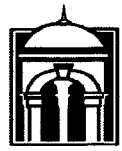
Tulsa Journal of Comparative and International Law

Volume 7 | Issue 1 Article 10

9-1-1999

State's International Legal Role: From the Earth to the Moon, A

Stacey L. Lowder



A STATE'S INTERNATIONAL LEGAL ROLE: FROM THE EARTH TO THE MOON

Stacey L. Lowder[†]

Since before the beginning of the space age, debate has existed regarding the legal status of *terra nullius*, that is, no man's land. With today's advanced technology, the moon and other celestial bodies are easily accessible. As territory belonging to no state, celestial bodies are comparable to the New World. What is the law governing the moon and other celestial bodies? Are they common heritage of mankind or can these be claimed as sovereign territory by a state just as the New World was claimed? What are the limits on states' utilization of outer space and celestial bodies? Where do those limits come from? Where does outer space begin? These questions are addressed in the following text.

In Section I of this paper, the history of international space law will be outlined. In Section II, explanation will be given of the nature of international space law, including the spatial classification of territory and types of state jurisdiction. The purpose of this explanation is to provide a foundation on which to address the idea of "common heritage of mankind." Section III provides a description of customary international law and treaties governing the moon and other celestial bodies. The five treaties and four resolutions governing the moon and other celestial bodies are compared to the Antarctica Treaty. The legal status of outer space, including the moon and other celestial bodies, will be explained in detail in Section IV. The purpose of Section V is to present the controversial issues of "where outer space begins" and the definition of "peaceful uses." In conclusion, the paper will address the possible future issues regarding international space law.

[†] B.A. Oklahoma City University (1995); Rotary Ambassadorial Scholar (1997); J.D. the University of Tulsa College of Law (1999).

I. HISTORY OF INTERNATIONAL SPACE LAW

A. Landmarks in the Development of International Space Law

Even before the Soviet Union's successful launch of Sputnik 1 on October 4, 1957, discussions were taking place regarding the legal perspective on access to and utilization of outer space. Prior to and during the employment of artificial satellites by both the Soviet Union and the United States, published works from different countries revealed an unfavorable view of such activity.[1] Though unfavorable views existed, not a single state questioned the legality of these activities.[2] States began to view uses of outer space in another context, specifically the legal implications of disarmament and arms control.[3] As legal norms were conceptualized and developed, adverse views abated. The emphasis on security issues promoted the objective of a shared, multinational right to access outer space exclusively for peaceful and scientific purposes.[4]

From July 1, 1957, through December 31, 1958, over sixty-six countries gathered together for the International Geophysical Year (IGY), in which representatives articulated their countries' hopes and expectations regarding rights of access to outer space.[5] That conjoint endeavor reflected observations and input from over 30,000 scientists and technicians for a period of eighteen months.[6] The achievement of the IGY "consists in its having secured the principle that orbiting satellites, as well as other uses of space for nonharmful purposes, represents a lawful activity which does not infringe upon any protected interests of states."[7] This general acceptance allowed states with space capabilities to advance these capabilities and in doing so the legality of activities in space evolved. Therefore, the development of the legal status of the use and enjoyment of outer space can attribute its inception to the endeavors of the IGY.[8]

During the thirteenth session of the General Assembly of the United Nations, held at the end of 1958, further discussion took place regarding the legality of outer space activities.[9] Although an absolute consensus was not reached on every issue, states' views were established which served as a basis for the development of future community policies re-

1. *See* MYERS S. MCDOUGAL ET AL., LAW AND PUBLIC ORDER IN SPACE 204 (1963).
2. *See id.* at 203.
3. *See id.* at 204.
4. *See id.*
5. *See id.* at 203.
6. *See* MCDOUGAL, *supra* note 1, at 203.
7. *Id.*
8. *See id.*
9. *See id.* at 212.

garding the policy of access to and enjoyment of outer space.[10] Exploration of space proceeded without opposition from any state. In the opinion of an Italian representative, Professor Ambrosini, an apparent consent by all states to space exploration amounted to a "tacit and unanimous agreement obtained between these states in the sense of allowing, during the geophysical year, the launching and circulation of rockets and artificial satellites which practically overflew all the territories of various states without any protest being made on the grounds of violation of sovereignty."[11] Whether or not the space vehicles and artificial satellites actually entered a state's territory may be challenged, Professor Ambrosini was correct in his assertion that the majority of states approved of the activities.

The Geophysical Year provided an opportunity for exploration in which states could test their limits. As exploration of space continued at an unprecedented pace, IGY provided a forum for exploration of legal implications of those activities. Because scientific advances were continually being made, new issues were being raised. The General Assembly of the United Nations then contributed to the development of space law by addressing those new issues.[12] As states with space capabilities embarked on a new frontier, law was developed to govern this new field.

B. The United Nations and the Development of International Space Law

The work of the United Nations holds intrinsic importance in the conception and the development of space law because it has served as the main forum for the achievements of this branch of international law since 1945.[13] While space activities occurred more often, agreements establishing a degree of consensus were achieved in United Nations deliberations.[14] The General Assembly's Committee on the Peaceful Uses of Outer Space (COPUOS) serves as the United Nations' official organ in negotiating principles implemented in the five treaties on the law of outer space and the four resolutions relevant to that law.[15] These treaties and resolutions cover issues of appropriation, peaceful use and exploration, astronauts' activities, liability for damage caused by space objects, and registration of space objects.

Resolutions are not law-making devices as are treaties, conventions or declarations. Also, none of the five United Nations treaties relating to outer space, in their capacity as treaties, affects the legal rights and duties

10. *See id.* at 213.
11. MCDOUGAL, *supra* note 1, at 207.
12. *See id.* at 212.
13. *See* BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW 150 (1997).
14. *See* MCDOUGAL, *supra* note 1, at 212.
15. *See* CHENG, *supra* note 13, at 150.

of non-parties. However, by way of Article 38 of the 1969 Vienna Convention on the Law of Treaties, a rule set forth in a treaty may become binding upon a third state as a customary rule of international law. A rule of customary international law is binding *erga omnes*; therefore, the treaties set forth by the United Nations play a vital role in the development of international space law governing all states. Similarly, a General Assembly resolution may be given weight as a declaration of general principles and would then bind all states.

II. NATURE OF INTERNATIONAL SPACE LAW

A. The Relevance of International Law

Space law is not a legal system independent from the law that governs on earth.[16] In the words of Professor Bin Cheng, space law is "a functional classification of those rules of international law and of municipal law relating to outer space, natural and man-made objects in outer space, astronauts and man's activities in outer space or affecting outer space."[17] Since its beginning, international law has adhered to no intrinsic geographical limits.

International space law, rather than domestic law, controls in the matter of boundaries between airspace and outer space.[18] Therefore, this paper concentrates on international law. While states' autonomous domestic laws have scientific and functional advantages, they only contribute insight to situations governed by international law.[19] The binding, or perhaps non-binding nature, of international law is important to understand because it contributes to the development of space law.

B. The Nature of International Law

Because international law extends to outer space, it is necessary to understand its nature. When discussing international law, the premises of the discussion is *lex lata*, that is, the law as laid down, as distinguished from *lex ferenda*, the law that is yet to be made.[20] International law has been defined as

> the body of rules of conduct, enforceable by external sanction, which confer rights and impose obligation primarily though not exclusively, upon sovereign states and which owe their validity both to the consent of states as expressed in custom and treaties and to the fact of the exis-

16. *See id.* at 429.
17. *Id.*
18. *See id.*
19. *See generally id.* at 429.
20. *See* CHENG, *supra* note 13, at 430.

tence of an international community of states and individuals.[21]

However, many elements of this definition are controversial and cannot be considered as a correct representation of *lex lata*.[22] Many of these elements fall into the category of *lex ferenda*, only representing ideas without legal implications.

