

# Legal Loophole or Just a Matter of Interpretation?

## *On the Outer Space Treaty's Methodology Test with the Diversification of Space Activities*

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### Abstract

The catching up effort of space law with space technology has always been the issue since the very beginning of space activities. Even after the wind of regulative actions on space activities has subsided, the development of space technology has continued, allowing space activities to diversify more. Within the diversification of space activities, applicable rules on these new activities have also come into question.

This paper considers that searching for the applicable rules in space law to the new activities is related to methodology of law, and this searching raises a certain dilemma: Whether or not there is a legal loophole in space law or there is no legal loophole and to find an applicable rule on new activities of space is just a matter of interpretation of the United Nations (UN) Space Treaties. In this study, the Outer Space Treaty (OST) and its applicability on space mining activities will be examined as an example of this dilemma.

In the general point of view, the OST leaves a great deal of uncertainty concerning the legal status of space resources and their commercial use including mining activities. As private space mining projects begin to emerge and the ordinary meaning of the OST cannot provide a concrete solution, how to use interpretation as a method to resolve this dilemma also comes to mind. This paper proposes dynamic interpretation as a methodological solution to this dilemma because it could allow expansive reading of the text, beyond its meaning at the time its conclusion. Therefore, with dynamic interpretation of the text of the OST, freedoms and obligations would respond to the changing conditions of the space activities and needs of the recent space community.

**Keywords:** Legal loophole, dynamic interpretation, *res communis* regime, space mining, international cooperation, quasi-common heritage of mankind.

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## 1. The Scope of This Work

Technology has always been one step ahead of law from the very beginning of the society. Legal concepts have been developed when there is a need caused by a development of a new practice in life. For instance, the property right was not the issue before the settlement of human beings on the land and the creation of infrastructure. As for space law and space activities, first human beings reached beyond the sky and then the international community started the discussion on the legal regime of space, celestial bodies, and space activities; liability on the damage caused by space crafts: the rescue of astronauts; and registration of space objects.

After the treaty making process ended with the enactment of the Moon Agreement, arising needs of space law have been addressed by soft law instruments such as the United Nations General Assembly Declarations or guidelines on space debris. However, development of space technology is a never-ending process, and it brings forth new questions on the existing hard law instruments. The attention of the international community now is on searching for applicable rules to the recent space activities.

This paper considers that this search raises a dilemma whether one assumes that there is no rule of space law applicable to these activities or that the appropriate rules for these activities can be found through interpretation. We also focus on discovering the applicable rules on these activities, rather than just stating the incapability of space treaties. In order to do this, the applicability of the Outer Space Treaty (OST), being the constitution of space law, will be examined with regards to the most related upcoming space activity which is space mining.

## 2. The Obvious Approach in Dilemma: Legal Loophole or Just a Matter of Interpretation?

In the general point of view, it has been defended that the OST does not provide clear rules concerning the legal status of space resources and their commercial use including mining activities.<sup>1</sup> The OST may support the

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1 We must distinguish the property rights which could be established on movable and immovable goods, and state the illegality of immovable property rights claims on the surface of the moon or any other celestial bodies in the face of the non-appropriation principle of the Outer Space Treaty. See. F. Lyall, P.B. Larsen, *Space Law A Treatise*, Ashgate, The UK, 2009, pp. 183-185; M. Erdem, *Uzayın ve Uzay Faaliyetlerinin Hukuki Rejimi*, Savaş, Ankara, 2014, pp. 105-116; R. Jahku, *Legal issues relating to the global public interest in outer space*, available: <http://cissmdev.devcloud.acquia-sites.com/sites/default/files/papers/jakhu.pdf> (accessed 01.08.2017), p. 14; R. Lee, *Article II of the outer space treaty: prohibition of state sovereignty, private property rights, or both?*, *Australian Journal of International Law*, 11 (2004); Statement by the Board of Directors of the IISL, *On Claims of Property Rights Regarding the*

