic Treaty, which reads as follows: "1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons."<sup>49</sup> The provisions are very similar. Since the Antarctic Treaty has been one of the most successful experiments in demilitarization, one can hope that the Outer Space Treaty will have similar success.

In contrast to both these sections, the first paragraph of article IV only provides for the partial demilitarization of outer space, including earth orbit. This partial demilitarization prohibits nuclear weapons and "weapons of mass destruction." Partial demilitarization bans only the military activities defined by the treaty.<sup>50</sup> "It is possible to argue that since . . . only nuclear weapons and other weapons of mass destruction are prohibited, the development of conventional weapons . . . is permissible."<sup>51</sup> This partial demilitarization is similar to provisions in the Law of the Sea which reserve the high seas for "peaceful purposes" but do not ban armed naval vessels from the high seas.<sup>52</sup>

*Weapons of Mass Destruction.* What is a weapon of mass destruction? "Weapons of mass destruction" is usually thought to include bacteriological, chemical, and radiological weapons now possible, or any future weapons capable of destruction comparable to nuclear weapons.<sup>53</sup>

The beam weapons and small homing vehicles currently under study as components of [SDI] would not cause such a result. On the contrary, the success of the new weapons systems depends upon their ability to zero-in on a small target, for example, a ballistic missile in flight. For this reason beam weapons and homing vehicles are not "weapons of mass destruction."<sup>54</sup>

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*Law, and Outer Space*, in INTERNATIONAL SECURITY DIMENSIONS OF OUTER SPACE 249 n.21 (U. Ra'anan & R. Pfaltzgraff, Jr., eds. 1984).

47. A. PIRADOV, INTERNATIONAL SPACE LAW 91-92 (1976); I. DORE, INTERNATIONAL LAW AND THE SUPERPOWERS—NORMATIVE ORDER IN A DIVIDED WORLD 113-14 (1984).

48. 12 U.S.T. 794, T.I.A.S. 4780, 402 U.N.T.S. 71. See also Cheng, *supra* note 30, at 102.

49. PIRADOV, *supra* note 47, at 91. Piradov warns: "The demilitarization of outer space should be distinguished from its neutralization, which implies the total or partial exclusion of outer space and celestial bodies from the sphere of military operations in the event of an armed conflict." *Id.* at \* note.

50. *Id.*; DORE, *supra* note 47, at 113-14; ZHUKOV & KOLOSOV, *supra* note 6, at 53.

51. DORE, *supra* note 47, at 114; N. MATEESCO MATTE, SPACE POLICY AND PROGRAMMES TODAY AND TOMORROW 42 (1980).

52. Smith, *supra* note 34, at 71.

53. Russell, *supra* note 16, at 160; Smith, *supra* note 34, at 70.

54. Smith, *supra* note 34, at 70.

Space-based particle beam weapons, kinetic kill vehicles, hyper-velocity guns, and most lasers, designed for ballistic missile defense purposes, would not violate the Outer Space Treaty, then, because they are neither weapons of mass destruction nor nuclear weapons. There is one weapon in the SDI program that would violate the Outer Space Treaty. That is the space-based x-ray laser.

*Nuclear Weapons.* The x-ray laser derives its energy from a nuclear explosion. The nuclear explosion directs some of its energy to the weapon's laser rods, but the blast also destroys the weapon itself and releases nuclear energy into the space environment.<sup>55</sup>

Although the term "nuclear weapons" is not defined in the Outer Space Treaty, one definition advanced is any device that "is capable of releasing nuclear energy in an uncontrolled manner" that is to be used "for war-like purposes."<sup>56</sup> Under this or any similar definition, the x-ray laser would be considered a nuclear weapon, and development in space would be in violation of the Outer Space Treaty.<sup>57</sup>

*The Spirit of the Outer Space Treaty.* Under a strict construction of article IV, the space-based x-ray laser is the only component of the SDI program that would be prohibited by the Outer Space Treaty. Some writers argue that

such a construction of the Article is not in keeping with the overall intent and purpose of the Treaty. In their view the inadequacies of Article 4, by the process of interpretation, must give way to the view that the Treaty in its larger sense obliges signatories to advance the peaceful and beneficial uses of the space environment so as to avoid in all areas all conduct that has a military or non-peaceful coloration."<sup>58</sup>

The advocates of the "spirit of the treaty" construction base their arguments on article 31 of the Vienna Convention on Treaties, which states in relevant part:

1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose.
2. The context for the purpose of the interpretation of a treaty shall comprise . . . the text, including its preamble.
- . . . .
4. A special meaning shall be given to a term if it is established that the parties so intended.<sup>59</sup>

These advocates contend that clauses two and four of the preamble to the Outer Space Treaty, which mention "peaceful purposes," and paragraph one

55. *Id.* at 70-71.

