

**OUTER VOID SPACE  
THE REASON FOR THIS NEOLOGISM IN SPACE LAW**

**Bin Cheng**\*

**NEED FOR THE TERM “OUTER VOID SPACE” IN SPACE LAW**

The need in space law for the term “outer void space” has arisen because of a change at some stage in the usage of the term “outer space” in the practice of the United Nations in its resolutions and draft treaties on outer space, a practice that has been generally followed in the space law world. In the early days of space law, the United Nations used to speak of “outer space and celestial bodies” even though it sometimes seemed to include celestial bodies within the term “outer space”.

The United Nations subsequently in effect changed the meaning of the term by speaking consistently of “outer space, including the moon and celestial bodies”. It follows that, irrespective of what specialists in other disciplines may say, in the space law world, “outer space” no longer designates the space in between all the celestial bodies. It now includes the moon and all the other celestial bodies. It consequently comprises the whole universe and everything within it outside the planet Earth.

One is thus left with no brief and convenient term to designate specifically the space in between the celestial bodies, be it interplanetary or interstellar, that is, whether within or beyond our solar system. This is highly inconvenient from a legal point of view as certain legal provisions may be intended to apply solely to the space in between, but not to, celestial bodies.

“Outer void space” is, therefore, the expression designed to fill the gap left by the abandonment of the original meaning of the term “outer space”. It is in no way intended to replace the term outer space or to alter its currently accepted meaning.

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## INITIAL USE OF THE TERM "OUTER SPACE" IN UNITED NATIONS RESOLUTIONS RELATING TO OUTER SPACE

At the initial stage of the space age, the United Nations in its resolutions relating to outer space constantly distinguished between "outer space" and "celestial bodies", especially in their operative provisions. Thus, in Part A of the well-known Resolution 1721(XVI) of 20 December 1961, the first substantive resolution relating to outer space, the General Assembly commended to States the following principles:

- (a) International law, including the Charter of the United Nations, applies to outer space *and* celestial bodies;
- (b) Outer space *and* celestial bodies are free for exploration and use by all States in conformity with international law and are not subject to national appropriation.<sup>1</sup>

Similarly, in its Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space adopted on 13 December 1963,<sup>2</sup> the General Assembly solemnly enjoined that States should be guided *inter alia* by the following principles:

2. Outer space *and* celestial bodies are free for exploration and use by all States on a basis of equality and in accordance with international law.
3. Outer space *and* celestial bodies are not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.<sup>3</sup>

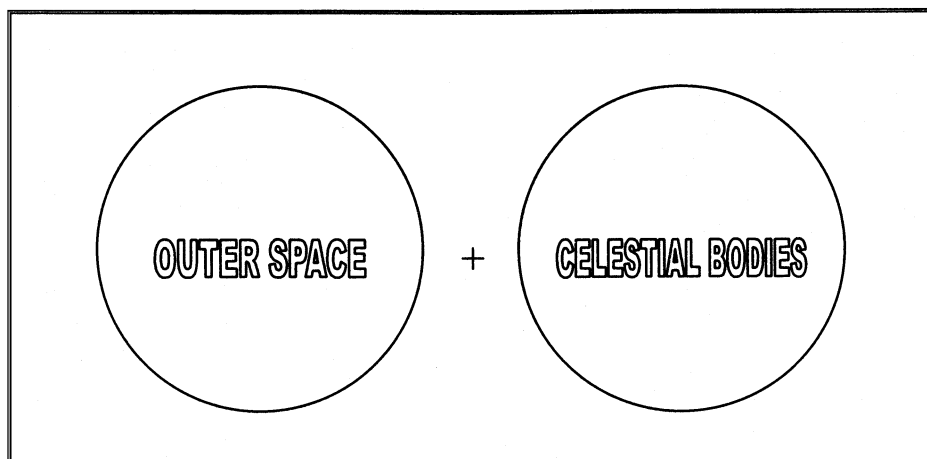
Extraterrestrial space consists, therefore, according to this terminology, of first "outer space" and then "celestial bodies". Celestial bodies are thus treated as a category apart from outer space as such, as illustrated in Figure 1 below.

