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The Moon Agreement in the Current Scenarios©

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Stating the problem

The 1979 Moon Agreement came into force in 1984 after reaching its fifth ratification. Between then and the present time a myriad of changes have taken place in the international and regional scenarios. Disagreement surrounding the interpretation of Article 11 remains outstanding and possibly accounts for the very cautious support this instrument received from the international community over the last thirty one years. Moreover the environmental sides of space activities are rather poorly covered by this Agreement

In line with a traditional academic practice the general conclusion stemming from this analysis is announced at the outset. That is to say, that the Moon Agreement is in strong need of revision today having in mind the recent technological developments and programmes envisaged for the next years concerning exploitation on the field.

To this end, pride of place should be given to Article 11 proclaiming that the Moon and its resources are the common heritage of mankind. The international régime laid down in paragraph 5 of this Article, inspired on the provisions underlying Part XI of the 1982 Convention on Law of the Sea appear far too complicated for these initial stages. Therefore this paper will be looking at possible reasons for the timid support this instrument has gained since 1979 and suggest possibilities for the Moon Agreement to become more consistent with the present time.

In this vein, analogies and differences underlying the law of the sea and the international law of outer space will be carried out including, *inter alia,* a brief discussion on the anachronism of the 'five-ratification requirement' in today's world and the way general opinion is moving on the international fronts. Account will also be taken of the fact that, on the international arena, states seem reluctant to get involved in further commitments arising from the creation of new international- binding- rules on the subject. Indeed, the era of space-law treaty adoption within the United Nations seems a thing of the past.

A word on the environmental aspects of the Moon Agreement will also be added with a view to establishing whether its provisions are really an improvement over those underlying the 1967 Space Treaty. However, on this matter, it is fair to say that the recent study entitled *Protection of the Environment of Celestial Bodies (PECB)*, International Academy of Astronautics 2010

(Hofmann, Rettberg, Williamson, Eds.) is sufficiently explicit on this question and reflects the state-of-the-art from the legal and other optics in impeccable form.

These thoughts, together with with the views expressed in Vienna on 25 March 2010, at an informal Seminar on the subject organised by the Federal Ministry for European and International Affairs of Austria, as well as the Report of the ILA Space Law Committee to the 74th Conference of the International Law Association (ILA) in August 2010 at The Hague and working session which followed its presentation, will be the primary -and most recent- sources of information relied upon by this writer to assess the consistency of the Moon Agreement in the present time.

Finally some thoughts shall be included on the long-standing controversy over rights of ownership on the Moon, triggered by article II of the 1967 Treaty and which, certainly, the Moon Agreement does not solve.

General remarks and issues surrounding Article 11

In spite of having been ratified by very few countries -albeit the necessary number to enter into force- the validity of the Moon Agreement in the current international scene was already questioned by the ILA Space Law Committee at the 70th Conference of the International Law Association, New Delhi 2002[1]. The Conference Resolution, adopted without dissent after extensive discussion and deep analysis -between 1998 and 2002- [2] by this Committee, stated in Part 4 that

'... *regarding the 1979 Moon Agreement the common heritage of mankind concept had developed today as also allowing the commercial uses of outer space for the benefit of Mankind, and that certain adjustments were suggested to article 11 of this Agreement concerning the international régime to be set up for the exploitation of the Moon resources which will make it more realistic in today's international scenario'* [3].

This conclusion, at that moment, was no doubt a step forward given the constant growing of commercial activities in space. Eight years on, however, the international context is not the same. In fact, a number of new issues -and familiar issues but nowadays seen in new light- may now be identified which, with a view to having a more precise legal context applicable to the Moon and its resources, appear in need of adjustment.

In this quest, **Professor Kopal's** recent observations and suggestions on the ILA's Space Law Report to the 74th Conference of the Association, particularly when referring to the chapter on 'Future work of the ILA Space Law Committee', are of special interest. This distinguished member of the ILA Committee was welcoming the fact that a revision of the legal aspects of the 1979 Moon Agreement had been listed by the Space Law Committee and suggested to call this topic '*Consideration of the 1979 Moon Agreement in the light of actual state practice and the new development of space activities* [4].

