THE LEGAL STATUS OF OUTER SPACE AND RELEVANT ISSUES: DELIMITATION OF OUTER SPACE AND DEFINITION OF PEACEFUL USE

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1. Issues requiring wider discussion

Insofar as the legal status of outer space is concerned, there are two issues regarding which the present development of the law gives rise to grave anxiety. They are: (a) the delimitation of the boundary between airspace and outer space, and (b) the definition of the term "peaceful", particularly as used in Article IV (2) of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Celestial Bodies (hereinafter the 1967 Space Treaty),[1] and Article 3 (a) of the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (hereinafter the Moon Treaty).[2] The current development, if unchecked, can produce serious consequences in many fields of international law. It, therefore, deserves wide attention and discussion, which should not be confined merely to the specialists.[3]

2. The legal status of outer space

From the physical, geophysical or cosmophysical point of view, one hopes that it is not disputed that rising from the surface of the earth, one finds one is first in the earth's atmosphere (airspace) before gradually leaving it to reach outer space, wherein are to be found at various distances from the earth the (earth's) moon and other celestial bodies.

2.1 Territorial delimitation a basic premise of international law

When it comes to discussing the legal status of outer space, it is well to recall, in the first place, the following words of Judge Max Huber in the *Palmas Island Arbitration* (1928) between the Netherlands and the United States of America. Notwithstanding the anti-historical school's references to "ancestral worship" in regard to precedents, these words remain perfectly valid today:

> The development of the national organisation 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* [national territory] in such a way as to make it *the point of departure* in settling most questions that concern international relations . . . [T]erritorial sovereignty belongs always to one, or in exceptional circumstances to several States, to the exclusion of all others. The fact that

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[1] 18 U.S.T. 2410; T.I.A.S. 6347; 610 U.N.T.S. 205, U.K.T.S. No. 10 (1968) and Cmnd. 3519.

[2] U.N. Doc. A/34/664, 18 INT'L LEGAL MATERIALS 1434 (1979).

[3] On the dangers of compartmentalized learning and knowledge, *see* Brownlie, *Problems of Specialisation*, in B. CHENG (ed.), INTERNATIONAL LAW: TEACHING AND PRACTICE 109 (1982).

> *the functions of a State can be performed by any State within a given zone* is, on the other hand, precisely the *characteristic feature* of the legal situation pertaining in those parts of the globe which, like *the high seas* or *lands without a master, cannot [res extra commercium] or do not yet [res nullius]* form *the territory of a State.*
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> *Territorial sovereignty* is, in general, a situation recognised and [N.B.] *delimited in space,* either by so-called natural frontiers as recognised by international law or outward signs of delimitation that are undisputed, or else *by legal engagements* entered into between interested neighbours, such as frontier conventions, or by *acts of recognition* of States within fixed boundaries . . .
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> . . . [Territorial sovereignty] serves to *divide between nations the space upon which human activities are employed,* in order to assure them at all points the minimum of protection of which international law is the guardian.[4]

It becomes clear that one of the initial premises of international law—evolved through many centuries by a large number of States and not to be swept aside by some newfangled doctrine emanating from a single country—is the territorial division "between nations [of] the space upon which human activities are employed." Traditionally three categories are established for this spatial division, (a) national territory, (b) *res extra commercium,* (c) *res nullius,* to which the 1979 Moon Treaty and the 1982 United Nations Convention on the Law of the Sea[5] have recently added a new one, namely, (d) common heritage of mankind *(res communis humanitatis).*

From this initial premise of territorial division, certain basic principles of international law have been evolved in order to ensure that there be no gaps in the law—in order to provide what has been called the "logical plenitude of the law" *(logische Geschlossenheit des Rechtes).* For they in turn furnish some fundamental presumptions onto which one can fall back for resolving any dispute in international law which does not appear to be regulated by any existing rule. In other words, they extend a safety net to catch all seemingly unregulated problems of international law, which occur now or in future. In fact, these principles, which provide the appropriate starting points for approaching issues of international law, are deceptively simple.

Thus within national territory, as the Permanent Court of International Justice pointed out in the case of *The Lotus* (1927) (again *pace* those who do not believe in judicial international law), the presumption is in favour of the State's freedom of action, in respect of anyone or anything located therein, including foreign nationals, and property belonging to foreign States and their nationals, unless the existence of an obligation under international law to act otherwise can be established.[6] In contrast, outside a State's territory, while a State may exercise jurisdiction over its nationals, and ships, aircraft and spacecraft of its nationality or registration when they are not within the territory of another State, the presumption is that it is not entitled to exercise jurisdiction over anyone or anything belonging to a foreign State or its nationals, unless a rule of international law authorises it to do so.

It is on the basis of such a spatial framework of division of State powers that over the centuries the other rules of international law are elaborated (*ratione materiae* or, if

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[4] 2 UNITED NATIONS REPORTS OF INTERNATIONAL ARBITRAL AWARDS. 829, 838-39 (italics added).

[5] U.N. Doc. A/CONF.62/122, and Corrig. 3 and 8; 21 INT'L. LEGAL MATERIALS 1261 (1982).