Carl Christol asserts that several factors contribute to the emergence of international law regarding the space environment.[23] Factors that contribute to the progression of international law governing outer space include scientific and technological progress, legal and political clout, and states' dissonant interests and values.[24] These factors are subject to constant change. In the midst of changing facts, needs, interests, and values, focus must remain on *lex lata* and not *lex ferenda*, those philosophical measures not yet recognized as law. The international legal system is evolving and progressing in order to meet the changing needs of an international society, but weight can only be given to those laws that are established. The term international law refers to an existing system of law made of, by, and for subjects of international law.[25]

The international legal system comprises all norms having legal force within the system.[26] Article 38(1) of the Statute of the International Court of Justice serves as an authoritative guide for recognizing the component parts of international law.[27] What the Statute of the International Court of Justice Article 38(1)(c) calls "the general principles of law" are those general principles of law found within every legal system by which it is distinguished.[28] Article 38(1)(b) identifies another component as "international custom, as evidence of a general practice accepted as law."[29] These two components articulated in Articles 38(1)(c) and (b) represent general international law.[30] This group of rules, referred to as general international law, consists of the rules of the international legal system that are applicable *erga omnes*, that is, to all the subjects of international law, and that are generally accepted by those subjects as law.[31]

---

21. HERSCH LAUTERPACHT, INTERNATIONAL LAW 9 (1970).

22. *See id.*

23. *See* CARL CHRISTOL, THE MODERN INTERNATIONAL LAW OF OUTER SPACE 1-2 (1982).

24. *See id.*

25. *See* CHENG, *supra* note 13, at 383-84.

26. *See id.* at 175.

27. Bin Cheng, *How Should We Study International Law*, 13 Chinese Y.B. Int'l L. & Affairs 223. (discussing I.C.J. Stat. art. 38(1)) (on file with author).

28. *See id.*

29. I.C.J. Stat. art. 38.

30. *See* CHENG, *supra* note 13, at 177. The term general international law is used here synonymously with customary international law.

31. *See id.* at 176.

Another component of international law that is found in the Statute of the International Court of Justice Article 38(1)(a) is "international conventions."[32] According to the 1969 Vienna Convention on the Law of Treaties Article 34, "a treaty does not create either obligations or rights for a third State without its consent."[33] In the same treaty, however, Article 38 states that nothing precludes a rule established in a treaty from becoming binding on third parties as a rule of general international law.[34] When discussing international law, a clear distinction must be kept between those laws applicable *erga omnes* and those applicable only to parties of a treaty. Also, one must remember that the Charter of the United Nations has no legislative authority on non-contracting parties.[35]

In international law, subjects of international law are states and other entities recognized by states as being endowed with international legal personality.[36] Debate exists as to whether international law governs bodies and persons other than states.[37] Insofar as treaties are concerned, only subjects of international law can enter into them, and as discussed above, these treaties bind only treaty parties unless the treaty rules have become rules of general international law.[38] In the context of international space law, the treaties governing outer space, including the moon and other celestial bodies, become binding on all states *only* when they have become rules of general international law accepted by the generality of states.

C. The Extraterrestrial Application of International Law

Under general international law, there are few activities of states that are either universally lawful or unlawful.[39] Whether an act is lawful or not, depends upon its *locus*, that is, the location where an activity took place.[40] According to Black's Law Dictionary, territory is that "part of a country separated from the rest and subject to a particular jurisdiction."[41] The spatial division of territories must be clear in order to determine the legality of an act.

In the *Palmas Island Arbitration* (1928) between the Netherlands and

---

32. *See* I.C.J. Stat. art. 38. Conventions are also called treaties.

33. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Conv.].

34. *See id.*

35. *See id.*

36. *See* CHENG, *supra* note 13, at 432.

37. *See* LAUTERPACHT, *supra* note 21; *see also* REBECCA M.M. WALLACE, INTERNATIONAL LAW 9 (3d. 1997) (asserting that states are no longer the exclusive subjects of international law).

38. *See* CHENG, *supra* note 13, at 433.

39. *See id.* at 387.

40. *See id.* at 75.

41. BLACK'S LAW DICTIONARY 1484 (7th ed. 1999).

the United States, the sole arbitrator, Judge M. Huber, stated that territorial sovereignty is the right of a state in regard to a portion of the globe "to exercise therein to the exclusion of any other state, the functions of a State."[42] He went on to say that

> the development of the national organization of States during the last few centuries and, as a corollary, the development of international law, have established this principle of the exclusive competence of the state in regard to its own territory in such a way as to make it the point of departure in settling most questions that concern international relations.[43]

Referring to the law as it was at the time of the arbitration, Judge Huber pointed out that the world was divided into three types of territories.[44] National territory is that over which a State exercises territorial sovereignty to the exclusion of all others.[45] *Territorium extra commercium* is that which is not subject to national appropriation, but is open to use by all. Literally, it is territory outside commerce, such as the high seas.[46] *Territorium nullius* is "territory without a sovereign recognized as a subject of international law, and hence susceptible in law of being acquired by a subject of international law."[47] That is, territory not yet appropriated to any state. International law now recognizes a fourth category of territory called *territorium commune humanitatis* meaning territory that is "common heritage of mankind".[48]

While both *territorium extra commercium* and *territorium commune humanitatis* cannot be territorially appropriated by any state, Professor Cheng notes that "they differ in that the former is essentially a negative concept, whereas the latter is a positive one."[49] *Territorium extra commercium* allows individual states to exercise discretion regarding the "administration, exploitation and use of natural resources of the territory in question, while *territorium commune humanitatis* leaves such matters to the discretion of the international community as a whole."[50]

With the areas of the world classified, a determination and regulation

---

42. CHENG, *supra* note 13, at 385.

43. *Id.*

44. *See id.*

45. *See id.* (quoting Judge Max Huber in the Palmas Island Arbitration that "territorial sovereignty always belongs to one, or in exceptional circumstances to several States, to the exclusion of all others").

46. *See id.* at 386.

47. CHENG, *supra* note 13, at l-iii.

48. *See id.* at 386.

49. *Id.*

50. *Id.*

of actions of states can be reached. Professor Cheng asserts that "the functional classification of activities of states into those that are lawful and those that are unlawful follows—and not precedes—spatial delimitation."[51] An example asserted by Professor Cheng is that a state may or may not arrest a foreign vessel for monitoring its electronic defense installations depending "not on the nature of the act but primarily on the *locus*, of both the act and the arrest, i.e., whether the act of intelligence-gathering and the arrest are carried out in a state's own territory, in the territory of another State, on the high seas, in no man's land, or in an area which is the 'common heritage of mankind'."[52]

During the Geophysical Year, countries throughout the world proceeded on the premise that the launching and flight of space vehicles was allowed regardless of what territory they passed "over" during the course of their flight.[53] Professor McDougal asserts that "there may have been initiated the recognition or establishment of a generally accepted rule to the effect that, in principle, outer space is, on conditions of equality, freely available for exploration and use by all in accordance with existing or future international law or agreements."[54] No state challenged the conclusion of the report given by the Ad Hoc Committee that outer space is free under conditions of equality.[55] These actions by states have contributed to the creation of the rules governing such actions.

D. Types and Elements of State Jurisdiction

In order to determine the legality of acts in different territories, an understanding of the nature of state jurisdiction is necessary. In international law, states are recognized as having three types of jurisdiction: that over its own territory; that over its own ships, aircraft, and spacecraft; and that over its own nationals, be they natural or legal persons.[56]

"Principles of jurisdiction determine: (a) a state's authority to adjudicate within its own territorial boundaries; (b) a state's authority to establish norms of conduct applicable both inside and outside its borders; and (c) a state's authority to exercise power to enforce its proscribed norms."[57] Jurisdiction can be divided into three types: territorial jurisdiction, personal jurisdiction, and quasi-territorial jurisdiction, and into two elements described by Professor Cheng as jurisfaction and jurisaction.[58]

---

51. *Id.* at 387.