development of some activities, however, it lacks a certain level of clarity to identify specific activities like space mining.<sup>2</sup> The Treaty never uses the term exploitation.<sup>3</sup> Therefore, clear and proper legal regulations and a central international management mechanism on the space resources are urgently needed.<sup>4</sup> However, this could even more complex and difficult to achieve than the process of atomic fusion. There are also some writers debating that the exploitative activities of the Moon and other celestial bodies would be contrary to the non-appropriation principle of the OST.<sup>5</sup> Considering the uncertainty argument on the OST and the necessity of enactment of a new international regime, it could be deduced that the

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Moon and Other Celestial Bodies, available: [https://www.iislweb.org/docs/IISL\\_Outer\\_Space\\_Treaty\\_Statement.pdf](https://www.iislweb.org/docs/IISL_Outer_Space_Treaty_Statement.pdf) (accessed 01.08.2017).

- 2 For the discussion see. F. Tronchetti, *The Exploitation of Natural Resources of the Moon and Other Celestial Bodies a Proposal for a Legal Regime*, Martinus Nijhoff Publishers, The Netherlands, 2009, p. 4; F. Von der Dunk, *The US space launch competitiveness act of 2015*, JURIST – Academic Commentary, December 3, 2015, available at: <http://jurist.org/forum/2015/11/frans-vonderdunk-space-launch.php>, (accessed. 01.08.2017); I. A. Vlastic, *Space treaty: A preliminary evaluation*, *California Law Review*, 55/2 (1967), p. 513; M. L. Smith, *The commercial exploitation of mineral resources in outer space*, in T.L. Z waan (Ed.), *Space law: Views of the Future*, Leiden, Kluwer Law International, 1988, pp. 53–54; P. de MANN, *Exclusive Use in an Inclusive Environment the Meaning for Space Resource Exploitation*, Springer, Switzerland, 2016, p. xxix; *Position Paper on Space Resource Mining Adopted by consensus by the Board of Directors on 20 December 2015*, pp. 2-3.

What is not explicitly prohibited is permitted approach of the Lotus Case is also adopted by some of the writers in the context of exploitation of natural resources of outer space. They claim that exploitation of natural resources could be legal, since the OST only refers to sovereignty claims of states. C.Q. Christol, *Article II of the outer space treaty revisited*, *Annals of Air and Space Law*, 9 (1984), 217, 240; D. Goedhuis, *Some recent trends in the interpretation and the implementation of the rules of International Space Law*, *Columbia Journal of Transnational L.* 19 (1981) 213, 219.

- 3 Tronchetti, 287.
- 4 D. Widgerow, *Boldly going where no realtor has gone before: the law of outer space and a proposal for a new interplanetary property law system*, *Wisconsin International Law Journal*, 28 (2011) 510; F. Tronchetti, *Legal aspects of space resource utilization*, in F. Von der Dunk, F. Tronchetti (Eds.), *Handbook of Space Law*, Edward Elgar Publishing, The UK, 2015, p. 813; P. De Mann, S. Hobe, *The National Appropriation of Outer Space and its Resources*, IISL/ESCL Symposium 27 March 2017, [www.unoosa.org/documents/pdf/copuos/lsc/2017/symp-08.pdf](http://www.unoosa.org/documents/pdf/copuos/lsc/2017/symp-08.pdf) (accessed: 15.08.2107); R. Lee, *Law and Regulation of Commercial Mining of Minerals in Outer Space*, Springer, 2012, p. 8; R. Merges-G.H. Reynolds, *Space Resources, Common Property and the Collective Action Problem*, *NewYork University Environmental Law Journal*, (1997); Tonchetti, 232-238.
- 5 A. Kerrest, *Exploitation of the Resources of the High Sea and Antarctica: Lessons for the Moon?*, *Proc. Coll. L. Outer Space* 47 (2004) 534; R. V. Günel, *Uluslararası Hukuk Açısından Uzay Madenciligi*, Turhan Kitabevi, İstanbul, 2017, p. 170.