[6] Permanent Court of International Justice, Series A, No. 10 (1927).

one prefers, functionally) by States in the light of their own perceived interests, either to restrain a State's freedom of action within its own territory, such as the rules on State and diplomatic immunities and on innocent passage of foreign merchant ships through a State's territorial sea, or to extend a State's jurisdiction beyond its territory in respect of foreigners, foreign ships, or foreign aircraft, such as the rules on piracy and on the rights of belligerents in sea warfare, particularly vis-a-vis neutrals. In terms of the terminology which we are subsequently to encounter, functional regulation of the conduct of States comes after, *and not before*, a spatial division of the world into various legal categories; at least this has been so since the rise of the principle of territorial sovereignty several centuries ago.

2.2 Legal status of the space above the surface of the earth under pre-1967 general (alias *customary) international law*

Insofar as general[7] (*alias* customary) international law is concerned, especially that before the 1967 Space Treaty, the legal status of the three different categories of physical space above the surface of the earth[8] is as follows:

(a) *Airspace* essentially shares the legal status of the subjacent surface of the earth, with the following result. Airspace over national territory is under the complete and exclusive sovereignty of the subjacent State, a point of law confirmed by Article 1 of the 1919 Paris Convention on the International Regulation of Aerial Navigation[9], and Article 1 of the 1944 Chicago Convention on International Civil Aviation[10], whilst the airspace above the high seas is *res extra commercium* and that over territory which is not under the sovereignty of any international person is *res nullius*.

(b) *Outer space* is *res extra commercium*.

(c) The *moon* and other *celestial bodies* are *res nullius*. [11]

The legal status of outer space has been modified, as among the contracting States, by various treaties concluded under the auspices of the United Nations. They and their effects on general international law will be examined below.

2.3 Legal status of the space above the surface of the earth under multilateral treaties sponsored by the United Nations

As among the contracting States, Article II of the 1967 Space Treaty stipulates:

> "Outer 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."

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[7] On this question of terminology, *see* B. CHENG, *supra* note 3.

[8] *See supra* section 2.

[9] 11 L.N.T.S. 173; U.N.T.S. No. 14 (1923), Cmd. 1916.

[10] 61 Stat. 1180; T.I.A.S. 1591; 51 U.N.T.S. 295; U.N.T.S. No. 8 (1953), Cmnd. 8742.

[11] *See* Cheng, *The Extra-terrestrial Application of International Law*, 18 CURRENT LEGAL PROBLEMS 132, 147-48 (1965).

It thereby confirms the status of outer space in the strict sense of the term, meaning the space in between all the celestial bodies, as *res extra commercium*. As among the contracting Parties to the Treaty, it also converts the status of celestial bodies (excluding always the earth) from that of *res nullius* to that of *res extra commercium*. Again, as among its contracting Parties, the 1979 Moon Treaty, once it comes into force, in its Article 11 further transforms the legal status of celestial bodies within the solar system other than the earth from *res extra commercium* to the common heritage of mankind, the exact meaning of which is that as defined by the provisions of the Treaty itself.[12]

As regards the effects of these treaties on general international law, reference is made to Article 34 of the 1969 Vienna Convention on the Law of Treaties[13] which merely confirms a well-established rule of general international law:

> A treaty does not create either obligations or rights for a third State without its consent.

This is not to deny the equally declaratory character of Article 38 of the same Convention:

> Nothing in articles 34 to 37 precludes a rule set forth in a treaty from becoming binding upon a third State as a customary rule of international law, recognised as such.

The crucial question to be answered in each case is whether or not a treaty provision has attracted an adequate *opinio generalis juris generalis* before one can say whether it has become a rule of general international law.[14]

In the present case, Article II of the 1967 Space Treaty has probably acquired such general acceptance already, but it is more than doubtful that the same can be said of Article 11 of the Moon Treaty, which has so far not yet even come into force, although this in itself is not fatal to the metamorphosis of a treaty provision into a rule of general international law.

As far as the legal status of airspace is concerned, none of the provisions in the multilateral treaties relating to outer space which have been sponsored by the United Nations purports to derogate from the rule of general international law of airspace sovereignty reaffirmed in Article 1 of the 1944 Chicago Convention.

3.1 Delimitation of airspace from outer space

If, as we have seen, airspace above the territory of a State is under its exclusive and complete sovereignty, which is not presumed to be restricted unless the existence of a rule of international law to that effect can be established, whilst, beyond it (we assume that it is not disputed that outer space lies beyond airspace), unless authorised by a rule of international law, a State is not entitled to extend its jurisdiction, particularly in respect of foreign territory, foreign ships, foreign aircraft or foreign spacecraft, or anyone

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[12] *See* Cheng, *The Moon Treaty*, 33 CURRENT LEGAL PROBLEMS 213 (1980).

[13] U.N. Doc. A/CONF. 39/27, 23 May, 1969; 8 INT'L LEGAL MATERIALS 679 (1969).

[14] *See* B. CHENG, *On the Nature and Sources of International Law*, *supra* note 3 at 201.

or anything therein or there on board, then the logical conclusion would appear unavoidable that the two regions require to be in law clearly separated; for the two legal regimes are fundamentally incompatible. In fact they are diametrically opposed to each other. If one is X, then the other is non-X. Hence the problem of the definition and delimitation of outer space, which has dogged all those concerned with the legal aspects of space flights before space flights even began.

In the United Nations, the question of determining where outer space begins was first raised in the General Assembly *Ad Hoc* Committee on the Peaceful Uses of Outer Space. The Committee, in its Report dated July 14, 1959, did not consider it to be "susceptible of priority treatment."[15] Since then, this topic has been, on and off, the subject of discussion in the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), which succeeded the *Ad Hoc* Committee, and its two Sub-Committees, namely, the Scientific and Technical Sub-Committee and the Legal Sub-Committee. It was formally put on the agenda of the Legal Sub-Committee in 1967. The General Assembly in recent years has repeatedly recommended that the Sub-Committee should continue to discuss the question, bearing in mind also problems relating to the geostationary orbit.