52. CHENG, *supra* note 13, at 387.

53. *See* MCDOUGAL, *supra* note 1, at 203.

54. *Id.* at 211.

55. *See id.*

56. *See* CHENG, *supra* note 13, at 387.

57. THOMAS BUERGENTHAL & HAROLD G. MAIER, PUBLIC INTERNATIONAL LAW IN A NUTSHELL, 159 (2d. ed. 1990).

58. *See* CHENG, *supra* note 13, at 72.

The American Law Institute adopted in its *Second Edition of Restatement of the Law* a similar distinction between jurisdiction to prescribe norms of conduct and jurisdiction to enforce the prescribed norms.[59] Professor Cheng asserts that jurisfaction "covers more than merely jurisdiction to legislate, and jurisaction more than mere law enforcement."[60] The *Third Edition of Restatement of the Law* has since reverted to a tripartite division of jurisdictions to prescribe, to adjudicate and to enforce.[61] The schematic classification set forward by Professor Cheng is helpful in understanding territorial jurisdiction as a whole.

Territorial jurisdiction, personal jurisdiction, and quasi-territorial jurisdiction should be distinguished. Territorial jurisdiction is the sum total of the powers of a state in respect of *terra firma* under its governmental authority, including all persons and things therein, and the extra-territorial activities of such persons.[62] Such power is derived from territorial sovereignty or may be derived from treaties, peaceful occupation, or even belligerent occupation.

Personal jurisdiction is "the sum total of the powers of a state in respect of individuals or corporate bodies or business enterprises having its nationality or otherwise enjoying its protection or owing it allegiance, wherever they may be."[63]

> Quasi-territorial jurisdiction comes between territorial jurisdiction and personal jurisdiction. It is the sum total of the powers of a state in respect of ships, aircraft and spacecraft (to the extent to which they are also granted legal personality) having its nationality or registration, . . . but also to all persons and things on board, including the activities of such persons, whether on board the craft or elsewhere.[64]

Jurisfaction, the normative element, represents the power of a state to adopt binding legal norms and to apply them with binding effect through its appropriate organs.[65] Jurisaction, the physical element, is the power of a state, at any given time or place, physically to perform any governmental function, be it the act of actually making, applying, implementing or enforcing laws. Professor Cheng explains that this includes "holding a legislative assembly, conducting an administrative inquiry, setting up a

---

59. *See* RESTATEMENT (SECOND) OF FOREIGN RELATIONS LAW OF THE UNITED STATES §§ 17-20 (1965) (cited in BUERGENTHAL *supra* note 56, at 159.)

60. *See* CHENG, *supra* note 13, at 72.

61. *See* RESTATEMENT (SECOND) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 401 (1965) (cited in BUERGENTHAL *supra* note 56, at 159.)

62. *See* CHENG, *supra* note 13, at 72.

63. *Id.*

64. *Id.* at 73.

65. *See id.*

tribunal, or arresting a wanted person."[66]

A state's personal jurisfaction over its nationals is limitless in its geographical scope, but such enacted laws may not be enforced while its nationals are in a foreign country because such person is under the territorial jurisaction of another state.[67] A hierarchy exists: territorial jurisaction prevails over all, and quasi-territorial prevails over personal jurisaction.[68] This means that a state may, in its own territory, pass laws applicable to its own nationals who are in foreign countries and try them *in absentia*, but it may not send its officers to where they are in order to arrest them.[69] International law restricts any attempt to exercise personal jurisaction at a place, which is subject to the territorial or quasi-territorial jurisaction of another state.[70]

Therefore, it is apparent that the legality of acts depends on their *locus*, as well as their nature and the person by whom they are carried out.[71] In order to reach an understanding of law governing *res nullius*, it is important to understand state jurisdiction. The absence of territorial sovereignty in *res nullius* does not prohibit a state from exercising either its personal or quasi-territorial jurisdiction over its nationals, ships, aircraft or spacecraft.[72] The absence of territorial sovereignty only means that territorial jurisaction can not be exercised in *terra nullius*.[73]

The distinction between jurisfaction and jurisaction is necessary in order to understand the consequences of the judgment of the Permanent Court of International Justice (PCIJ) in The S.S. Lotus Case.[74] In that decision, the court rejected the territoriality of criminal law as a binding rule of international law and affirmed, in effect, the universal scope of territorial jursfaction and the overriding character of territorial jurisaction.[75] The PCIJ stated that states have a wide measure of discretion

> in application of their laws and the jurisdiction of their courts to persons, property, and acts outside their territory. States' discretion is only limited in certain cases by prohibitive rules; in regards to other cases, every state remains free to adopt the principles which it regards as best and most suitable. All that can be required of a state is that it should not overstep the limits which international law places upon its jurisdiction;

66. *Id.*
67. *See* CHENG, supra note 13, at 74.
68. *See id.*
69. *See id.*
70. *See id.*
71. *See id.* at 75.
72. *See* CHENG, *supra* note 13, at 79.
73. *See id.* at 74.
74. *See* The S.S. Lotus (France v. Turkey), 1927 P.C.I.J. (ser. A) No. 10.
75. *See* id.

within these limits, its title to exercise jurisdiction rests in its sovereignty.[76]

III. SOURCES OF INTERNATIONAL SPACE LAW

A. The Formation and Emergence of Rules of International Law

General international law is created when consent is given by the generality of states that a given rule is a rule of international law with application to all subjects of the legal system.[77] This general acceptance may be labeled *opinio generalis juris generalis*.[78] Article 38(1)(b) of the ICJ Statue speaks of "international custom, a general practice accepted as law."[79] International law is not applied to states by a governing authority-it is founded on acceptance by states.[80]

The material element of "custom" has been much debated. Professor Cheng asserts that custom differs in importance in the international legal system as it does in a municipal system.[81] What in municipal law is an indispensable constituent element serves, in general international law, as *evidence* of a legal norm.[82] This is articulated in Article 38(1)(b) of the International Court's Statute.[83] Usage or State practice in the ascertainment of rules of general international law is the means of establishing the existence of a rule.[84] A rule exists even when it is not used, so general acceptance of a rule is significant.[85] Article 38 of the Statute of the International Court of Justice speaks of "judicial decisions and teachings of the most highly qualified publicists of the various nations, as *subsidiary means* for the determination of rules of law."[86]

Professor Cheng asserts that the term "custom" does not require prolonged usage as such, but can be instant.[87] Professor Rebecca Wallace also asserts that "custom must be distinguished from mere usage."[88] She explains that a state may act a certain way only out of "courtesy, friend-

---

76. The S.S. Lotus, *supra* note 74, at 18.

77. *See* CHENG, *supra* note 13, at 179.

78. *See id.* at 180. Professor Cheng defines *opinio generalis juris generalis* as "a general *opinio juris* among the subjects of international law that the rule is one of general international law." *Id.* at 1.

79. I.C.J. Stat. art. 38.

80. *See* WALLACE, *supra* note 37, at 3.

81. *See* CHENG, *supra* note 13, at 180.

82. *See id.*

83. *See* I.C.J. Stat. art. 38

84. *See* CHENG, *supra* note 13, at 180.

85. *See id.* at 181.

86. I.C.J. Stat. art. 38 (emphasis added).

87. *See* CHENG, *supra* note 13, at 191.