56. *Id.* at 70.

57. CHRISTOL, *supra* note 36, at n. 37.

58. *Id.* at 26-27.

59. U.N. Doc. A/Conf. 39/27, (1969), 63 AM. J. INT'L L. 75 (1969).

of article I create a general framework that requires all space activities have a peaceful purpose that will benefit all mankind. This framework then overrides the omissions of article IV and prohibits military use of space.<sup>60</sup>

There are critics of this view, however, who argue:

To adopt the reasoning that defensive activity in outer space is unlawful under Articles I and IV(1) because it would not be, in the wording of Article I, "for the benefit and in the interests of all countries" would mean smuggling the terminology of Article IV(2) into Article IV(1) under the guise of the "common interests" principle and ignoring the express words of Article IV(1).<sup>61</sup>

Such construction tactics also ignore the legislative history of the treaty. Proposals to extend the term "exclusively for peaceful purposes" to all outer space areas were rejected during negotiations on the treaty.<sup>62</sup> Furthermore, the wording of the preamble: "Recognizing the common interest of all mankind in the . . . use of outer space for peaceful purposes" and "Desiring to contribute to . . . use of outer space for peaceful purposes. . .," is not mandatory but, rather, aspirational.<sup>63</sup> "[I]nternational documents refer to the exploration and use of outer space for peaceful purposes exclusively merely as a goal to be pursued."<sup>64</sup>

#### *Nuclear Test Ban Treaty*

The Nuclear Test Ban Treaty is a multilateral treaty that specifically bans nuclear tests or other nuclear explosions in outer space. "Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion . . . in the atmosphere; beyond its limits, including outer space."<sup>65</sup> As noted above, the x-ray laser satellite would require a nuclear explosion to operate it. The use of the satellite then would violate the Nuclear Test Ban Treaty. Even the testing of an operable x-ray laser system in the atmosphere or in outer space would contravene the treaty. Therefore, this treaty would prohibit the use or testing of the x-ray satellite in space.

#### *Anti-Ballistic Missile Treaty*

The Anti-Ballistic Missile Treaty (ABM Treaty)<sup>66</sup> is a bilateral treaty that grew out of the U.S.-Soviet Strategic Arms Limitation Talks (SALT I).<sup>67</sup> Article

60. See Treaty citation, *supra* note 18; Vlastic, *supra* note 24, at 169-74.

61. DORE, *supra* note 47, at 118.

62. *Id.* See also n.99. Cheng, *supra* note 30, at 102; CHRISTOL, *supra* note 36, at 22-26.

63. See Treaty citation, *supra* note 19. Also note that the preamble does not use the word "exclusively."

64. PIRADOV, *supra* note 47, at 93.

65. Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, art. I, done Aug. 5, 1963, 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 43. See also Russell, *supra* note 16, at 163; Bridge, *supra* note 7, at 653.

66. Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, United States-U.S.S.R., 23 U.S.T. 3435, T.I.A.S. No. 7503.

67. Russell, *supra* note 16, at 160; O'Neill, Jr., *supra* note 24, at 179.

I of the treaty prohibits deployment of antiballistic missile (ABM) systems for defense of either party's own territory.<sup>68</sup> Article II defines an ABM system as follows:

1. For the purposes of this Treaty an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory, currently consisting of:
  - a) ABM interceptor missiles . . .
  - b) ABM launchers . . .
  - c) ABM radars . . .<sup>69</sup>

In article V the parties agreed "not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based."<sup>70</sup>

Application of the ABM Treaty to SDI depends upon whether the list components of an ABM system in article II is exhaustive or merely exemplary.