international community refers to a legal loophole in space law on dealing with future space mining activities.<sup>6</sup> A legal loophole is defined as an omission which permits the intent of a legal document to be avoided.<sup>7</sup> It means that there is no clear answer to a legal case, no possible valid answer which would help to reach a solution. It can also be said that if an action is neither prohibited nor permitted, then there is a legal loophole.<sup>8</sup> In the face of the existence of a legal loophole, this need for a legal rule could be filled either by the legislature or by analogy from similar areas of law which could be used as a method to resolve the loophole.<sup>9</sup>

If the international community could not reach an international agreement to regulate space mining activities in the near future, would it still be necessary to be under the shadow of the uncertainty argument on the OST and watch domestic legal systems adopt their own national legislations year by year? This paper suggests not just to look at the tip of the iceberg, but explore more underneath the surface, therefore space law does not have a legal loophole as discussed above.

Space law does not intentionally or unintentionally leave a gap in the rules regarding space activities nor would the application of a rule to the recently developing space activities cause inconsistency with the purpose of the space law rules. To the contrary, space law provides a general principle which gives a certain freedom on conducting all space activities for the benefit of humankind.<sup>10</sup> What space law does not provide is to regulate space activities in detail; it refers only to peaceful and scientific characteristics of it. Therefore, the size, the number, and the content of the activity have been left to the technological developments; it only gives a general provision which necessitates interpretation.<sup>11</sup>

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6 For instance Lee, 2012, p. 318, 320.

7 For the definition: <https://legal-dictionary.thefreedictionary.com/loophole> (accessed. 31.07.2017).

8 [www.blackwellreference.com/public/tocnode?id=g9781405106795\\_chunk\\_g978140510679513\\_ss1-19#citation](http://www.blackwellreference.com/public/tocnode?id=g9781405106795_chunk_g978140510679513_ss1-19#citation); <http://thelawdictionary.org/loop-hole/> ; <http://dictionary.cambridge.org/dictionary/english/loophole> (accessed 31.07.2017); B. Emrah Oder, *Anayasa Yargısında Yorum Yöntemleri*, Beta, İstanbul, 2010, p. 264.

9 Emrah Oder, pp. 265-271; R. Aybay, *Hukuka Giriş*, İstanbul Bilgi Üniversitesi Yayınları, İstanbul, 2005, pp. 356 – 357, 362 – 363.

10 Jakhu, p. 4.

11 Lee, 2012, p. 199; Neger, Walter, *Space Law-an independent branch of the legal system*, in C. Brünner, A. Soucek, (Eds.) *Outer Space in Society, Politics, and Law*, Springer, (2011), p. 241.

If we intend to interpret a single rule to apply to a certain situation, we could not talk about a legal loophole in the law, because legal regulations cannot be both general and lacunal at the same time. De Mann, p. xxx.

On the general interpretation of space law provisions see also: Christol, pp. 217-240; F. Tronchetti, *Non-appropriation principle as a structural norm of international law*:

In sum, basic principles regarding space activities are too general; it becomes a matter of interpretation to find substantial provisions for new space activities.<sup>12</sup> By stating our stand on the dilemma, we indicate our conclusion from the very beginning. This paper does not intend to reinvent the wheel; it seeks to test a certain method of interpreting the OST. It will expand upon the ordinary meaning of the *res communis* regime of the OST and interpret the rights and obligations of the regime via dynamic interpretation. This method of interpretation enables a more comprehensive reading of the text in light of current necessities of space law concerning new space activities such as space mining, which serves as an example in this paper.