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<sup>1</sup> Italics added.

<sup>2</sup> Resolution 1962(XVIII).

<sup>3</sup> Italics added.



**Figure 1: Meaning of “outer space” up to the 1963 Resolution**

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However, it must be recognised that the United Nations usage of these terms might not have been altogether consistent or always precise. It is much to be doubted whether, for example, in the same resolution the United Nations when speaking of outer space, intended to refer exclusively to the space in between all the celestial bodies and consciously to exclude the celestial bodies themselves. Thus, in the same 1963 Declaration, the General Assembly laid down also *inter alia* the following principles:

1. The exploration and use of *outer space* shall be carried on for the benefit and in the interests of all mankind.
4. The activities of States in the exploration and use of *outer space* shall be carried on in accordance with international law, including the Charter of the United Nations...<sup>4</sup>

It is quite clear now that the General Assembly did not intend these and other principles in the 1963 Declaration that mentioned only *outer space* and not *celestial bodies* not to apply also to the latter. There was, therefore, at that time some ambiguity in the use of the term “outer space”.

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<sup>4</sup> Italics added.

## USE OF THE TERM "OUTER SPACE" FROM THE 1967 SPACE TREATY ONWARDS

This may well be the reason why the 1967 Space Treaty<sup>5</sup> amended the usage of the term "outer space". The treaty was largely based on the 1963 Declaration. It had expanded the Declaration and turned it into a treaty. The treaty amended the usage by adopting a new formula, used already in the title of the treaty, namely, "outer space, including the moon and other celestial bodies". Thus, the above quoted Principles 1 and 4 of the 1963 Declaration were reformulated in the treaty as follows:

### *Article I*

The exploration and use of *outer space, including the moon and other celestial bodies*, shall be carried out for the benefit and in the interests of all countries...

### *Article III*

States Parties to the Treaty shall carry on activities in the exploration and use of *outer space, including the moon and other celestial bodies*, in accordance with international law, including the Charter of the United Nations...<sup>6</sup>

This new formulation has since been consistently followed by the United Nations in all its subsequent treaties and resolutions relating to outer space. In any event, the phrase "outer space and celestial bodies" is never used again. The new formulation is doubtless more precise and explicit than the previous practice, and avoids any possible argument *a contrario* that celestial bodies are not included, whenever reference is made only to outer space. Henceforth, the moon and other celestial bodies are no longer treated as being separate from outer space as such, but form part of it. Reference to outer space automatically includes celestial bodies. In principle, this would be so even if there were no express inclusion of the celestial bodies.

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<sup>5</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies, London, Moscow and Washington, 27 January 1967, 610 United Nations Treaty Series 205.

<sup>6</sup> Italics added.

Attempts have sometimes been made to suggest or argue that, notwithstanding the new phraseology, there is in reality no change in the meaning of the term “outer space”, and that the word “including”, is merely another way of saying “and” as found in the previously used phrase “outer space and celestial bodies”. But this is simply not true.

From the purely literal point of view, on the other hand, according to the ordinary meaning of the words, “and” expresses “the general relation of connection or addition...; thus: along or together with, added to or linked to, as well as...”.<sup>7</sup> Consequently, in the phrase “outer space and celestial bodies”, outer space and celestial bodies must be regarded as discrete and separate, linked together by the conjunction “and”. On the other hand, we are told that, “To INCLUDE is to comprehend, esp. as a constituent or subordinate element of a whole, or as a part in a total”.<sup>8</sup> This being the case, in the phrase “outer space, including the moon and other celestial bodies”, these objects are reckoned to be an integral part of outer space. The meaning of the expression “outer space” must therefore be different in the two instances. In the former case, it excludes celestial bodies. In the latter case, it includes celestial bodies, whether expressly stated or not.