Every previous U.S. administration, including until recently Reagan's own, accepted a very restrictive interpretation of the ABM pact. In that narrow view, the treaty prohibits the testing of any antimissile technologies, including such exotic ones as lasers and particle beam weapons. . . . To date, that stringent interpretation, which is shared by the Soviets, has not hampered the SDI program because it is still in the early research stages.<sup>71</sup>

In early October 1985, however, National Security Adviser Robert McFarlane announced the position (shared by Defense Secretary Caspar Weinberger) that "wide-open testing and even development of the space-based Strategic Defense Initiative . . . is 'approved and authorized' by the ABM treaty."<sup>72</sup> Defense officials argued that the ABM Treaty limitations did not apply to new technology systems.<sup>73</sup> Pentagon officials said that "Agreed Statement D," which was attached to the treaty, exempted exotic systems by providing that any new forms of ABM systems "would be subject to discussion."<sup>74</sup> United States' negotiators to the ABM Treaty disagreed and insisted that the treaty and its agreed statements were drafted with the intent that future exotic systems be covered.<sup>75</sup> Protests of this abrupt turnabout were also heard from other U.S. diplomats, including Secretary of State Schultz, U.S. congressmen, and members of the North Atlantic Treaty Organization (NATO).<sup>76</sup> After a meeting

68. Article III allows two ABM systems per party. A protocol of the treaty limits the parties to one.

69. 23 U.S.T. 3435, T.I.A.S. No. 7503.

70. *Id.*

71. Kittle, *Will Star Wars Zap U.S.-Soviet Arms Talks?*, U.S. NEWS & WORLD REPORT, Oct. 28, 1985 at 34, col. 1.

72. *Resolving a Star Wars Skirmish*, TIME MAGAZINE, Oct. 28, 1985 at 45, co. 1.

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.*; *Will Star Wars Zap U.S.-Soviet Arms Talks?*, *supra* note 71.

with his senior advisers, President Reagan announced that the United States would continue to "voluntarily" adhere to the narrow interpretation, even though the less restrictive view was legally justified.<sup>77</sup>

The suggestion that the United States is not legally bound to apply the ABM Treaty to the new technology systems of SDI is a radical departure from previous interpretations and cannot be justified by a reading of the treaty or analysis of the intentions and practice of the parties to the treaty.

The words "currently consisting of" in article II suggest that the list of components serves as an example of what an ABM system consisted of at one point in time. Smith points out:

The purpose of the new ABM technologies is to counter ballistic missiles or their elements. While they are not listed in Article II, they were not then "currently" available. A reasonable interpretation of Article II is that the Parties intended that the development of new ABM technologies be included within the definition of "ABM systems."<sup>78</sup>

The "Agreed Statement D" mentioned above provides that if other ABM systems are developed "based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radar . . . specific limitations on such systems and their components would be subject to discussion" by the Standing Consultative Committee formed under the treaty.<sup>79</sup> The use of the term "specific limitations" suggests that such new systems would be subject to the general limitations applicable to all ABM systems under the ABM Treaty and may be subjected to more specific limitations within the framework of the treaty if the Consultative Committee can reach an agreement.<sup>80</sup>

As Congressman Dicks pointed out:

Since many of the new technology systems could substitute for the components listed in the treaty, testing them in space or on aircraft would be violations of the treaty as well. Even if the United States and Soviet tests of these new technologies are not violations, the tests can undermine the treaty so as to make it meaningless.<sup>81</sup>

Subsequent statements and practice of both the U.S. and the USSR demonstrate that the treaty is applicable to new technologies. As stated earlier, every U.S. administration since ratification of the ABM Treaty has considered the treaty to apply to all ABM systems and has acted accordingly. Secretary of State Rogers, in presenting the ABM Treaty to the Senate for ratification, testified that "the parties have agreed that future exotic types of ABM systems,

77. *Id.* at cols. 2-3.

78. Smith, *supra* note 34, at 62.

79. *Id.*

80. *Id.* This interpretation is supported by members of the U.S. Salt I negotiating delegation. *Id.* at 63 n.57.