Much of the discussions in the United Nations has been chronicled by the United Nations Secretariat in the background paper which, at the request of the Legal Sub-Committee, it produced in 1970 on *The Question of Definition and/or the Delimitation of Outer Space,*[16] to which there *is an addendum dated January 21, 1977.*[17]

Those who take part in this discussion in or outside the United Nations have broadly been divided into (a) spatialists who believe in the need of some geographical or territorial delimitation of airspace from outer space, and (b) functionalists who spurn the need of such a separation and consider it adequate for international law to regulate space flights simply by reference to the nature of the activity or the nature of the vehicle, or a combination of both. Often subsumed under the banner of functionalists is a third category (c) consisting of "wait-and-seers". Included in the third category are some whom the public opinion poll statistics would label as "don't knows", as well as some government representatives who seem to be saying to other government representatives and the world at large, "Of course we all know where outer space is, but there is really no need for you to worry about it, because it is way beyond you."

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[15]U.N. Doc. A/4141. *See* Cheng, *The United Nations and Outer Space,* 14 CURRENT LEGAL PROBLEMS 247, 260-62 (1961).

[16]U.N. Doc. A/AC.105/2/7.

[17]U.N. Doc. A/AC.105/C.2/2/7/Add. 1. For subsequent discussions in the Legal Sub-Committee, see *Report of the Legal Sub-Committee on its 17th Session* (13 March - 7 April 1978), A/AC.105/218, Part IV (paras. 35-45); A/AC.105/C.2/SR.296-298; *Report of the Legal Sub-Committee on its 18th Session* (12 March - 6 April 1979), A/AC.105/240, Part IV (paras. 39-47); A/AC.105/C.2/SR.314-318; *Report of the Legal Sub-Committee on its 19th Session* (19 March - 3 April 1980), A/AC.105/271, Part III (paras. 29-42); A/AC.105/C.2/SR.332-334; *Report of the Legal Sub-Committee on its 20th Session* (16 March - 10 April 1981), A/AC.105/288, Part IV (paras. 48-67); A/AC.105/C.2/SR.353-357; *Report of the Legal Sub-Committee on its 21st Session* (1-19 February 1982), A/AC.105/305, Part III (paras. 30-44); A/AC.105/C.2/SR.372-378.

The functionalist view was much in vogue at one time. However, over the years, a number of States have switched over to either a spatial approach or wait-and-seeism. A clear example of the former group is Belgium which, previously functionalist, in 1976 changed its mind and suggested a 100 kilometre line in a paper presented to the Scientific and Technical Sub-Committee.[18] While at the time the Soviet Union made light of the Belgian proposal on the ground that it was avowedly arbitrary, the Soviet Union itself put forward the following working paper in 1979[19]:

1. The region above 100 (110) kilometres altitude from the sea level of the earth is outer space.
2. The boundary between airspace and outer space shall be subject to agreement among States and shall subsequently be established by a treaty at an altitude not exceeding 100 (110) kilometres above sea level.
3. Space objects or States shall retain the right to fly over the territory of other States at altitudes lower than 100 (110) kilometres above sea level for the purpose of reaching orbit or returning to earth in the territory of the launching State.

Although champions of pure functionalism continue to be found in the Legal Sub-Committee,[20] the attitude of the United States of America, followed closely by the United Kingdom and the Federal Republic of Germany, has also shifted—however, in their case, more pronouncedly towards wait-and-seeism. The principal reasons advanced by the United States for not wishing to assign a high priority to any concrete discussion of the question of delimitation are:

(a) The inability of most countries to monitor such an altitude frontier;
(b) The lack of adequate examination of the relevant scientific, legal, and political factors;
(c) The possible inhibiting and even stifling effect of such a boundary on future efforts to explore and use outer space.[21]

Between the various approaches, no agreement appears to be in sight at the moment.

3.2 Possible long-term implications of present stagnation

It is not intended here to rehearse all the legal arguments for and against the different approaches to the subject.[22] By now, it is obvious that the operative reasons for the present dilatoriness in the United Nations discussion on the delimitation of outer

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[18]U.N. Doc. A/AC.105/C.1/L.76.

[19] *Approach to the Solutions of the Problems of the Delimitation of Airspace*, U.N. Doc. A/AC.105/C.2/L.121 (reissued version of March 28, 1979).

[20]For example, Japan, A/AC.105/C.2/SR.314, 2 Apr., 1979 at 3. *See also, Report of the Legal Sub-Committee on Its 21st Session*, A/AC.105/305, para. 39, *in fine* (1982).

[21] *See e.g.*, U.N. Doc. A/AC.105/C.2/SR.316, 4 Apr., 1979 at 2.

[22]For a fuller discussion, see Cheng, *The Legal Regime of Airspace and Outer Space: the Boundary Problem. Functionalism versus Spatialism: The Major Premises*, 5 ANNALS OF AIR AND SPACE LAW 323 (1980). *See also*, debate between Bin Cheng, E. Pépin (for) and Mircea Mateesco-Matte, Michel Bourely, S. Neil Hosenball (against) on *Delimitation of Air Space and Outer Space; Is It Necessary?* in McGill Centre for Research of Air and Space Law, EARTH-ORIENTED SPACE ACTIVITIES AND THEIR LEGAL IMPLICATIONS 229 (1983).

space are not of a legal nature. It is not believed that government legal officers arguing for the lack of a *legal* need for delimitation can really do so with conviction, just as it would be unthinkable that any competent lawyer would advise his client that there is no need to have his land and that of his neighbours delimited.