### 3. Dynamic Treaty Interpretation in International Law

It is clear that interpretation is crucial for understanding a rule as well as for the process of applying it.<sup>13</sup> Interpretation of a treaty itself would have different purposes and be done to ascertain which rules could be applied to whom, to which situations and for which period.<sup>14</sup> Every person or organ that is concerned with the application of a treaty would use interpretation, therefore it is not exclusive to judges to be used in a case.<sup>15</sup>

According to the general rule of interpretation of the Vienna Convention on the Law of Treaties, as enacted in article 31, a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.<sup>16</sup> It is intended that the terms of a treaty means something and has to be applied

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a new way of interpreting article II of the outer space treaty, *Air&Space Law Journal*, 33 (2008) 277-305; Lee, pp. 128-142; R. Jakhu, J.N. Pelton, Y.O.M. Nyampong, *Space Mining and Its Regulation*, Springer, Switzerland, 2017, p. 115; S. Gorove, *Interpreting article II of the outer space treaty*, *Fordham Law Review*, 37/3 (1969) 349-354; For systemic integration method of interpretation see. De Mann, p. 44-48.

12 According to the statements of Italian and Romanian delegations at the Legal Subcommittee of the UN Committee on the Peaceful Uses of Outer Space, there was even no legal loophole back in the sixties. They have stated that it is not accurate to defend that there was a legal vacuum in outer space since rules of general international law were also applicable to outer space. See. Statement of the Representative of Romania, at the thirty-fourth meeting of the Legal Subcommittee, 13 March 1964, available: [www.unoosa.org/pdf/transcripts/legal/AC105\\_C2\\_SR029-037E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR029-037E.pdf) (accessed: 15.08.2017), p. 81.

13 O. Dörr, K. Schmalenbach, *Vienna Convention on the Law of Treaties*, Springer, 2012, p. 522.

14 Dörr, p. 530.

15 P. Malanczuk, *Akehurst's Modern Introduction to International Law*, 7<sup>th</sup> edn, 1997, pp. 3-7.

16 1969 Vienna Convention on the Law of the Treaties, available: <https://treaties.un.org/doc/publication/unts/volume%201155/volume-1155-i-18232-english.pdf> (accessed: 01.08.2017).

honestly, reasonably, namely, all treaties has to be interpreted in good faith.<sup>17</sup> As an integral part of *pacta sunt servando* principle, interpretation in good faith prevents the parties to take an unfair advantage from the interpretation of the treaty.<sup>18</sup> The nature and the aim of a treaty should be inferred from the whole text, including its preamble and annexes.<sup>19</sup> As understood from the general rule on the interpretation of the treaties, interpretation is a tool to understand the true meaning of the treaty text itself instead of giving effect to the intention of the parties.<sup>20</sup>

Since the law is made up to serve the needs of communities, it has the necessary normative tools to be adjusted in order to survive.<sup>21</sup> It has to adapt to the situations, which it regulates a specific activity depending on the scientific and technological accumulation of knowledge. As this knowledge advances and the activity diversifies, the regulations regarding the activity would necessitate some degree of revision.<sup>22</sup>

Revision of law is easier with the legislative tools at the domestic level. However, revision of international law and its adaptation to the recent developments becomes complicated concerning the different structure of the international law. At this stage, interpretation of law becomes significant on the application of existing rules to the recent developments of the human activities.

Interpretation of existing rules with respect to the recent developments of human activities refers to the time element of the interpretation. For this element, there are two approaches, one of which is the static/contemporary approach and the other is the dynamic/evolutionary approach.<sup>23</sup>

The first approach suggests that the terms of a treaty shall be interpreted as at the time when the treaty is concluded. It assumes that the time stops after concluding a treaty and ignores the developments of law and transformation of society in time. The main reason behind this approach is the state-centric perception of the international law. According to the defenders of the approach, a state is bound only to the legal instrument that it has shown the

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17 M. Vileger, Commentary on the 1969 Vienna Convention on the Law of Treaties, Martinus Nijhoff Publishers, Leiden, 2009, p. 425.