88. WALLACE, *supra* note 37, at 9.

ship, or convenience", rather than out of consent to a legal obligation.[89] Rules of custom consist of two elements: material and psychological.[90] The material element is a state's behavior and practice; the psychological element is the conviction held by a state that its behavior is mandatory.[91] Professor Cheng asserts that it is not a legal duty that exists, rather it is a state's acceptance of a given rule as a rule of international law and that rule is invocable against that state.[92] Much debate continues regarding the definition of the psychological element of "custom." Therefore, careful attention must be given states' acceptance of legal norms in order to determine those legal rights and duties that are applicable to all states.

B. The Relationship Between General International Law and Treaties

As previously discussed, treaties are binding only on contracting parties, unless the rules they incorporate have become rules of general international law. It is important to keep in mind that only treaty parties are bound by treaty provisions. Whether the metamorphosis of treaty provisions into rules of general international law will occur depends on the attitude of states.[93] Treaty provisions are transformed into rules of general international law whenever a provision becomes *opinio generalis juris generalis*.[94] The only requirement is the acceptance of a rule as one of general international law by the dominant section of that particular subject, whether or not contracting parties.[95] There is debate as to whether acceptance is required only from the dominant section, or from the international community as a whole.

In the creation of rules of general international law, assertions have been made that the weight of states is not equal and that unanimity is not required.[96] In order for a given norm to be pronounced a rule of general international law, acceptance by the preponderant weight of states is requisite.[97] Calculation of the weight of different states varies with the subject matter, the context, and the circumstances.[98] It is important to recognize that this difference does exist and may legitimately be taken into account, although it undermines the concept of sovereign equality.[99] Because international law is a horizontal system and is composed of a self-

89. *Id.*
90. *See id.*
91. *See id.*
92. *See* CHENG, *supra* note 13, at 1-1ii.
93. *See id.* at 190.
94. *See id.* at 191.
95. *See id.*
96. *See id.* at 190.
97. *See* CHENG, *supra* note 13, at 190.
98. *See id.*
99. *See id.*

governing society, it is understandable that the dominant section plays such a controlling role.[100]

One may conclude that all the five treaties relating to outer space, signed by the dominant space powers, may all become rules of general international law. This conclusion can be refuted by the fact that all five treaties contain a withdrawal clause permitting the contracting states to withdraw from the treaty by written notice.[101] The effect of a withdrawal clause is defeated when a state remains bound by its provisions on account of their having become rules of general international law.[102] While debate exists regarding the extent to which the dominant section controls, it is well established that the generality of states must recognize the treaty provisions as expressions of general international law in order for those provisions to bind third states.[103] Before that recognition, the treaty provisions are only binding on the state parties and are not binding *erga omnes*.[104] With this in mind, the provisions of the following treaties will be closely examined.

1. Antarctica Treaty

The legal status of Antarctica is a relatively recent example of *territorium nullius* becoming *territorium extra commercium*. Accordingly, a background of Antarctica will be helpful to understand its legal status.

Antarctica was discovered in the early 1800's.[105] The first known landing was made on February 7, 1821, by an American sealer.[106] Yet, it was not until the 1840's the Antarctica was established as a continent.[107]

In the 1900's, seven countries, known as "claimant states" made claims of sovereignty over Antarctica.[108] These countries based their claims on a diverse assortment of theories, including the well-worn doctrine of "discovery" or "exploration," as well as "contiguity" or proximity to the Antarctic landmass.[109] After World War II another group of five countries—all with extensive contacts to the continent—asserted that they would neither maintain nor acknowledge any territorial claims to

100. *See id.* at 191.

101. *See id.*

102. *See* CHENG, *supra* note 13, at 191.

103. *See id.*

104. *See id.*

105. "Antarctic," Microsoft Encarta 98 Encyclopedia (1993-1997).

106. *See id.*

107. *See id.*

108. GURUSWAMY & HENDERSON, INTERNATIONAL ENVIRONMENTAL LAW IN A NUT SHELL, 172-73 (1997). These "claimant states" are the United Kingdom (1908), New Zealand (1923), Australia (1933), France (1938), Norway (1939), Chile (1940) and Argentina (1942).

109. *Id.* at 172.

Antarctica. They became known as the 'nonclaimant states.'"[110]

The Antarctic Treaty was concluded in 1959, freezing for thirty years all territorial claims to Antarctica and dedicating the entire continent to peaceful scientific investigation. The treaty came into effect in 1961 and "in 1991, 24 nations approved a protocol to the treaty that would ban oil and other mineral exploration for at least 50 years."[111] The Antarctic Treaty set precedent for other areas not appropriated to any state. While the Treaty is only binding on state parties, its provisions have become rules of general international law that are binding on all states.

2. Four Resolutions and Five Treaties on Outer Void Space and Celestial Bodies

Since the beginning of international space law development, debate has existed within COPUOS as to the best method to establish such law. The Soviet Union favored a treaty method because only States who had given their consent would be bound. The United States, however, who commanded a two-thirds majority in the United Nations, insisted on a resolution rather than a treaty.

Resolutions lack legally binding force, but have beneficial characteristics of simplicity and flexibility. Resolutions can be adopted, implemented and changed without delay, requiring approval from only a two-thirds majority. The disadvantage of resolutions is that they offer no recourse because they are not binding, with the exception of matters concerning the budget and procedure.

Treaties are legally binding on the parties to the agreement, which allows the establishment of a legal framework. The problem with treaties is that they may take a long time for parties to come to agreement. As will be seen below, after five treaties were drawn up, COPUOS returned to the previous method of elaborating principles in resolutions, as seen in *Resolution 37/92 of December 10, 1982 on Principles Governing the Use by States of Artificial Satellites for International Direct Television Broadcasting*. This exemplifies the difficulty that can be encountered with treaties.[112]

Resolution 1721 (XVI) of December 20, 1961 "commends" states to use outer space for exploration in conformity with international law and not subject celestial bodies to national appropriation. [113] At the time of the resolution, 1961, outer void space, not being *terra firma*, was probably

110. The Antarctic Treaty, Dec. 1, 1959, 402 U.N.T.S. 71. This group consisted of Belgium, Japan, South Africa, the U.S.S.R. and the United States.

111. GURUSWAMY & HENDERSON, *supra* note 108, at 172.

112. *See* CHENG, *supra* note 13, at 154.

113. *See* Resolution 1721 (XVI) of December 20, 1961, G.A. Res. 1721 (cited in CHENG, *supra* note 13, at 735).

already considered an international law *res extra commercium* not subject to national appropriation.[114] Celestial bodies, however, being *terrae firmae*, could legitimately be considered as international *res nullius* susceptible of being appropriated to a state through effective occupation.[115] While this resolution did not change international law, it played political importance in the development of the legal status of outer space and especially celestial bodies.[116]

Resolution 1884 (XVIII) of October 17, 1963 calls for all states to declare their intention not to station in outer space any objects carrying nuclear weapons or other kinds of weapons of mass destruction.[117] *Resolution 1962 (XVIII) of December 13, 1963* represents an understanding between the Soviet Union and the United States that ground rules would be observed in the exploration and use of outer space.[118]

Resolution 37/92 of December 10, 1982 on Principles Governing the Use by States of Artificial Satellites for International Direct Television Broadcasting (DBS resolution) was written after a gap of nineteen years since the previous resolution.[119] During that period the United Nations proceeded by way of treaties in its development of international space law; therefore, the DBS resolution represents a return to the previous method of elaborating principles by way of resolution, rather than treaty.[120] These resolutions, although not legally binding, were significant contributions in the development of international space law.

The five United Nations treaties so far adopted contributing to the development of international space law have all come into force.[121] *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, January 27, 1967* (1967 Space Treaty) is the first and the most important of the treaties.[122] The driving force behind the conclusion of this treaty was the successful landing by the Soviet Union's Luna IX on the moon

---

114. *See* CHENG, *supra* note 13, at 152.