Indeed, the ILA Committee concurred last August at The Hague that the Moon Agreement was in the limelight once more and that preliminary conclusions should be advanced for the next Conference in 2012 thus paving the way for further research and comparative analysis of state practice on the matter.

To this end I shall turn the page back to the days of the ILA New Delhi Conference in 2002 for a brief review.

At the time the present writer had succeeded Professor **Karl-Heinz Böckstiegel** as Chair of the Committee and **Professor Stephan Hobe** became the General Rapporteur. The Special Rapporteur on this matter was **Professor Frans von der Dunk** who submitted a critical analysis, plus a number of carefully thought out changes, to "save" the Moon Agreement. These changes, at first sight, appeared somewhat drastic. Yet, on further discussion and interpretation, they appeared less dramatic.

From a historical perspective, however, these changes affected provisions which were at the very core of profound- and sometimes vitriolic - debates and compromise within the Legal Subcommittee of COPUOS (LSC) in the early seventies, between the delegations of developing countries and those of the Soviet Union.

In later years, the precedent provided by the Law of the Sea, and difficulties arising from Part XI (dealing with the Area, particularly article 136 providing that the Area and its resources were the common heritage of mankind) became illustrative on this point. As is known, this situation led to the conclusion of the 1994 New York Agreement on the Implementation of Part XI, and only then was the door open for the 1982 Law of the Sea Convention to become effective. A similar course of action is envisaged by part of the doctrine for the Moon Agreement.

The 'common heritage of Mankind' (CHM) clause (Art. 11, 1)

By way of example, and before taking a final decision on the need to delete the 'common heritage of mankind' (CHM) clause and replacing it, for example, with the expression, ´common interests of Mankind´ or 'common concern of all Mankind´´ or 'province of mankind', among the many variations suggested by the doctrine, let us take a look, in hindsight, at the harsh discussions registered within the LSC over article 10 of the then 1972 Draft Text of the Agreement on the Moon stating that the natural resources of the moon and other celestial bodies were a common heritage of mankind. In those days the whole of this text was placed between square brackets thus indicating a complete lack of consensus on the matter.

This situation prompted the Soviet Union to submit a Working Document to the Legal Subcommittee of COPUOS on 28 March 1973 where the expression 'common heritage of mankind' was severely questioned on the grounds that, pursuant to the 1967 Space Treaty, the moon and other celestial bodies could not become the property of anyone and, moreover, that the concept of 'heritage' was closely intertwined with the right of ownership and of property. When something belonged to nobody, it obviously had no owner and therefore could not - according to the Soviet document - become the heritage of anybody. This approach, at the time, left a number of delegations to the LSC particularly uneasy[5].

In response the Argentine delegation, headed by **Professor Aldo Armando Cocca**, in a kind of rebuttal to the Soviet stance, submitted a working document containing a deep discussion on the width, length and implications of a

number of terms related to ´property´, 'ownership', 'heritage', 'succession' and others, in the different legal systems of the world, and recommending the replacement of the formula 'province of all mankind' with 'common heritage of Mankind' [6], as it now stands.

The Soviet Union, for its part, remained firm in its position until 1978 when a slight change of attitude was perceived within the LSC. However, it was not until 1979, when a number of delegations made public their discouragement on the lack of consensus over crucial aspects of the UN Draft, that the USSR decided to become more flexible and, doubtless, more compromising[7].

In today's scenarios the suppression of the CHM formula may not appear politically wise, as part of the specialists held when expressing their views in New Delhi at the ILA Conference. Furthermore, it is also fair to say that this concept - if still undefined - is an important element for negotiation between industrialised and developing countries provided it is developed and used within each specific context and subject. This is quite different from invoking and applying an abstract formula without exactly knowing what its dimension and consequences may turn out to be and which, so far, has given way to confusion and reluctance in going along, *inter alia*, with the text of the Moon Agreement. Perhaps the wording of this formula could be adjusted to be consistent with other international instruments of our time.