18 M. Vileger, 425; V. O. Mazzuoli, The Law of the Treaties, Forense, Brasil, 2016, p. 258.

19 Villegar, s. 427; Mazzuoli, pp. 259-260.

20 Dörr, s. 522.

21 P.- M., Dupuy, Evolutionary interpretation of treaties: between memory and prophecy, in E. Cannizzaro (Ed.) The Law of Treaties Beyond the Vienna Convention, Oxford University Press, 2011, p. 123.

22 Dupuy, p. 137.

23 U. Linderfalk, Doing the right thing for the right reason- why dynamic or static approaches should be taken in the interpretation of treaties, International Community Law Review 10 (2008), 113.

intention to bind itself to.<sup>24</sup> Therefore, for the interpretation of the international treaties, the intention of state parties has to be considered, and the intention of state parties could be gathered at the time of the conclusion of the treaty.<sup>25</sup> It reflects the assumption that the meaning of the text is fixed to the moment when the drafting period of the treaty ended.<sup>26</sup>

This approach has found a place at some of the jurisprudence of the International Court of Justice (ICJ). In the *Rights of Nationals of the United States of America in Morocco* case and the case concerning *Kasikili/Sedudu Island*, the court used the restrictive approach in order to interpret some generic terms.<sup>27</sup> The Eritrea-Ethiopia Boundary Commission also applied static interpretation stating that a treaty should be interpreted by reference to the circumstances prevailing when the treaty was concluded.<sup>28</sup>

The opposite approach to static interpretation is based on the assumption that the drawn content of a treaty by the Parties would change as time passes, and the Parties may intend to give meaning to the context with respect to changing circumstances. According to this approach, referred to as dynamic interpretation, the meaning of a term in a treaty could be inferred not at the time of its conclusion, but at the time of interpretation.<sup>29</sup> Dynamic interpretation is related to the evolutionary and realist perceptions on the law.<sup>30</sup> It denies the idea of a fixed meaning of statute given permanently by the legislators. Instead, it would serve as a necessary tool to adapt the text to the evolving social and legal conditions.<sup>31</sup>

The dynamic interpretation would be traced in the body of international court decisions. The ICJ, in addition to the decisions in which it has used

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24 The Case of *Golder v. UK*, Separate Opinion of Judge Sir Gerald Fitzmaurice, pp. 46-57. See also A. Bolintineau, Expression of consent to be bound by a treaty in the Light of the 1969 Vienna convention, *American Journal of International Law*, 68, (1974) 672; G. Korontzis, Making the treaty, in D. Hollis (Ed.) *Oxford Guide to Treaties*, Oxford University Press, UK, 2012, p. 196.

25 C. M. Brölmann, Specialized rules of treaty interpretation, in D. B. Hollis (Ed.) *The Oxford Guide to Treaties*, Oxford University Press, UK, 2012, p. 513; J. Kokott, States, sovereign equality, in R. Wolfrum (Ed.), *Max Planck Encyclopedia of Public International Law*, Oxford University Press, 2012, p. 571; J. Weiler, Transformation of Europe, *The Yale Law Journal*, No. 8, Symposium: International Law, (1991), 2416.

26 E.E.Triantafilou, Contemporaneity and evolutive interpretation under the Vienna convention on the law of the treaties, *ICSID Review*, 32/1 (2017), 151.

27 *Rights of Nationals of the United States of America in Morocco case and (France v. United States of America)*, *I.C.J. Reports 1952*, p. 176; *Kasikili/Sedudu Island case (Botswana/Namibia)*, *I.C.J. Reports 1999 (II)*, p. 1062, para. 25.

28 The Eritrea– Ethiopia Boundary Commission Delimitation of the Border Between Eritrea and Ethiopia (*Eritrea v. Ethiopia*) 25 RIAA 83, (2002), 110.