115. *See id.*

116. *See id.*

117. *See* Resolution 1884 (XVIII) of October 17, 1963 (cited in CHENG, *supra* note 13, at 736).

118. *See* Resolution 1962 (XVIII) of December 13, 1963 (cited in CHENG, *supra* note 13, at 736).

119. *See* Resolution 37/92 of December 10, 1982 on Principles Governing the Use by States of Artificial Satellites for International Direct Television Broadcasting (cited in CHENG, *supra* note 13, at 738). [hereinafter DBS resolution].

120. *See* CHENG, *supra* note 13, at 154.

121. *See id.* at 155.

122. *See* Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Outer Celestial Bodies, Oct. 10, 1967, 21 O.O.S.A. (Office for Outer Space Affairs) 2222. [hereinafter Outer Space Treaty].

on February 3, 1966.[123] The United States was set on achieving a treaty through the United Nations that would restrict exploration of outer space to peaceful purposes only and would prevent any nation from claiming sovereignty over any celestial bodies.[124]

Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space, April 22, 1968 (Astronauts Agreement) was a response to fatalities that occurred in space exploration.[125] On January 27, 1967 three United States astronauts died before take-off due to a fire that broke out on board Apollo I.[126] Shortly thereafter, a Soviet died in Soyuz I when landing.[127] The United Nations General Assembly requested that COPUOS prepare "an agreement on assistance to and return of astronauts and space vehicles."[128]

The Astronauts Agreement calls on States to notify both the launching authority and the Secretary-General of the United Nations if it is discovered that an astronaut or a space object made an emergency landing in territory under their jurisdiction or in any place not under the jurisdiction of any state.[129] If within their territory, states are to undertake to search, rescue, and return the astronaut unconditionally and if outside the territory, render such other assistance that they can.[130]

Convention on International Liability for Damage Caused by Space Objects, March 29, 1972 was achieved after nine years of discussion.[131] States, especially without advanced space technology, were concerned about the danger of space objects falling within their country and causing personal injuries or material damage.[132] The convention is well drafted and provides more information than Article VII of the 1967 Space Treaty.[133] The Convention clearly defines the conditions in which a launching State or inter-governmental organization becomes liable, establishes the procedure for the presentation of claims, and provides means for resolving disputes regarding the settlement of claims.[134]

---

123. *See* CHENG, *supra* note 13, at 156.

124. *See id.*

125. *See* Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space, April 22, 1968, O.O.S.A. 2345. [hereinafter Astronauts Agreement].

126. *See* CHENG, *supra* note 13, at 157.

127. *See id.*

128. *Id.*

129. *See id.*

130. *See id.*

131. *See* Convention on International Liability for Damage Caused by Space Objects, March 29, 1972, O.O.S.A. [hereinafter Convention on International Liability],

132. *See* CHENG, *supra* note 13, at 158.

133. *See id.*

134. *See* Convention on International Liability, *supra* note 126.

Convention on Registration of Objects Launched into Outer Space, January 14, 1975 provides for the identification of space objects and the entities that launch them, which are important pieces of information when determining liability for damages which occur.[135] Identification of space objects is dependent upon knowledge and ability to track the basic orbital parameter of objects launched into space.[136] From the legal standpoint, "space object" is the generic term used to cover space craft, satellites, and anything that human beings launch or attempt to launch into space, including their components and launch vehicles, as well as parts thereof.[137] The required registration will help facilitate identification of space objects and communication between states concerning such space objects.

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, December 18, 1979 (1979 Moon Treaty) reflects the wishes of non-space developing countries.[138] The idea of 'a common heritage of mankind' which was first introduced in reference to the seabed and ocean floor, is expressed in the Moon Treaty.[139] States without advanced space capabilities want to ensure that the uses of outer space will be exclusively for peaceful purposes and will benefit all peoples. The prime objective of developing countries has been secured in the wording of the Moon Treaty, but no space power of any significance has ratified the treaty.[140]

Each treaty discussed above has considerably contributed to the formation of rules of general international law. The five treaties and the four resolutions governing outer space and celestial bodies, and the Antarctic Treaty are only binding on their state parties. But it is evident that because of the way in which general international law works, these treaties carry weight to all states.

IV. THE LEGAL STATUS OF OUTER SPACE AND OF CELESTIAL BODIES

The legal categorization of territories under general international law has been discussed above. The differences between categorizations of national territory, *territorium extra commercium*, *territorium nullius*, and "common heritage of mankind" have been explained in detail. It is now necessary to determine which of these categories includes outer space,

135. *See* Convention on Registration of Objects Launched into Outer Space, January 14, 1975, O.O.S.A.

136. *See* CHENG, *supra* note 13, at 159.

137. *See id.* at 462 ("space vehicle").

138. *See* Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, December 18, 1979, O.O.S.A. [hereinafter 1979 Moon Treaty]

139. *See id.*

140. *See* CHENG, *supra* note 13, at 161.

including the moon and other celestial bodies. This determination is made by looking at general international law as well as treaties that have come into force and whether these treaties have metamorphosed into general international law, binding *erga omnes*.

A. Outer Space and Celestial Bodies under General International Law

At the initial stage of the space age, celestial bodies, including the moon, being *terrae firmae* and no different from the so called "New World" when Christopher Columbus landed, were *territorium nullius* capable of being lawfully occupied by States.[141] This position has changed since the beginning of the space age because of treaties. Two multilateral treaties, both drafted by the United Nations Committee on the Peaceful Uses of Outer Space, specifically deal with the legal status of outer space and celestial bodies: the 1967 Space Treaty and the 1979 Moon Treaty. The rule incorporated in Article II of the 1967 Space Treaty that outer space, including the moon and celestial bodies, is not subject to national appropriation can probably be regarded as having become a rule of general international law. Outer void space, not being *terrae firmae*, has from the very beginning, not been subject to national appropriation under general international law.[142]

B. Outer Space and Celestial Bodies under the 1967 Space Treaty

The 1967 Space Treaty provides in its Article III:

> States' Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.[143]

Article III affirms that international law has to be complied with by state parties to the Treaty in their activities in outer space and on celestial bodies and includes the Charter of the United Nations under the umbrella of international law.[144] It has already been stated that treaties cannot be binding on third parties; therefore the Charter cannot be considered binding *erga omnes*, unless its provisions have by general consent acquired the force of general international law.[145] However, by way of Article III, parties of the 1967 Space Treaty, which are not members of the

141. *See id.* at 390.
142. *See id.* at 525.
143. Outer Space Treaty, *supra* note 122, at art. III.
144. *See id.*
145. *See* CHENG, *supra* note 13, at 399.

United Nations, have thereby consented to be bound by the Charter insofar as their activities in outer space are concerned.[146]

There is controversy as to the meaning of the latter part of Article III.[147] The article may be understood to require state parties to always act in the interest of maintaining peace and security and promoting cooperation and understanding in the international community.[148] Secondly, Article III may be only an explanation of the need for states parties to comply with international law and the Charter of the United Nations.[149] A third interpretation may be that the Charter of the United Nations has to be complied with only to the extent that it affects peace, security and cooperation among the international community.[150] Article III does not increase the obligations of the contracting parties under general international law and under treaties to which they are already parties.[151]

Article II of the 1967 Space Treaty states "[o]uter space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."[152] It has transformed the legal status of the moon and other celestial bodies from *res nullius* (their status under general international law) to *res extra commercium*.[153] As far as outer void space is concerned, Article II has merely confirmed its legal status under general international law.[154] The concept of non-appropriation as applied to the high seas is embodied in Article II.[155] According to this article, no contracting state will be entitled to exercise territorial jurisdiction over any part of outer space or of celestial bodies.[156] However, types of state jurisdiction do apply in outer space, just as on the high seas. Otherwise, this would be an area of lawlessness.[157]

Customary international law has now accepted the principle set forth in the 1967 Space Treaty that outer space and celestial bodies are not subject to national appropriation.[158] However, the appropriation of the natural resources thereof is another matter.[159] Such appropriation of natu-

---

146. *See id.*
147. *See id.*
148. *See id.* at 400.
149. *See id.*
150. *See* CHENG, *supra* note 13, at 400.
151. *See id.*
152. Outer Space Treaty, *supra* note 122, at art. II.
153. *See* CHENG, *supra* note 13, at 399.
154. *See id.*
155. *See id.*
156. *See id.*
157. *See id.*
158. *See* CHENG, *supra* note 13, at 401.
159. *See id.*

ral resources falls within the freedom of exploration and use that is allowed under the Treaty.[160]

The underlying concept of the Treaty follows that of general international law as it is stated in its Preamble: the belief that "the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development."[161] This intention has been carried further in the 1979 Moon Treaty.