The environmental clauses in the Moon Agreement

In the field of international environmental law, for instance, the situation is illustrative when dealing with topics and areas referred to as being **of concern to mankind**. Let us take, as example, the protection of the ozone layer in light of the 1987 Montreal Protocol. In this framework, developing countries whose consumption of CFCs and other chemical products containing chlorine and bromine fell below a certain figure - calculated *per capita and per annum* - only became bound by the restrictions imposed by the system ten years after they became parties to the Protocol Montreal. The protection of the ozone layer is - doubtless - **a common concern of all mankind**. And so are the Moon and its resources.

If we look at the Moon Agreement in this light, insofar as the amendments suggested to Article 11.1 are concerned, the use of the term 'common concern of all mankind' appears preferable to 'province of all mankind' which still remains vague and has different connotations depending on the language and area in which this provision is ,considered. Moreover, this would take us back to the uncertainties underlying *'apanage'* in the French version of the 1967 Space Treaty and *'incumben a'* in the Spanish text, which are not exactly synonymous. In addition, the formula 'common concern of mankind' is increasingly being applied in the field of modern international law.

Another valid question in this field, as observed in the outset, is to determine whether the environmental provisions included in the Moon Agreement should be seen as an improvement over Article IX of the 1967 Space Treaty which fails to go beyond laying down a duty of international cooperation -coupled with consultation mechanisms- when a country involved in experiments in outer

space has 'reason to believe' that it might cause damage to the environment.

An interesting idea was discussed by the ILA Space Law Committee in New Delhi concerning the contemporary concept of 'inter-generation' responsibility which was included in Article 4 of the Moon Agreement. In this sense, **von der Dunk** proposed, and committee members, in general, welcomed, the idea that article 4.1 of the Moon Agreeement should carry a word on the commercial aspects of the exploitation of moon resources and could read as follows (changes and/or additions in italics):

'The exploration and use of the moon, *including commercial exploitation and use,* shall be the province of all mankind and shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic and scientific development. *Commercial exploitation and use are, however, only allowable [permissible] in conformity with the provisions of Article11.* Due regard shall be paid to the interests of present and future generations as well as to the need to promote higher standards of living and conditions of economic and social progress and development in accordance with the Charter of the United Nations'.

If we have in mind that, as underlined by Professor Mahulena Hofmann in an introduction to the study mentioned at the outset on the protection of the environment of celestial bodies, a significant amount of space debris has already contaminated the surface off the Moon, Venus and Mars it is not exaggerated to suggest that agile procedures on dispute settlement coupled with strict rules applicable to the protection of the Moon environment are becoming a high priority in the world of today[8]. All research, especially *in-situ* research, produces a certain amount of pollution. The spacecraft populations in the orbital environments of the planetary bodies, notably the Moon and Mars, are already on the rise. Developing space based energy sources, including in-situ resource utilization for use in space or transfers to Earth, can affect the planetary environment detrimentally. Commercial space tourism is increasing and so is its environmental impact. Industrial activity, mining in particular, may destroy the original environment of smaller celestial bodies[9].

At this stage, and in this context, it becomes opportune to ask ourselves whether the adjustments proposed to make the Moon Agreement more consistent in today's current international scene, should be introduced as amendments to the Agreement or made by means of a separate international instrument -either binding or recommendatory- whenever the review clause envisaged in Article 18, were to be made use of.

Amendments to multilateral treaties: how should the suggested changes be made?

A frequent objection when amendments to multilateral treaties are considered is that, from a practical stance, it appears just as difficult to amend the Treaty as to agree on a new one. If, in the case of the Moon Agreement, we follow the first course of action, i.e. to "save" the Agreement by introducing amendments, then we would - theoretically, at least - become immersed in the issue of having, on the one hand, States Parties to the original Agreement and, on the other, States Parties to the amended Agreement. This entails the complications arising from the application of Part IV of the

Vienna Convention on the Law of Treaties, particularly articles 40 and 41 on amendments of multilateral treaties and agreements to modify multilateral treaties between certain of the parties only.