The real reason for countries to keep on saying that the time for establishing a line separating outer space and territorial airspace "is not yet ripe" must doubtless be, as, for instance, Professor Almond has suggested, because "the determination of the appropriate line raises policy problems that have not yet been resolved amongst States,"[23] and, one may perhaps add, probably not even amongst the different agencies within the same State, particularly amongst the service agencies. One can well imagine the differences in opinion between those concerned with military aviation and those concerned with military activities in outer space. The one would argue for the highest frontier possible, while the other for the lowest possible. But if one were to wait for all the armed services to agree, one could easily wait till the Greek Calends.

All that I wish to do here is simply to point out some of the possible long-term consequences which may flow from the present deliberate or enforced inaction, apart from the obvious one of a possibly disastrous case of conflict of State jurisdiction for lack of a clear-cut delimitation. From the outset, let it be said that the present position appears to favour the space Powers. Already taking advantage of the fact that during the initial period of space flights, which may not yet have come to an end, States generally are well disposed towards such flights, space Powers have more or less succeeded in bringing into existence a rule of general international law that all orbits of artificial earth satellites are considered to lie in outer space with the result that, whatever may be or might have been the precise upper limit of national airspace, it is now deemed not to exceed, in any event, the lowest perigee height of any satellite which has so far been launched into orbit.[24] This explains the various proposals which seek to have an explicit international agreement that outer space begins at least from a height of 100 or 110 kilometres above sea level,[25] which is at present approximately the height in question. Thus space Powers have more or less established the freedom of outer space under general international law above such a height, but, by declining to confirm such a line, they leave the options open for themselves, if they so wish, at some later stage, to claim either a higher or a lower limit according to the wishes, presumably, of the military.

Not only can the space Powers thus afford to sit on their hands in this matter, but they may indeed also hope, while the present on the whole favourable attitude of States towards space flights lasts, to make further gains by not committing themselves at this stage. From this point of view, whilst the approaches of the Soviet Union and of the United States in this matter may appear at the moment to be totally opposed, the interest they are pursuing, *qua* the two major space Powers, is identical.

Thus, on the one hand, the United States speaks of the possible inhibiting and even stifling effect of fixing a boundary now between airspace and outer space on future

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[23] H.H. Almond, Jr., *Legal Definition of Outer Space*. PROCEEDINGS OF THE 21st COLLOQUIUM ON THE LAW OF OUTER SPACE 84 (1979).

[24] *See* Cheng, *Outer Space: The International Legal Framework*. 10 THESAURUS ACROASIUM 41, 66-72 (1979).

[25] *See supra* notes 18 and 19.

efforts to explore and use outer space,[26] while, on the other hand, the Soviet Union in its 1979 proposal, suggested that "*[s]*pace objects of States shall retain the right to fly over the territory of other States at altitudes lower than 100 (110) kilometres above sea level for the purpose of reaching orbit or returning to earth in the territory of the launching State."[27] What is noteworthy is the Soviet use of the expression "retain the right" of space objects to pass through the airspace of other States on reaching their orbit or on their return to earth.[28] The point is that there is no evidence to suggest that under general international law the space object of any State has a right to "fly over the territory of other States", *i.e.*, through their airspace, "for the purpose of reaching orbit or returning to earth". But obviously, this is what the space Powers dearly hope can be achieved, the establishment of a right not merely of "innocent passage" for civilian space objects through the airspace of other States, but one similar to what the 1982 United Nations Montego Bay Convention on the Law of the Sea calls "transit passage" for both civil and military space objects, including ballistic missiles. The Soviet Union wishes to do so by means of a multilateral treaty, pretending that what is asked of other States is a simple confirmation of an already existing limitation of their airspace sovereignty, whilst the wait-and-see school led by the United States is hoping to bring this about imperceptibly by gradual practice—if possible, without the subjacent States being even aware of what is happening.

Those who pretend that such a right already exists will no doubt wish to pray in aid provisions such as Article 1 of the 1967 Space Treaty which provides *inter alia* that "*[o]*uter space, including the moon and other celestial bodies, shall be free for exploration and use by all States. . . ." This is where the wait-and-seers begin to join hands with the functionalists; for there is a tendency for them both to argue that existing United Nations sponsored multilateral agreements on outer space are all based on the functionalist approach, by regulating activities and not areas. According to the functionalists, if an activity is lawful, then it may be conducted anywhere, and if an activity is declared unlawful, then it may be carried out nowhere. Again, one should be aware of the logical consequences of the functionalists' argument.

In the first place, even if an activity is lawful, this by no means implies that it may be conducted no matter where. Thus the German-Venezuelan Mixed Claims Commission (1903) clearly ruled that, while under international law, the high seas are free to all nations, this does not mean that the upper riparian State on a river which flows into the high seas thereby enjoys a right of passage through the territory of another State situated downstream.[29] Secondly, one should by now also have realised what are the true effects of the functionalist approach on airspace sovereignty. What the

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[26] *See supra* note 21.

[27] *See supra* note 19.