The same conclusion will be reached if we look at the intention of the parties, for instance, in the Preamble of the 1967 Space Treaty, which is almost a literal reproduction of the preamble of General Assembly Resolution 1962(XVIII). In the Treaty’s Preamble, there are repeated references to the “exploration and use of outer space for peaceful purposes”,<sup>9</sup> as well as other references to “outer space”,<sup>10</sup> all without the qualification “including the moon and other celestial bodies”. For the same reasons as those mentioned above with reference to Resolution 1962, the parties cannot possibly be interpreted as having intended these references to apply merely to the space in between the celestial bodies, and not to celestial bodies as well.<sup>11</sup> It follows that in both instances, namely, in the respective Preambles of Resolution 1962 and of the 1967 Space Treaty, the true intended meaning of the phrase “outer space” must be the entire outer space including the moon and the other celestial bodies.

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<sup>7</sup> See the definition of “and” in Webster’s New International Dictionary (1948, 2<sup>nd</sup> edition, Marriam, Springfield, Massachusetts).

<sup>8</sup> Refer note 7 above under the definition of “contain”.

<sup>9</sup> Clauses 2 and 4.

<sup>10</sup> Clauses 1, 3 and 8.

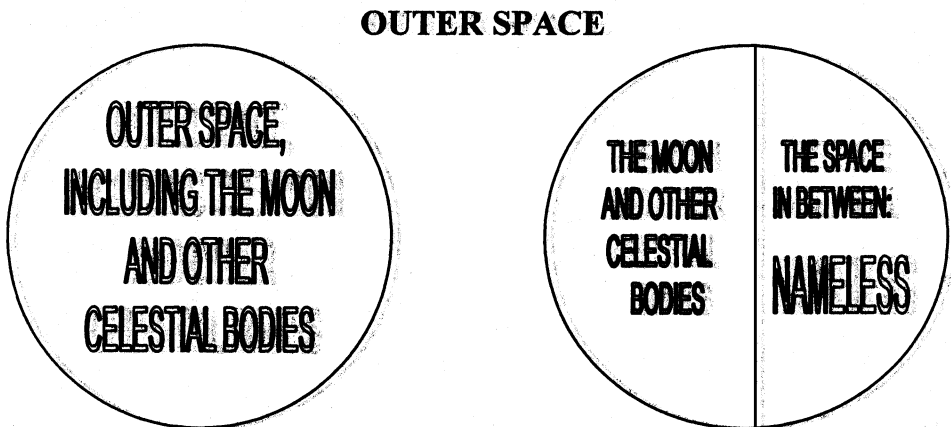
<sup>11</sup> See text to note 4.

It may well be that there was some ambiguity in the term “outer space” prior to the 1967 Space Treaty, meaning sometimes the whole of outer space including the celestial bodies, and sometimes outer space without the celestial bodies. Whatever the situation might have been, it is indubitable that in the then usual phrase “outer space and celestial bodies”, the term was used in the sense of outer space without the celestial bodies. It is equally clear that since the 1967 Space Treaty there has been a conscious effort to tighten up the terminology by switching over, in comparable circumstances, from the phrase “outer space and celestial bodies” to the term “outer space, including the moon and other celestial bodies”.

A deliberate step has been taken to bring consistency in the use of the term “outer space”. Henceforth “outer space” is to mean only one thing: it refers to the entire universe, including all the celestial bodies, beyond planet Earth. It is no longer to be used in the narrow sense to designate the space in between the celestial bodies.

#### **SPACE IN BETWEEN THE CELESTIAL BODIES BECOMES NAMELESS**

One of the consequences of this change in the use of the term “outer space” is that the vast space in between all the celestial bodies (including in this case also, planet Earth) has lost any specific designation. It has become nameless, as Figure 2 seeks to show.