Yet, on looking closer, and in light of the changes suggested by the ILA Special Rapporteur in 2002, it may be reasonably expected that the 13 States Parties to the 1979 text today will have no great difficulties in becoming bound by the amended text. In addition, the new provisions may seem more acceptable to the - so far, detached - members of the international community.

Be that as it may, for practical reason, and having in mind the difficulties involved in amending a multilateral treaty as said before, the present writer submits that the Moon Agreement should read as it stands today and that any change should be introduced by an UNGA Resolution or separate Protocol. Furthermore, the possibility of adding more 'COPUOS Understandings' for the interpretation of certain substantial provisions with the idea of not damaging consensus, should be given further consideration.

As to one of the initial questions raised in this paper, namely whether the Moon Agreement had gone forward in regulating environmental aspects initially addressed in Article IX of the 1967 Space Treaty, it should be answered in the negative.

The 'five-ratification requirement'

Another source of contention, apart from the difficulties surrounding the CHM concept, is the fact that the Moon Agreement only required five ratifications to enter into force. This took place on 11 July 1984.

Contrary to the previous Space Treaties - which established a similar requirement but where the number of ratifications and accessions grew at regular pace -albeit somewhat slowly in the case of the 1975 Convention on Registration- in the case of the Moon Agreement very few States have become parties to the Moon Agreement to date. In fact, there were 10 in 2002 and 13 in 2010.

Those figures -which imply an unfortunate contradiction with the system- speak for themselves. The "five ratifications" requirement was perhaps advisable in the early days of the space age in order to encourage the effectiveness of the new Space Treaties. And, in this respect, it has worked well.

The Moon Agreement, however, is now illustrative of the contrary. More than thirty years on the world scenario is entirely different and, should we ever go back to the stage of 'treaty-making' of the United Nations, the 'five ratifications' formula ought to be reviewed.

Non-appropriation, ownership and sovereignty on the Moon

To review the scope and implications of 'ownership' in the Moon Agreement it is helpful to go back for a moment to the time of the drafting the 1967 Space Treaty.

France, already in those days, was not too happy with the wording of Article II because of the risks of ambiguity between the principle of non-sovereignty -a concept of public law- and that of non-appropriation, which came under private law. The French delegate stated, in no uncertain terms,

Je pense en particulier aux risques d'ambigüité existant entre le principe de non- souveraineté -qui relève du droit public- et celui de la non-appropriation émanant du droit privé (A/AC.105/PV.44, p.41 (19-9-66).

In this context I am strongly reminded of Bin Cheng's views, who followed the drafting process very closely. He considered this ambiguity was not so as the principle of non-appropriation embodied in Article II of the 1967 Space Treaty was the same as that traditionally applied to the high seas. It simply meant that, as among States Parties, none will be entitled to exercise territorial jurisdiction, no matter on what basis, over any part of outer space or celestial bodies[10].

Under the 1967 Space Treaty both outer space and celestial bodies are declared *res extra commercium* (Arts. II and I, paragraph 2 and 3) and freedom of those areas for scientific investigation, exploration and use is a mere consequence of their status as *res extra commercium*[11]. It is interesting to observe, however, that the term 'exploitation' was never used in that context. Conversely, the Moon Agreement did.

Following **Professor Cheng's** very clear reasoning, since there is no territorial jurisdiction in outer space or on celestial bodies there can be no private ownership of parts thereof which presupposes the existence of a territorial sovereign itself competent to confer such titles of ownership. Hence, outer space and celestial bodies are not subject to national appropriation nor are they subject to appropriation under private law[12].

This contention remains valid in the world of today and forms part of a statement issued by the International Institute of Space Law during the 48th Session of the LSC in March-April 2009. The present writer, for her part, included these thoughts, and confirmed them, in a presentation made at the UN /Iran Workshop on *International Legal Framework Governing space activities - Current Status and Trends,* Tehran, November 2009 [13].

Yet, the statement of the French delegation in 1968 showed concern about the possibility of a semi-permanent occupation of parts of outer space and, particularly, celestial bodies, for exploitation purposes, a matter which required further study and, if the example of the continental shelf was taken as a guide, also further regulation[14].