C. Outer Space and Celestial Bodies under the 1979 Moon Treaty

The 1979 Moon Treaty is recognized as the first legal recognition of territory belonging to the "common heritage of mankind." The territory includes the moon and other celestial bodies within the solar system, except the earth, and all their natural resources.[162] This concept, however, was not achieved easily.

The concept of "common heritage of mankind" began in 1967 when Mr. Arvid Pardo, the Maltese Ambassador to the United Nations, introduced the concept that the sea-bed and ocean floor, beyond the limits of present national jurisdiction, should be declared "a common heritage of mankind", which should be used exclusively for peaceful purposes and administered by an international authority for the benefit of all peoples.[163] The concept was quickly seized upon by those interested in the development of international space law.[164]

Two forces were at work in the development of the 1979 Moon Treaty. The non-space developing countries wanted primarily to have the new concept of the "common heritage of mankind" accepted in a legally binding document.[165] Opposing such an idea was the Soviet Union and the United States, the two space powers.[166] The end result was that both sides could claim success in regard to their respective objectives.[167] However, developing states probably achieved only a label, rather than a legally binding rule.[168] The United States exemplifies the little weight given to the language, by maintaining its assertion that the 1979 Moon Treaty does not establish a moratorium on exploitation.[169] Additionally, the non-space developing countries cannot give too much credit to the 1979 Moon

160. *See id.*
161. Outer Space Treaty, *supra* note 122, preamble.
162. *See id* at art. 1(1).
163. *See* CHENG, *supra* note 13, at 160.
164. *See id.*
165. *See id.* at 161.
166. *See id.*
167. *See id.*
168. *See* CHENG, *supra* note 13, at 161.
169. *See id.*

Treaty because no space power has yet ratified the treaty.[170]

V. THE DIVISION BETWEEN AIRSPACE AND OUTER SPACE

When discussing the legal status of outer space, one must ask where does outer space begin and what exactly is outer space?[171] As it stands, there is no answer that is accepted by all states. Professor McDougal points out that the most striking feature of outer space is "its vastness, indeed, its boundlessness."[172] Several approaches are taken in delimiting airspace and outer space.

Some experts have described the gradual merging of atmosphere into space in empirical terms.[173] Moving from the earth outward, five layers of atmosphere are encountered, with the upper limit somewhere about 1000 miles above the earth.[174] The problem with these boundaries is that they are imprecise and shift from place to place and from time to time.[175]

Another approach has been to emphasize the potentiality of unprotected human access where man can no longer obtain a sufficient amount of oxygen by breathing air.[176] Others have considered space to begin at the point where the atmosphere is reduced to one per cent, which is approximately 20 miles above the earth.[177] Another option is to draw a line on the basis of the "material limit" of the earth's atmosphere, that is, along the level where collisions between the air particles are extremely rare.[178] This would mean outer space begins at approximately 600 miles above the earth's surface.[179] It is obvious that arriving at an all-purpose definition of "outer space" is difficult. Different sciences with different approaches lead to different results. Further, with the development of technology, change is seen even in the results.

However, there is a more popular view that is most helpful in determining the legal status of "outer space." The line of demarcation has been considered to be the altitude at which an artificial satellite comes closest to the earth in its orbit, that is, the perigee.[180] A number of spacecraft, both manned and unmanned, had a perigee of approximately 100 miles.[181]

---

170. *See id.*
171. *See* MCDOUGAL, *supra* note 1, at 33.
172. *Id.* at 32.
173. *See id.* at 33.
174. *See id.*
175. *See id.*
176. *See* MCDOUGAL, *supra* note 1, at 33.
177. *See id.* at 34.
178. *See id.*
179. *See id.*
180. *See id.*
181. *See* MCDOUGAL, *supra* note 1, at 34.

It appears that the altitude of about 100 miles above surface can be considered an artificial satellites' lowest possible point before it will burn up.[182] Since Sputnik I first went into orbit on October 4, 1957, the lowest perigee achieved so far has been at 96 kilometers, and the next lowest at 104 kilometers.[183] All other satellites have perigees above the 110 kilometer line. Therefore, it has been asserted that at 96 kilometers one is definitely in outer space. And if not at 96 kilometers, then definitely at 110 kilometers.[184] The speculation as to where airspace sovereignty ends and where outer space begins is still debated, but most states accept this line of reasoning as *lex lata*.

VI. "PEACEFUL USES" OF OUTER SPACE AND CELESTIAL BODIES

A. Uses under General International Law

As law governing outer space, the moon and other celestial bodies has developed, the determination of the extent of utilization has been debated. Before the existence of the 1967 Space Treaty, no specific guidelines relating to the military use of outer space, the moon and other celestial bodies existed. Only the rules of general international law that govern areas of *res extra commercium* or *res nullius* were applicable.[185] Military use was allowed only with observance of general international law.[186]

The definition of "peaceful" has been an issue much debated. Professor Christol explained that the expression "peaceful purposes" is a legal term of art.[187] The term has been discussed mostly regarding its use in Article IV(2) of the 1967 Space Treaty and in Article 3(a) of the 1979 Moon Treaty.[188] The expectation of exclusive use for peaceful purposes has been applied to all spatial areas—outer void space, the moon, and other celestial bodies.[189]

At the beginning of the space age several views were adduced in defining "peaceful purposes."[190] While both of the dominant space powers asserted from the inception of the space age that outer space and celestial bodies should be used only for genuinely peaceful purposes and the common benefit of mankind, no single definition of "peaceful purposes" was agreed upon.[191]

---

182. *See id.* at 33.
183. *See* CHENG, *supra* note 13, at 451.
184. *See id.*
185. *See id.* at 513.
186. *See id.*
187. *See* CHRISTOL, *supra* note 23, at 22.
188. *See* CHENG, *supra* note 13, at 513.
189. *See* CHRISTOL, *supra* note 23, at 22.
190. *See id.*
191. *See* CHENG, *supra* note 13, at 514.

The proposals regarding "peaceful purposes" began in the field of nuclear energy as seen in the 1946 United States Atoms for Peace Plan.[192] A little over a decade later, the *ad hoc* Committee on the Peaceful Uses of Outer Space and the Committee on the Peaceful Uses of Outer Space (COPOUS) were created. Also during this period, many resolutions regarding the "peaceful uses of outer space" were passed by the General Assembly, such as Resolution 1148 (XII) that asserted the concept of sending objects through outer space eclusively for peaceful and scientific purposes.[193]

The mindset of the times must be regarded as a factor contributing to the move towards "peace." During this period was the beginning of a movement in which "peaceful" was adopted as a fashionable term. People were speaking of world peace, rather than war.[194] It was during the time of this movement that the United States adopted the National Aeronautics and Space Act creating the National Aeronautics and Space Administration (NASA).[195] The 1958 act provided that "the Congress declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of mankind." [196] The Soviet Union took actions that were given the popular label of "peace" as well. Exemplifying such custom is the fact that the Soviet Ambassador to the United Kingdom ordered, for the ambassadorial country residence, 100 rose bushes of the variety "Peace".[197] The prevailing popular custom of "peace" was the new trend.