[28] For present purposes, we may leave aside the phrase "in the territory of the launching State", which would obviously not suit those space Powers which, like the United States, arrange often for their space vehicles to be picked up from the high seas on their return to earth. Soviet space vehicles normally land within Soviet territory.

[29] *Faber* case, VEN. ARB. 600, 629-30 (1903). *See also*, B. CHENG, GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS 69 (1953).

functionalists are really saying is that, insofar as space flights are concerned, the concept of airspace sovereignty is irrelevant. In other words, whatever may be the effects of the principle of airspace sovereignty on other matters, such as aerial navigation, it is simply not applicable to space flights. What they are saying is that, if a space activity is authorised by international law, then the flight may thereby take place within the airspace of another State. This ignores the fact that when people reckon a particular space activity to be compatible with international law, say military reconnaissance, what they have in mind is such activity when conducted *in outer space*, but never for a moment thereby a right for military reconnaissance satellites to pass through the national airspace of other States. The effect of the functionalist doctrine, which is relied upon by the wait-and-seers allegedly only as a temporary expedient, is, therefore, the abolition of the rule of airspace sovereignty in favour of space activities and space vehicles recognised as lawful by international law. Therefore, the functionlists are not really non-believers in the spatial approach. All that they are saying is that, insofar as a State's space activities are concerned, other States' airspace sovereignty begins and ends at sea level; in other words, it no longer exists.

International law is not made by the will of international lawyers. It is made by the will of States. If States wish to create a right of transit passage for space flights through the airspace of other States, or if they wish to abolish airspace sovereignty of States altogether in favour of foreign space flights, they are perfectly entitled to attempt to do so.

There are, however, two things which may be said in this connexion. First, if States wish to do any of these things, it behoves them, especially those which consider themselves leader nations, to do so openly, and not through some legal sleight-of-hand, which in the long run can only undermine respect for international law. While some such tactics may not be uncommon sometimes in municipal law, the arrogance, insensitivity and deviousness which they imply when resorted to in the international arena can in fact be very harmful to a State's international image and relations.

Secondly, in the light of what is happening, it becomes all the more necessary for all States and scholars to examine much more closely than hitherto what is meant by permissible and not permissible space activities. Does permissibility mean solely permissibility in outer space, or does it imply also a right of transit passage for such activities through what other States would normally consider to be their national airspace? This merely shows the inevitability of the delimitation issue, however hard the functionalists and the wait-and-seeists may wish to dodge it. If permissibility means strictly the former, then delimitation becomes a prerequisite and, therefore, a priority issue. But if it is to be given the latter meaning, as the space Powers, whether major or minor, whether spatialist, functionalist or wait-and-seeist, seem now to imply, then this appears to be high time for the other States to take a closer interest in the precise nature of these activities before a right of way is created through their national airpsace in favour of these activities. If the development of air law is any guide,[30] before States would agree to foreign spacecraft—or earth to earth rockets—flying through their national airspace, they would no doubt wish to know whether they are friendly or hostile, nuclear or non-nuclear, peaceful or military, public or private, commercial or

[30] *Cf.* Cheng, *From Air Law to Space Law*, 13 CURRENT LEGAL PROBLEMS 228 (1960).

non-commercial, on a scheduled service or not, as well as most probably a host of other things. At least one of these issues is what we shall examine next, the spurious use of the term "peaceful".

4. The "peaceful use" of outer space, including the moon and other celestial bodies

4.1 The vogue of "peaceful use"

Insofar as pre-1967 Space Treaty general international law was concerned, there was certainly no specific rule relating to the military use of outer space, the moon and other celestial bodies other than those which were applicable to any other areas of *res extra commercium* or *res nullius*. This meant that their military use was in principle permitted, subject only to the observance of the ordinary rules of international law and, as among members of the United Nations, those to be found in the Charter of the United Nations, such as its Article 2(4).[31]

However, especially in the heady atmosphere of the initial period of man's first entry into space, there was a very strong and highly emotional, albeit not very realistic, sentiment among many people, and even governments, that outer space and celestial bodies should be used only for genuinely peaceful purposes and the common benefit of mankind. Proposals to this effect were made respectively by the United States in 1957 and the Soviet Union in 1958.[32] Such proposals in the early days of the space age are reminiscent of similar ones a decade before in the field of nuclear energy, including the 1946 United States Atoms for Peace Plan.[33] From this point of view, the very name given by the United Nations to its organs dealing with space matters is indicative of this pious hope. Thus in 1958 it set up the *Ad Hoc* Committee on the *Peaceful* Uses of Outer Space, and the following year the Committee on the *Peaceful* Uses of Outer Space (COPUOS), the latter reamining the main United Nations organ concerned with outer space. Moreover, various resolutions passed by the General Assembly on outer space during this period, such as Resolution 1348 (XIII) of December 13, 1959, Resolution 1472 (XIV) of December 12, 1959, Resolution 1721 (XVI) of December 20, 1961, Resolution 1802 (XVII) of December 19, 1962, all referred to the "peaceful uses of outer space".

It was in the midst of all this that the United States in 1958 adopted the National Aeronautics and Space Act[34] which, *inter alia,* set up the National Aeronautics and Space Administration (NASA). In Section 101, sub-section (a), it is provided:

"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."

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[31] "All 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" (T.S. 993; 59 Stat. 1031; U.K.T.S. No. 67 (1946), Cmd. 7015).

[32] *See* Cheng, *supra* note 15 at 259, nn. 54, 55.