29 Dörr, p. 534.

30 Emrah Oder, p. 225.

31 Linderfalk, p. 715.

static interpretation, has also used dynamic interpretation in order to interpret some generic terms. In the advisory opinion *regarding Legal Consequences for States of the Continued Presence of South Africa in Namibia*, it has used this approach in order to interpret the phrase “sacred trust of civilization.” According to the decision, the Court have taken into consideration the changes of the law that happened in the last half century and could not turn a blind eye on the subsequent development of law.<sup>32</sup>

In the *Aegean Sea Continental Shelf* case and the *Navigational and Related Rights* case, the Court has used the same method and legal reasoning in order to interpret generic terms such as “territorial status” and “commerce.”<sup>33</sup> In the *Gabčíkovo-Nagymaros* case, the Court has interpreted the articles of the bilateral treaty between the state parties in the light of dynamic interpretation, as well. The Court has stated that the vulnerability of and risks to the environment necessitate it to take into consideration new legal norms on the environment; therefore, the bilateral treaty before the state parties has to be enhanced recent developments in environmental law.<sup>34</sup>

Apart from the jurisprudence of the ICJ, the dynamic interpretation has a special place in implementation in the case law of the European Court of Human Rights (ECtHR). According to the Court, the European Convention on Human Rights (ECHR) is a living instrument and could be accorded to the present-day conditions.<sup>35</sup> Dynamic interpretation used by the Court has been beneficial to expand the content of the fundamental rights in order to fulfill the needs of modern society. However, the Court does not create a totally new right which is not included in the Convention.<sup>36</sup>

In the *Golder* case, the Court has sought for the object and purpose of the Convention through using the preamble and the foundational idea which led the European Commission to be established by the member states. Then the Court has concluded that the right to access to the Court has been inherently included in Article 6 according to the main target of the Convention, and the Court also has declared that this interpretation of the Art. 6 does not impose a new obligation to the states parties.<sup>37</sup>

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32 *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)*, Advisory Opinion, I.C.J. Reports 1971, para. 53.

33 *Aegean Sea Continental Shelf, Judgment*, I.C.J. Reports 1978, para. 80; *Dispute Regarding Navigational and Related Rights, (Costa Rica v. Nicaragua)*, Judgment, I.C.J. Reports 2009, para. 63-70.

34 *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, I.C.J. Reports 1997, para. 112.

35 Dörr, p. 535.

36 Dörr, p. 535. Letsas, p. 59.

37 *The case of Golder v. The UK, (Application no. 4451/70)*, Judgment, 21 February 1975, para. 34, 36.



After the *Golder* case, the Court's argument that the Convention is a living instrument and the interpreting due to the present-day conditions argument has been used in several cases. *Tyrer v. UK*, *Engel and Others v. The Netherlands*, *Airey v. Ireland*, *Marckx v. Belgium*, *Louizidou v. Turkey*, *Bayatyan v. Armenia* are the cases in which dynamic interpretation has been used in order to re-ascertain the content of the rights provided by the Convention.<sup>38</sup>

The dynamic interpretation could also be discovered in the decisions of other regional or international courts such as the European Court of Justice, Inter-American Court of Human Rights, and the International Tribunal for the Law of the Sea, as well as from dispute resolution mechanisms of the World Trade Organization.<sup>39</sup>

Following this general provision on dynamic interpretation, we would love to go further on two complication factors regarding dynamic interpretation.

*Firstly*, in international law, there is a tendency to describe some branches of international law as self-contained regimes according to their individual subjects and contents. International human rights law, international humanitarian law, environmental law, the law of the sea, European union law, and the law of world trade are branches which are called to be examples of self-contained regimes. For some writers, these autonomous regimes, being particular systems, certainly would have a special method of interpretation.<sup>40</sup> Apart from this fragmented approach to international law, there are also

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38 The case of *Tyrer v. The UK*, (*Application no. 5856/72*), Judgment, 25 April 1978, para. 31; The case of *Engels and others v. The Netherlands*, (*Application no. 5100/71; 5101/71; 5102/71; 5354/72; 5370/72*), Judgment, 8 June 1976, para. 69; Case of *Airey v. Ireland*, (*Application no. 6289/73*), Judgment, 9 October 1979, para. 26; The case of *Marckx v. Belgium*, (*Application no. 6833/74*), Judgment, 13 June 1979, para. 41; The Case of *Loizidou v. Turkey* (*Application no. 15318/89*), Judgment, 18 December 1996; The case of *Bayatyan v. Armenia*, (*Application no. 23459/03*), Judgment, 7 July 2011.