While talk of "peace" increased, so did the military potential of space technology. With this in mind, the United States interpretation of the word "peaceful" was created.[198] The official position of the United States has been and still remains that "peaceful" means "non-aggressive" and not "non-military."[199] The Soviet Union held an opposite view that military activities in the space environment cannot be and are not peaceful.[200] The Soviet proposal, banning use of outer space for military purposes, equated peaceful use with non-military use.[201] The United States rejected the Soviet Union's proposal because it included a ban on overseas military bases.[202]

---

192. *See id.*
193. *See* CHRISTOL, *supra* note 23, at 23.
194. *See* CHENG, *supra* note 13, at 514.
195. *See id.*
196. *Id.*
197. *See id.*
198. *See id.* at 515.
199. *See* CHENG, *supra* note 13, at 515.
200. *See* CHRISTOL, *supra* note 23, at 22.
201. *See* CHENG, *supra* note 13, at 515.
202. *See id.*

On November 13, 1958 the United States proposed that the United Nations establish a committee to promote international cooperation in the peaceful uses of outer space.[203] Much support was given to this widely based appeal.[204] However, it was the last time that the General Assembly gave formal approval to such appeal because no agreement could be reached among states.[205] All proposals were referred to the First Committee of the United Nations in the form of a draft, which was approved fifty-four to nine, with eighteen abstentions.[206] The Soviet bloc states contributed the negative votes and announced a boycott of the new United Nations Outer Space Committee because it did not take into account its proposal of banning overseas military bases.[207] On December 13, 1958, the General Assembly adopted the report of the First Committee, stressing the need for "international and scientific cooperation in the peaceful uses of outer space."[208]

Throughout the discussion of how outer space ought to be used, no agreement was reached on what the term "peaceful" really meant.[209] With the reality of military activities in outer space, states continued to assert their respective views of "peaceful purposes."[210] Senator Al Gore, representing the United States, stated before the First Committee of the United Nations on December 3, 1962:

> [i]t is the view of the United States that outer space should be used only for peaceful—that is, non-aggressive and beneficial—purposes. The question of military activities in space cannot be divorced from the question of military activities on earth. To banish these activities in both environments we must continue our efforts for general and complete disarmament with adequate safeguards. Until this is achieved, the test of any space activities must not be whether it is military or non-military, but whether or not it is consistent with the United Nations Charter and other obligations of law.[211]

As a member of the United Nations, the United States was willing to abide by Article 2(4) of the Charter of the United Nations, which requires that "[a]ll members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations."[212] However, the United States asserted the fact

203. *See id.*
204. *See id.*
205. *See* CHRISTOL, *supra* note 23, at 23.
206. *See id.*
207. *See id.*
208. *See id.*
209. *See* CHENG, *supra* note 13, at 515.
210. *See id.*
211. *Id.*
212. U.N. CHARTER art. 2, para, 4 (cited in CHENG, *supra* note 13, at 513).

that no legal constraints exist in general international law or even the Charter of the United Nations that oblige states not to use outer space for military purposes.[213]

Several assertions can be made in defense of the United States' position. One argument is that "military" activities cannot be separated from "non-military" activities.[214] The opposite view, however, is that likewise there is no recognizable distinction between "aggressive" and "non-aggressive" space activities.[215] Also, while the United States asserts in its National Aeronautic and Space Act that activities in space should be devoted to peaceful purposes, it does not specify that those purposes are exclusive.[216] The Act places no legal limitation on the United States' activities in space: it merely states a general objective of the United States in its activities internationally as well as domestically.[217] The use of the word "non-aggressive" rather than "non-military" activities may be justified on grounds that the military can be used in a non-aggressive manner in maintaining peace. The United States justified military activities as peaceful because they had a peaceful intent and made arms control possible by assuring both the United States and the Soviet Union of the ability to observe what the other was doing in a way not before possible.[218] While both the United States and the Soviet Union both continued to defend their positions, the truth of the matter was that neither country wanted a final definition to be accepted by all states.[219] Such an ultimate conclusion would limit both countries' future use of outer space. As P.K. Menon stated, "[s]ince an all-pervasive, acceptable, objective criteria defining peaceful uses have never been devised, the conclusion that a particular activity is peaceful is always a subjective determination and therefore apt to reflect the self interests of the party making the determination."[220]

Nothing in general international law or in the Charter of the United Nations obligates states to refrain from using outer space for military purposes. It is now established that general international law regards outer space, including the moon and other celestial bodies, as open to use by all states and their nationals.[221] States must refrain from interfering

213. *See* CHENG, *supra* note 13, at 515.
214. *See id.*
215. *See id.* at 516.
216. *See id.*
217. *See id.*
218. *See* CHENG, *supra* note 13, at 516.
219. *See id.*
220. MENON, THE UNITED NATIONS' EFFORTS TO OUTLAW THE ARMS RACE IN OUTER SPACE ch. 3 (1988).
221. *See id.*

with other states' use.[222] Other than that, there are no specific restrictions on military use in peacetime.[223] Additionally, there are no developed restrictions of military use during times of war or armed conflict.[224] Restrictions on military use of outer space, including the moon and other celestial bodies, are found only in treaties.

B. Uses under the 1967 Moon Treaty

It must be remembered that treaties are only binding on state parties. However, if such treaties are declaratory of general international law or provisions of the treaty have become rules of general international law through general acceptance, then as general international law, it is binding *erga omnes*. Article IV of the Space Treaty reads: "[s]tates' Parties to the Treaty undertake not 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."[225]

> 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 for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.[226]

Several points must be made regarding the textual language of the 1967 Space Treaty Article IV. The Treaty constantly uses the expression, "outer space, including the moon and celestial bodies."[227] Therefore, when the Treaty is referring to the moon and celestial bodies, it makes specific reference. It would follow that Article IV(2), which refers to utilization of "the moon and other celestial bodies" for exclusive "peaceful purposes," does not apply to outer void space.[228] There is no mention of the use of the void between celestial bodies. Therefore, it can be deduced that the 1967 Space Treaty has not reserved outer space as a whole for use exclusively for peaceful purposes.[229]

---

222. *See id.*
223. CHENG, *supra* note 13, at 525.
224. *See id.*
225. Outer Space Treaty, *supra* note 122, at art. IV.
226. *Id.* (emphasis added).
227. *See id.*
228. *See* CHENG, *supra* note 13, at 528.
229. *See id.*

Opinions differ regarding interpretation of Article IV(2). Professor Cheng cites the importance of the interpretation in the fact that "depending on the interpretation one chooses, even if the word 'peaceful' is interpreted as meaning 'non-military,' the construction, for instance, of a mine on the moon . . . for the excavation of valuable minerals for the manufacture of space weapons . . . could be regarded as either prohibited or allowed."[230]

Debate during the negotiations of the 1967 Space Treaty embraced the nature of military use for peaceful purposes.[231] Those who interpreting "peaceful" as "non-military" pointed to the traditional use of the term as exemplified in the 1959 Antarctic Treaty.[232] The United States, however, maintained its "non-aggressive" interpretation, as it did under general international law.[233] A participant in the negotiations wrote:

> [d]uring the drafting of the [1967 Space] Treaty, the Indian delegation proposed an amendment to confirm that the parties to the Treaty (or all states) undertake to use outer space and the celestial bodies exclusively for peaceful purposes. Brazil, Mexico and some other delegations gave some support to this principle. But the Indian amendment was not generally acceptable. However much one may regret it, it is difficult to foresee any general acceptance, in the context of wider measures of disarmament, or a reservation of outer space for peaceful purposes, whatever that may mean, if the attempt was to exclude all use for defense purposes.[234]