[33] *See* Cheng, *International Cooperation and Control: From Atoms to Space*, 15 CURRENT LEGAL PROBLEMS 226 (1962).

[34] P.L. 85-568; 72 Stat. 426.

In this connexion, two further factors may be mentioned. First, the 1958 National Aeronautics and Space Act was passed in the very infancy of space flights. Secondly, the late 'fifties also marked the beginning of the Soviet Union's campaign under Premier Khrushchev of "peaceful co-existence", both as a result of, and in response to, which everything one did then was given the vogue label of "peace". The fervour and fever were such that it was reported that the Soviet Ambassador to the United Kingdom had ordered 100 rose bushes of the variety "Peace" to be planted in the ambassadorial country residence. However, inevitably, much of this movement was sheer window-dressing. Thus often, without necessarily altering what one was doing, one found oneself no longer engaged in war studies, but first in defense, and then better still in peace studies. The old adage, *Si vis pacem, para bellum* (If you desire peace, prepare for war) was given a new twist.

4.2 The United States interpretation of "peaceful use"

However, the military potential of space technology soon became more and more apparent. It would seem that it was against this background that the peculiar United States interpretation of the word "peaceful" was born. The official United States position, backed more often than not by United States writers, as well as some foreign ones, has from almost the very beginning of the space era till even now, been that "peaceful" means "non-aggressive" and not "non-military".

Thus, in a statement made before the First Committee of the United Nations on December 3, 1962, Senator Gore, representing the United States, said:

> It 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.[35]

What Senator Gore said was perfectly understandable, even if his use of words was not necessary defensible. The United States was not prepared without further ado to accept legal restraints on the use of outer space for "military" purposes, but it would of course abide by its obligations under the United Nations Charter and other obligations of law in not using outer space for "aggressive" purposes. Insofar as the substance of what Senator Gore said is concerned, it can hardly be faulted; for, as we have seen, there was nothing in general international law or even the Charter of the United Nations which obliged States not to use outer space for military purposes. In fact, that remains the position even today.

However, by seeking not to ride against the tide of popular opinion on the "peaceful use" of outer space, and bearing in mind possibly Section 101, sub-section (a), of the 1958 National Aeronautics and Space Act, the United States was putting its foot on the slippery slope of distorting the meaning of "peaceful" by interpreting it as "non-aggressive" and not "non-military".

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[35]U.N. Doc. A/C.1/PV.1289 at 13, 3 Dec., 1962. Regarding the Soviet attitude, *see infra* note 40.

Those who defend the United States' use of the word "peaceful" often point to the impossibility of separating "military" from "non-military" activities, seemingly under the impression that there exists some clear-cut and universally recognised and immediately recognisable distinction between "aggressive" and "non-aggressive" space activities. One wonders in this context whether partisans of this view have a ready definition of what paragraph 9 of the Preamble of the 1967 Space Treaty would designate as "propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace, or act of aggression".

But it is clear from what Senator Gore said that he had no difficulty in distinguishing between military and non-military activities. In fact, while the United States National Aeronautics and Space Act of 1958 says that it is the "policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind", it does not specify that they should be *exclusively* for peaceful purposes. Moreover, the policy in question is not confined to United States activities in space, but activities in space in general. In other words, Section 101 (a) does no more than state a general objective to be pursued by the United States internationally as well as domestically. It is by no means a legal limitation on the type of activity the United States is entitled to engage in outer space.

Besides, the 1958 Act clearly distinguishes between space activities which come under the "civilian agency" NASA and "activities peculiar to or primarily associated with the development of weapons systems, military operations, or the defense of the United States (including the research and development necessary to make effective provision for the defense of the United States)" which "shall be the responsibility of . . . the Department of Defense". So the distinction is not between "peaceful" and "military", but between "civilian" or "civil"[36] on the one hand and "military" and "defense" on the other hand. But this is pure semantics; for, in substance, it is the same distinction. This is not to say that there are no problems in demarcating clearly between "military" and "non-military". But, contrary to the contention of those who defend the United States' use of the word "peaceful", in saying that, in practice, it is not possible to separate the military from the non-military, such a distinction, described as one between "defense" (*i.e.*, military) and "civilian" (*i.e.*, non-military) lies at the very foundation of the United States National Aeronautics and Space Act itself.

4.3 Article IV of the 1967 Space Treaty

Reference has previously been made to the use of the expression "peaceful uses" of outer space in various resolutions of the United Nations General Assembly in the early sixties,[37] and to the attitude of the super-Powers to the complete demilitarisation of outer space in isolation from the question of disarmament in general.[38] From this point of view, the exact title of General Assembly Resolution 1962 (XVIII) of December 13,

[36] *Cf.* also, *Description of a Presidential Directive on National Space Policy*, The White House. June 20, 1978 SPACE LAW. SELECTED BASIC DOCUMENTS. 2d ed., Senate Comm. on Commerce, Science and Transportation, 95th Cong., 2d Sess. 559 (Comm. Print 1978).

[37] *See infra* note 41.

[38] *See supra* note 35.

1963, which is the precursor of the subsequent 1967 Treaty, and that of the 1967 Treaty itself are interesting. The former is the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, the latter Treaties of Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. In neither case, is the word "peaceful" included in the title, although in paragraph 4 of both, the desire "to contribute to broad international cooperation in the scientific as well as in the legal aspects of exploration and use of outer space for peaceful purposes" is expressed. But this is really not all that different from sub-section (a) of Section 101 of the United States National Aeronautics and Space Act of 1958.