**Figure 2: Meaning of “outer space” since the 1967 Treaty which, by including celestial bodies, deprives the space outside celestial bodies of a specific name**

The problem with this new nomenclature in depriving the vast void in outer space of a name is that it can cause a great deal of confusion and misunderstanding. For instance, there is a very prevalent misconception that because Article IV(2) of the 1967 Space Treaty provides that “[t]he moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes”, this means that the whole of outer space, including the whole empty space in between the celestial bodies, has been reserved exclusively for uses for peaceful purposes. This is far from the truth.

This vast empty space has not been totally demilitarised. Only certain restrictions have been placed on its military use by Article IV(1) of the Treaty under which “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, ... or station such weapons in outer space in any other manner.” Otherwise, the States Parties remain entitled to use this empty space for any military purpose they wish, subject only to the observance of international law and treaty obligations, including the United Nations Charter.<sup>12</sup> This misunderstanding can easily have arisen because of the lack of a term to describe this vast empty space.

### **NEED TO INTRODUCE THE TERM “OUTER VOID SPACE”**

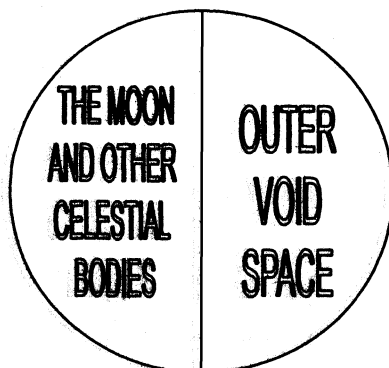
What I have done is to name this empty space the “outer void space”,<sup>13</sup> as can be seen in Figure 3 below. It is to be hoped that this term will be generally adopted. It is respectfully commended especially to the attention of the United Nations Committee on the Peaceful Uses of Outer Space, and the space law world at large.

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<sup>12</sup> See further Cheng B, *Studies in International Space Law* (1997, Clarendon Press, London) Part V: Military Use of Outer Space 513-538; “Military Use of Outer Space: Article IV of the 1967 Space Treaty Revisited” in *The Utilization of the World’s Air Space and Free Outer Space in the 21<sup>st</sup> Century*, Proceedings of the International Conference on Air and Space Policy, Law and Industry for the 21<sup>st</sup> Century, organised by the Korean Association of Air and Space Law and the Republic of Korea Air Force Academy, 23-25 June 1997, Seoul, Korea (to be published).

<sup>13</sup> See Cheng B note 12, example at 327; Section III.1 on “Filling in Lacunae, e.g. ‘Outer Void Space’ ” in “The 1967 Space Treaty: Thirty Years On”, Keynote address at the International Institute of Space Law’s special dinner to celebrate the 30<sup>th</sup> Anniversary of the Space Treaty, (1997) 40 *Space Law Colloquium* XVII, XIX; “The 1967 Outer Space Treaty: Thirtieth Anniversary” (1998) 23 *Air and Space Law* 156, 157.

OUTER SPACE



**Figure 3: Need to introduce the term “outer void space”**

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Before concluding perhaps two remarks may be made.

First, it is clear from what has been said that the purpose in introducing this new term is simply to fill a terminological gap in space law. It is certainly not intended to change the now well-established meaning of outer space as used in space law, and still less to replace it.

Secondly, with particular reference to the qualifier “void” in “outer void space”, it needs perhaps to be pointed out that the term is meant for use in legal and maybe also ordinary discussions regarding outer space. It has no pretension to being a description and even less a definition or prescription to be used in space science and technology which proclaims that the space in question (which, as have been seen, is in real need of a generic name) is absolutely bereft of any form whatsoever of matter or energy, be it dust, gas, or radiation, solid or charged particles, or anything else.

What the term “outer void space” is intended to do is merely to be used in legal (which does not prevent it from spreading to other fields) discussions and instruments to designate specifically the space in between celestial bodies, as distinct from the celestial bodies themselves. Outer void space is simply outer space without or void of all the celestial bodies. As to what in law is a celestial body, that is a separate issue which next requires in-depth examination.