Indeed, it may be submitted, that the time would seem ripe today to start discussing this kind *of sui generis* 'ownership' mentioned by France - possibly, to avoid confusion, under a different name- as space activities envisaged on celestial bodies are gaining momentum. The IISL and the ILA appear, *inter alia*, a right forum to start addressing the question and dealing with its many intricacies.

However, for the general public and to meet the objective of creating awareness, it is considered that the contents of the original statement by Bin Cheng in 1968, reconfirmed by the IISL in 2009, are clear enough.

General conclusion

One cannot escape the fact that, as noted earlier, the general opinion concurs -with few exceptions- that the Moon Agreement should be kept afloat. The issues

addressed in this paper are points of contention which should be clarified and simplified by way of a separate instrument keeping, however, the Moon Agreement in its present reading. Special attention should be therefore centralised on art.11 of this Agreement with the objective of achieving some uniformity among the various interpretations currently held by the international community on the major issues involved. Any adjustments should be introduced by a separate international instrument.

Concerning the environmental aspects of the Moon Agreement, which certainly fail to be more realistic and precise than Article IX of the 1967 Space Treaty, it is submitted that the duty of international cooperation be viewed as a legal obligation -and not just an expression of ideals. It should be considered as an indispensable requirement for the validity of activities in outer space, conducted by public and/or private entities.

As regards the current discussion relating to rights of property over the Moon and its resources, the statement denying any possible territorial jurisdiction in outer space or on celestial bodies is valid today. As **Bin Cheng** held in 1968, there can be no private ownership of celestial bodies and/or parts thereof which presupposes the existence of a territorial sovereign itself competent to confer such titles of ownership. Hence, outer space and celestial bodies are not subject to national appropriation nor are they subject to appropriation under private law[15].

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[1] See Williams, M., *Final Report on the Review of Space Law Treaties in View of Commercial Space Activities – Concrete Proposals, ILA Report of the Seventieth Conference,* New Delhi 2002, 192-215, including New Delhi working session 216-227, London.

[2] The ILA Space Law Committee examined this question between 1998-2002 in-between its London Conference (2000) and New Delih (2002. See *Reports of the Sixty-Ninth and Seventieth ILA Conferences*

[3] Ibid. , *ILA Resolution* 1/2002, *New Delhi Conference Report*, 13-15.

[4] Kopal, Vladimir, member of the ILA Space Law Committee (Czech Republic) in a letter to the present writer entitled *Observations on some issues included in the Fourth Report on the Activities of the ILA Space Law Committee,* 3 August 2010, on file.

[5] Doc.A/AC.105/115, 27 April 1973, 24-25.

[6] Doc. A/AC.105/115, Annex 1, 29-31.

[7] By the present writer, *International Law before and after the Moon Agreement*, International Relations, London, Vol. VII, N° 2,1981,1168-1193.

[8] Hofmann, Mahulena, *Protection of the Environment of Celestial Bodies (PECB)*, International Academy of Astronautics 2010 (Hofmann, Rettberg,Williamson, Eds.), Foreword 5-6.

[9] Ibid.

[10] Cheng, Bin, *Le Traité de 1967 sur l'Espace, Journal de Droit International, Clunet,* N°3, 1968, 532-645, at 568.

[11] Ibid., 564.

[12] In this sense, Belgium had taken note of the interpretation of the term 'non-appropriation' advanced by several delegations, possibly without contradiction, as covering both the establishment of sovereignty and the creation of titles of property in private law (A/AC.105/C.2/SR.719 and Add. 1 (4-8-1966), p.7. France spoke of the prohibition of 'any claim of sovereignty or property rights in space' (A/C.1/SR.1492 (17-12-1966), 429. Quoted by Bin Cheng, op.cit. in note 10 *supra.*

[13] Williams, M., *The Declarations and Legal Principles on Outer Space Today, UN/Iran*

Workshop on International Legal Framework Governing Space Activities – Current Status and Trends, November 2009, Tehran.

[14] Op.cit. in note 10 *supra, 574-576.*

[15] See notes 10, 11and 12 *supra.*