81. 131 CONG. REC. H4397 (daily ed. June 18, 1985).

i.e., systems depending on such devices as lasers, may not be deployed, even in permitted areas.”<sup>82</sup> The Subcommittee on Arms Control, International Security and Science of the United States House of Representatives, released a report in May 1984, which stated that “development and deployment of the SDI [would] result in inconsistencies with and ultimately, outright abrogation of the ABM Treaty.”<sup>83</sup> The Arms Control and Disarmament Agency reported in a 1984 Arms Control Impact statement that: “The ABM Treaty bans the development, testing, and deployment of all ABM systems and components that are sea-based, air-based, space-based, or mobile land-based.”<sup>84</sup> Even Defense Secretary Weinberger has made statements that the ABM Treaty would have to be amended before deployment of SDI.<sup>85</sup>

The Soviet Union has consistently protested that the systems proposed for SDI would be in violation of the treaty. In an interview with *Time Magazine*, General Secretary Gorbachev said: “In our view, [the SDI research program] is the first stage of the project to develop a new ABM system prohibited under the treaty of 1972.”<sup>86</sup>

Clearly, the ABM Treaty is applicable to the new technology systems of the Strategic Defense Initiative and the new interpretation of the ABM Treaty proposed by the Reagan administration cannot be justified and would seriously undermine the treaty. The ABM Treaty bans the development, testing, or deployment of ABM components that are space-based. While “space-based” is not defined in the treaty, it is generally assumed to mean stationed or placed in orbit, not just passing through space.<sup>87</sup>

*Deployment* of the SDI system is prohibited by the ABM Treaty. But, at what point does research end and development and testing begin? Verification by “national technical means” is an important part of the ABM Treaty. Laboratory research and testing is not verifiable by “national technical means.” Field testing would be verifiable by these means and would be in violation of the treaty. “Field-testing in ‘an ABM mode,’ . . . constitutes the culmination of growth, or creation, which the Parties intended to prohibit.”<sup>88</sup>

General Secretary Gorbachev agrees:

What we have in mind is not research in fundamental science. Such research concerning space is going on and it will continue. What we mean is the designing stage. . . . And when they start building models or mockups or test samples, when they hold field tests, now that is something . . . that can be verified.<sup>89</sup>

82. Chayes, *The ABM Treaty and the Strategic Defense Initiative*, 5 *PAGE L. REV.* 735, 740 (1985).

83. 131 *CONG. REC.* H4345 (daily ed. June 17, 1985).

84. Chayes, *supra* note 82, at 740.

85. Smith, *supra* note 34, at 63.

86. *An Interview With Gorbachev*, *TIME MAGAZINE*, Sept. 9, 1985 at 24.

87. Smith, *supra* note 34, at 64.

88. *Id.* at 66.

89. *An Interview With Gorbachev*, *supra* note 86, at 28.

This interpretation is also consistent with the subsequent practice of the parties. Both the United States and the Soviet Union have performed laboratory research on ABM components since the ratification of the treaty. Neither has protested that the other's laboratory research was in violation of the treaty. By their silence, the parties have acknowledged that laboratory research and testing are not in violation of the ABM Treaty.<sup>90</sup>

### *Conclusion*

While the Outer Space Treaty does not totally demilitarize space, it does prohibit the placing of nuclear weapons or weapons of mass destruction in outer space. None of the components of SDI would be considered a weapon of mass destruction, but one component, the x-ray laser, *would* be considered a nuclear weapon. Deployment of the x-ray laser would violate the Outer Space Treaty. Testing or use of the x-ray laser would also violate the Nuclear Test Ban Treaty.

The ABM Treaty does apply to the new technology components of the Strategic Defense Initiative. The ABM Treaty would prohibit the development, testing, or deployment of SDI. "Development, testing and deployment" does not, however, include laboratory research. The treaty is not triggered until the field-testing stage is reached. Any SDI research up to field testing would not violate the ABM Treaty, but any development or testing beyond that point would violate the treaty.

Recent attempts to reinterpret the ABM Treaty are not legitimate. Deployment of the Strategic Defense Initiative would require amendment to, withdrawal from, or breach of the ABM Treaty. Amendment does not seem likely at this time. Further, any amendment that allowed deployment of SDI would render the treaty meaningless. While withdrawal is allowed under international law, either withdrawal or breach of the treaty would have disastrous political consequences. These consequences could include the increase of East-West tensions, the acceleration of the arms race (and its expansion into space), and an increased probability of nuclear war.

*Darlene Cypser*

90. Smith, *supra* note 34, at 66.