39 Case 283/81, *Srl CILFIT and Lanificio di Gavardo SpA v. Ministry of Health* [1982] ECR 3415, para. 20; Inter-American Court of Human Rights, Advisory Opinion OC-16/99 OF OCTOBER 1, 1999, Requested by the United Mexican States, "The Right to Information on Consular Assistance in the Framework of the Guarantees of Due Process of Law, para. 114; Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, Advisory Opinion (1 February 2011) ITLOS/Case 17, para. 117; WTO, United States Import Prohibition of Certain Shrimp and Shrimp Products-Report of the Appellate Body (22 October 2001) WT/DS58/AB/R, para. 130 and WTO, China-Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products-Report of the Appellate Body (21 September 2009) WT/DS363/AB/R, para. 397.

40 E. Bjorge, *The Evolutionary Interpretation of Treaties*, Oxford University Press, UK, 2014, p. 28.

some writers who defend that international treaties could be categorized according to their different features as law-making treaties, contract treaties, etc., and their interpretation method would vary by their characteristics.<sup>41</sup>

It is acceptable to underline the different characteristics and to show the different needs of various regimes in international law. However, this does not necessarily mean that international law is fragmented into different self-contained systems and these regimes require different applications. On the contrary, international law is a whole legal system which consists of different branches. Also, it could not be easy to distinguish the international treaties, since the treaties may not be homogeneous, but are including various kinds of clauses.<sup>42</sup> Therefore, there is no accurate interpretation method allocated to the self-contained regimes or law-making treaties; to decide on which interpretation method to apply to any branch or to any treaty may depend on the *structure* of the branch and *the object and the purpose* of the treaty.<sup>43</sup>

*The second issue concerning dynamic interpretation* is the relationship between the intention of the state parties on the enacting of a treaty and the interpretation of the treaty. The main criticism on dynamic interpretation is the ignorance of the original will of states parties. It has been argued that the progressive application of the treaty may contradict with the original intention of the parties.<sup>44</sup>

Against this originalist criticism to dynamic interpretation, it is argued that once an international treaty has been enacted, it could be treated as independent from the common intention of its drafters.<sup>45</sup> At the same time, it is also defended that dynamic interpretation does not necessarily give meaning to the text beyond the intention of the parties.<sup>46</sup> It may also be the

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41 J.H.H. Weiler, The geology of international law, governance, democracy and legitimacy, *Zeitschrift für Ausländisches Öffentliches Recht und Völkerrecht*, 64 (2005), 547, 556.

42 P. Rauter, *Introduction to the Law of Treaties*, Routledge, The UK, 2011, pp. 25-30.

43 J. Crawford, P. Nevill, Relations between international courts and tribunals: the regime problem, in M. A. Young (Eds.) *Regime Interaction in International Law*, Cambridge University Press, The UK, p. 236, 252; M. Waibel, Demystifying the art of interpretation, *European Journal of International Law*, 22 (2011), 572.

44 This approach represents originalist approach to the interpretation and is based on the originalist theories on the constitutional law and interpretation methods used in constitutional courts. See for further details, L. Solum, What is Originalism? The Evolution of Contemporary Originalist Theory, available: <http://scholarship.law.georgetown.edu/facpub/1353> (accessed 08.08.2017); J. Goldsworthy, Jeffrey: Originalism in constitutional interpretation, *Federal Law Review*, Vol. 25, 1997, 1-50.