Nowhere, however, in the 1967 Space Treaty, is outer space in the narrow sense *(sensu stricto)* of the term, *i.e.*, the void in between all the celestial bodies, confined to "peaceful uses" only.

The relevant provision is Article IV which provides:

> 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 *[N.B.:* no reference to outer space*]* 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 manoeuvres 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.[39]

From the standpoint of international law and according to its rules on treaty interpretation, the structure and interpretation of Article IV are fairly clear. The article is divided into two parts.

4.3.1 Partial delimitarisation of earth orbits and of outer space in the wide sense of the term.

Geographically, paragraph 1 of Article IV, notwithstanding the omission of any specific reference to the moon, is applicable to first, without prejudice to whether or not they are in outer space, earth orbits, and secondly, using the expression favoured in the 1967 Space Treaty, "outer space, including the moon and other celestial bodies", as a whole, *i.e.*, outer space in the wide sense of the term *(sensu lato)*.

Materially, or, to use the "in" word, functionally, it prohibits the installation or stationing of "any objects carrying nuclear weapons or any other kinds of weapons of mass destruction" in any of those places mentioned above or "in any other manner". But, subject to what is provided for in paragraph 2 of the same article, *nothing in Article IV (1) itself* prohibits the stationing of any other type of weapons in outer space, including the moon and other celestial bodies, or in fact the use of outer space, including the moon and celestial bodies, for military purposes in any other way. Insofar

[39] *See* Cheng, *The 1967 Space Treaty*, 95 J. DU DROIT INT'L. 532, 598-616 (1968).

as Article IV (1) is concerned, apart from the stationing of nuclear weapons and weapons of mass destruction, outer space as a whole has not been demilitarised at all. Such demilitarisation as it stipulates, in the form of the prohibition of the stationing of nuclear weapons and weapons of mass destruction, is strictly partial. Attempts made during the drafting of the 1967 Space Treaty by some delegations to bring about a complete demilitarisation of outer space were clearly rejected by both super-Powers.[40] In other words, under both general international law and Article IV (1) of the 1967 Space Treaty, States are perfectly entitled to use the whole of outer space for military purposes, bar the stationing of nuclear weapons and weapons of mass destruction.

4.3.2. Complete demilitarisation of the moon and other celestial bodies

Paragraph 2 of Article IV, on the other hand, is quite different, different in both its geographical and its material scope. Geographically, it applies only to "the moon and other celestial bodies". Specifically and pointedly, it does not refer to outer space as such, *i.e.*, the empty space in between the celestial bodies. Materially, it delimitarises all celestial bodies other than the earth.

Article IV of the 1967 Space Treaty owes much to President Eisenhower's proposal presented to the United Nations in 1960.[41] In making his proposal, he recalled specifically the Antarctica Treaty of the previous year,[42] even though neither super-Power wished to apply the Antarctica model to the whole of outer space.[43]

Article I of the Antarctica Treaty is very similar to Article IV (2) of the 1967 Space Treaty and is, therefore, very helpful in clarifying the latter's meaning. It states:

> 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 manoeuvres, as well as the testing of any type of weapons.
>
> 2. The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purpose.

Three points emerge clearly from Article I of the Antarctica Treaty, which *mutatis mutandis* appear fully applicable also to Article IV (2) of the 1967 Space Treaty:

> (a) "Peaceful" means non-military.
>
> (b) References to military installations, military manoeuvres and so forth in the provision are exemplicative and not exhaustive.
>
> (c) The possibility of using military personnel and equipment for scientific research or other peaceful purposes in no way invalidates point (a) above.

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[40] *Cf.* U.N. Doc. A/AC.105/C.2/SR.65 (22 July 1966), 9-10 (U.S.A.); *Ibid.* /SR.66 (25 July 1966), 6-7 (U.S.S.R.).

[41] Official Records of the General Assembly, GA(XV) A/PV.868, 22 Sept., 1960, 45, 48. *See also*, Cheng, *supra* note 15 at 277, n. 43.

[42] 12 U.S.T. 794; 1 T.I.A.S. 4780; 402 U.N.T.S. 71; U.K.T.S. No. 97 (1961), Cmnd. 1535.

[43] *See supra* note 40.

Regarding the last point, there has been a great deal of misunderstanding, resulting in frequent allegations that the last sentence of Article IV (2) of the Space Treaty merely highlights the hollowness of the whole paragraph. But this is not so. In this connexion, the following quotation from the decision of Edwin B. Parker, umpire in the United States-German Mixed Claims Commission (1922), in *Opinion Construing the Phrase "Naval and Military Works or Materials" as Applied to Hull Losses and Also Dealing with Requisitioned Dutch Ships* (1924) is highly pertinent. It shows clearly that the test of whether an activity or an equipment is of a military character is essentially a functional one and not one of nominal status:

> The taxicabs privately owned and operated for profit in Paris during September, 1914, were in no sense military materials; but when these same taxicabs were requisitioned by the Military Governor of Paris and used to transport French reserves to meet and repel the oncoming German army, they became military materials, and so remained until redelivered to their owners. The automobile belonging to the United States assigned to its President and constitutional commander-in-chief of its Army for use in Washington is in no sense military materials. But had the same automobile been transported to the battlefront in France or Belgium and used by the same President, it would have become a part of the military equipment of the Army and as such impressed with a military character.[44]

Thus if the same automobile is subsequently to be sent either to Antarctica or to the moon to carry out scientific research, the same equipment, although it may still belong to the Army, would not be "impressed with a military character", and its use would be perfectly lawful under both treaties, provided there is no abuse which, of course, is a different matter, inasmuch as it would no longer be a matter of treaty interpretation, but one of treaty violation.