Only aggressive military conduct is considered outside the peaceful purposes requirement of the 1967 Space Treaty.[235] Therefore, military activities for beneficial and peaceful purposes would not be in violation of Article IV(2).[236]

It is well established that the only specific limitation placed on the use of the outer void space for military purposes is that found in Article IV(1).[237] The language specifically refers to the limitation of nuclear weapons or any other kinds of weapons of mass destruction from being placed "in orbit around the earth . . . install on celestial bodies . . . nor station in outer space in any manner."[238] This language refers to nuclear

230. *Id.*
231. *See id*
232. *See id.* at 529.
233. *See* CHENG, *supra* note 13, at 529.
234. H. G. Darwin, *The Outer Space Treaty,* 42 Brit. Y.B. Int'l L. 278 (1967).
235. *See* CHENG, *supra* note 13, at 529.
236. *See id.*
237. *See id.*
238. Outer Space Treaty, *supra* note 122, at art. IV.

weapons and other weapons of mass destruction specifically and not to peaceful purposes generally. Because the article specifically mentions celestial bodies, the language "in outer space in any manner" appears to include outer void space. Professor Cheng asserts that "the outer void space as such can be used for any military activity that is compatible with general international law and the Charter of the United Nations, so long as no "nuclear weapons or any other kind of weapons of mass destruction are stationed there."[239]

An interpretation of the words "any *other* kind of weapons of mass destruction" has produced the idea that the 1967 Space Treaty does not mean nuclear weapons as such, but only nuclear weapons that cause "mass destruction."[240] Provided, therefore, that they do not cause mass destruction, whatever that may be interpreted to mean, an argument may be made that the stationing in outer void space of nuclear weapons without the capability of mass destruction would be allowed under the provisions of the treaty.[241] However, this argument lacks merit because of the express wording of the Treaty.[242] A stronger argument may be that such an interpretation does not preclude the stationing in outer void space of nuclear *powered* weapons, such as X-ray lasers, provided that they are not capable of mass destruction.[243]

Even more important than the effect of the suggested interpretation, "it should be pointed out that what the parties have agreed to refrain from in Article IV(1) is simply to station such weapons in outer space, including celestial bodies."[244] "They have not agreed to refrain from either (a) using any kind of weapon in outer void space, or (b) sending any kind of weapon to their target through outer void space."[245] Professor Cheng further points out that

> whilst the stationing of weapons of mass destruction in outer space is prohibited by the 1967 Space Treaty, nothing prevents the stationing of such weapons in a State's own territory, including its national airspace, provided they are not in earth orbit. Since there is no agreed delimitation of the boundary between national airspace and outer space . . . this can be an added source of conflict.[246]

Only parties to the Partial Nuclear Test Ban Treaty would not be exempt

239. CHENG, *supra* note 13, at 529.
240. *See id.* at 530.
241. *See id.*
242. *See id.*
243. *See id.*
244. CHENG, *supra* note 13, at 530.
245. *Id.* at 531.
246. *Id.*

from the suggested loopholes.[247]

In summary, it can be seen that the adoption of the "non-military" interpretation of the word "peaceful" in Article IV of the 1967 Space Treaty, contracting parties will remain free to use outer void space for military purposes in accordance with general international law.[248] Only the stationing in outer void space of weapons of mass destruction is prohibited. Under the "non-military" interpretation of the word "peaceful," however, the moon and other celestial bodies must be completely demilitarized.[249] Professor Cheng asserts that the "only real restrictions under that interpretation are the establishment of military bases, installation, testing of weapons and the conduct of military maneuvers on celestial bodies other than the moon and the earth."[250]

C. Uses under the 1979 Moon Treaty

Articles 3(1) and (4) of the 1979 Moon Treaty essentially reiterate Article IV(2) of the 1967 Space Treaty. The only difference is that the 1979 Moon Treaty makes clear that "the enumerated prohibitions apply to the moon no less than to all other celestial bodies within the solar system apart from the earth."[251] Article 3(3), likewise, simply repeats the 1967 Space Treaty Article IV(1) with special reference to the moon.

Article 3(2) prohibits the threat or use of force or of hostile act on the moon, or the use of the moon in order to commit any such acts or to engage in any such threats in relation to "the earth, the moon, spacecraft, the personnel of spacecraft or man-made space objects."[252] This provision is very similar to the principle set in Article 2(4) of the United Nations Charter.[253]

The Moon Treaty has been accepted by only a few states, none of which is a significant space power.[254] Therefore, the principles of the 1967 Space Treaty serve as the best guideline in determining the permissible use of outer void space, the moon, and other celestial bodies.

D. Recent Developments

It is now generally accepted that many military uses are considered by States to be both peaceful and lawful. State activities must remain consistent with the established rules of customary international law. The label of an activity, such as "peaceful," "military," or "non-military,"

247. *See id.*
248. *See id.*
249. *See* CHENG, *supra* note 13, at 531.
250. *Id.* at 532.
251. *Id.* at 533.
252. *See* 1979 Moon Treaty, *supra* note 138, at art. 3(2).
253. *See id.*
254. *See id.*

bears no weight on whether or not that activity is legal. Professor Christol notes that the United States retains its inherent right to national self-defense according to international law.[255] He explains that the United States drew

> a distinction between the exclusively beneficial and peaceful uses of the Moon and other celestial bodies as contrasted with aggressive uses. The distinction, then as well as now, assures a state the right to engage in peaceful military activities in these limited areas. It may not engage in aggressive military activities by the use of mass destruction or nuclear weapons in the space environment, nor may it engage in aggressive military activities on the Moon or celestial bodies.[256]

With this distinction clearly understood, states must abide by general international law in their use of outer space, including the moon and other celestial bodies.

Today, debate continues over the definition of "peaceful," but it appears that the position that non-aggressive military uses are peaceful is generally accepted.[257] Thus, "peaceful" has come to mean that as it is described in the 1967 Moon Treaty: "general space activity that is beneficial to and in the interests of all countries."[258]

255. *See* CHRISTOL, *supra* note 23, at 37.
256. *Id.*
257. *See id.* at 22.
258. *Id.*

VII. CONCLUSION

With the advent of the space age, debate began over the legal status of *terra nullius*. This question has been further augmented by the advances in technology that have made the moon and other celestial bodies easier to access. It has been established that the principle of the 1967 Space Treaty, that celestial bodies are free from appropriation by any state, is now general international law. The concept that outer space, including the moon and other celestial bodies, belong to the "common heritage of mankind", has not been accepted by the generality of states. With the acceptance of the principle that celestial bodies are free from territorial jurisdiction, states must take necessary steps to extend the relevant parts of their national laws to outer space. It is imperative that states realize their capacity to govern in light of jurisaction and jurisfaction, in order that outer space does not become a lawless area.

The United Nations is likely to remain the main forum for the future development of general international space law. The United Nations should encourage states to agree upon a set boundary between airspace and outer space. It is apparent that the space dominating states have used their position to avert such a boundary. However, for development of international space law, the *locus* over which the rules have effect must be delineated.

As technology continues to develop, the need for law governing outer space, including the moon and other celestial bodies, becomes more apparent. States cannot be free to do as they please—they must adhere to guidelines in order for peace to be maintained. If states are going to adhere to space law, they must be able to identify it.

Although outer space, including the moon and other celestial bodies, is not regarded as common heritage of mankind, it must be treated as such. While obeying the existing rules of general international law, States must recognize the importance of working together for the benefit of all. Many developments are yet to be achieved in the area of space technology and states must ensure that these developments are for the benefit, and not the detriment, of the world as a whole.