4.4. United States interpretation of the term "peaceful" in relation to Article IV needless, wrong and potentially noxious

4.4.1 United States interpretation needless

In the light of what has been said in regard to the proper interpretation of Article IV of the 1967 Space Treaty, it is quite unnecessary for the United States to interpret, or rather to misinterpret, the term "peaceful" in Article IV (2) of the Space Treaty as meaning "non-aggressive" and not "non-military" in order to enable itself to use outer space in the narrow sense of the term for military purposes, as do in fact both super-Powers and a few other States by means of observational, communications, meteorological, geodetic and other types of satellites, space vehicles or space stations. All States Parties to the 1967 Space Treaty remain entitled to do so both under the Treaty and under general international law, unless of course they become so tangled up by their functional definition of outer space that they do not know where outer space is.

It has sometimes been suggested that since the United States has for many years used the term "peaceful" in relation to outer space to mean "non-aggressive" and not "non-military", and has encountered no opposition or protest, this usage must be

[44] DECISIONS AND OPINIONS 75, 97.

deemed to have been accepted by other States. But this reasoning is invalid, inasmuch as there is no call for other States to protest for as long as the United States has violated no rule of international law or any of its treaty obligations. That some States wish to give their legitimate activities some fancy description such as "beneficial", "the greatest", or "peaceful", is something which is quite immaterial to others, who are entitled simply to dismiss such action as eccentric or propagandist. Neither the law nor their legal position can thereby be changed.

The present United States interpretation of the word "peaceful" in relation to Article IV of the Space Treaty is quite needless for as long as, of course, the United States does not seek to apply it to Article IV (2). The United States position is all the more incomprehensible inasmuch as there is no evidence to suggest that the United States intends to conduct military activities on the moon and other celestial bodies.

4.4.2 United States interpretation wrong

The present United States interpretation of the word "peaceful" to mean merely "non-aggressive" would simply be wrong if applied to Article IV (2) of the Space Treaty, which is where the word appears in Article IV. The same would be true if applied to Article 3 of the 1979 Moon Treaty which likewise provides that all celestial bodies within the solar system other than the earth "shall be used by all States Parties exclusively for peaceful purposes."[45]

Among various reasons, the simplest is that any such interpretation would render the first sentence of Article IV (2) of the Space Treaty completely meaningless and redundant, and cannot, therefore, be valid. The elementary explanation is that "aggressive" acts are contrary to international law and the Charter of the United Nations, particularly Article 2(4) of the Charter,[46] not only on the moon and on other celestial bodies, but also anywhere in the universe. Insofar as Parties to the 1967 Space Treaty are concerned, they specifically undertake in Article III of the Treaty that:

"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. . . ."

Aggressive acts would, therefore, be prohibited in outer space as a whole and it would consequently be absolutely superfluous in Article IV (2) specifically to provide that "the moon and other celestial bodies shall be used. . .exclusively for 'non-aggressive' purposes". Is anyone seriously suggesting that because Article IV (2) does not mention outer space, *i.e.*, outer space in the narrow sense of the term, States Parties to the 1967 Space Treaty may, therefore, freely engage in "aggressive" acts in outer space *stricto sensu?* The conclusion is inescapable that, if the word "peaceful" in Article IV (2) is to have any meaning at all, it must bear its plain meaning of "non-military" and can certainly not mean "non-aggressive".

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[45] *See supra* note 12.

[46] *See supra* note 31.

4.4.3 United States interpretation potentially noxious

For as long as the United States restricts its idiosyncratic interpretation of the word "peaceful" to some non-existent limitation on the military use of outer space *stricto sensu*, perhaps no more harm is done than the emperor preening himself in his non-existent clothes. But rather whimsical interpretation carries with it seeds of serious consequences.

The United States is a party to the Antarctica Treaty. It is also a party to many multilateral and bilateral agreements for international cooperation in nuclear matters, under which nuclear materials, equipment and facilities which have been transferred from one contracting party to another contracting party may be used by the latter only for "peaceful purposes".[47] Is the United States prepared to allow the word "peaceful" in these treaties to be interpreted by the other parties as meaning also "non-aggressive" and not "non-military"? Is that the reply that the United States is getting from some of the States which have already misused the nuclear assistance they have received in order to make bombs, non-aggressive bombs no doubt? If not, it should not take them long to learn what is the interpretation of the word "peaceful" favoured by the United States, unless the United States itself takes immediate steps to revise its attitude in the matter.

5. Conclusion

The United States occupying as it does a preeminent position in the world, its *opinio juris* must obviously carry great weight in the formation of rules of general international law. However, in regard to both the question of delimitation of outer space and the interpretation of the expression "peaceful", particularly in relation to the 1967 Space Treaty, the United States has persisted in attitudes it took up at the very beginning of the space age. It is hoped that at least a case has been made to show that its "wait-and-see" policy in respect of the former question, and its rather strange interpretation of the word "peaceful" to mean "non-aggressive" and not "non-military", harbour serious consequences for international law. It is to be hoped that the issues they raise will not only be given some thought by the United States, but will also receive attention from space lawyers, and general international lawyers everywhere.

[47] *See supra* note 33.