45 Dissenting Opinion of Judge Alvarez in *Reservations to the Convention on Genocide* (n 37), 53.

46 Dupuy, p. 126; G. Letsas, Intentionalism and the interpretation of the ECHR” in M. Fitzmaurice, E. Olufemi Elias, P. Merkouris (Eds.) *Treaty Interpretation and the Vienna Convention on the Law of the Treaties: 30 Years on*, Martinus Nijhoff Publishers, Leiden, 2010, p. 266.

intention of the state parties to interpret the text progressively.<sup>47</sup> Thus, drafters of a treaty have always two kinds of intentions: one of them is the concrete intention of the drafters and the other is the abstract intention of the drafters. In addition to these intentions, there is another intention of the parties, which is known as the meta-intention. The meta-intention is the intention of the parties on which one of the two intentions (concrete and abstract) is called to be more important than the other. Therefore, to determine the meta-intention, or to decide on the relevant intention for the interpretation, we examine the object and purpose of the treaty.<sup>48</sup>

For instance, due to this distinction, the drafters of the ECHR may have a concrete idea of what are the human rights and their content in 1950; however, at the background, they also might have abstract intentions on the moral objectivity and universality of these rights, which also constitute the object and purpose of the Convention. Hence, it becomes necessary to look into the needs of the human rights system in the light of present-day conditions and the object and purpose of the Convention, in order to interpret it.<sup>49</sup>

Consequently, no matter if it is called a self-contained regime or law-making treaty or not, one could use dynamic interpretation method if the system or the treaty necessitates innovative applications. In order to understand the need for dynamic interpretation, we have to examine the scope of the branch and the object and purpose of the treaties which may be drawn by the concrete or abstract intentions of the drafters.

#### **4. On the Application of Dynamic Interpretation Method to the Outer Space Treaty**

Space law is defined as the set of international and national legal rules, the principles that govern human activities conducted in outer space.<sup>50</sup> The scope of space law is to regulate the use and exploration of outer space and celestial bodies and redress the balance between the interests of various space actors.<sup>51</sup>

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47 Bjorge, p. 76, 138.

48 This is Dworkin's classification on the interpretation which Letsas applies to international treaty interpretation. G. Letsas, *A Theory of Interpretation of the European Convention on Human Rights*, Oxford University Press, UK, 2007, pp. 70-72.

49 Letsas, 2007, s. 73.

50 F. Tronchetti, *Fundamentals of Space Law and Policy*, Springer, 2013, p. viii; Neger, Walter, p. 235.

51 Tronchetti, 2013, p. vi; Neger, Walter, p. 243; Von der Dunk, *International space law*, in F. Von der Dunk, F. Tronchetti (Eds.), *Handbook of Space Law*, Edward Elgar Publishing, The UK, 2015, p. 29.

Due to the developments in space law, it has been defended that, like environmental law, space law has gained its independence in the legal system as well.<sup>52</sup> Furthermore, space law is described as evolutionary, because as space activities grow in number and diversity, it has been adapting itself to new changes and evolving.<sup>53</sup>

The Outer Space Treaty, as the fundamental treaty of the space law system, has converted soft law instruments into legally binding tools and provided an appropriate framework for the future legal activities.<sup>54</sup> The Treaty has created rights and obligations for the space-faring states. Therefore, it has been designed to establish a general framework for human's exploration and use of outer space and celestial bodies.<sup>55</sup>

As for legal regime of space and space activities, the OST provides a *res communis* regime. The *res communis* regime of outer space consists of three elements as provided by Articles I, II, and III of the OST. The first element, as drawn up by the Article I, presents the outer space and celestial bodies to the humankind, and gives a certain level of freedom to explore the outer space but obliges space faring states to carry out their activities for the benefit of all of us. In addition to the Article I, non-appropriation principle, has been enacted to strengthen the *res communis* regime of the outer space. Thus, in Article II sovereignty claims of the states by any means are strictly forbidden. Lastly Article III, as a supplementary element for the *res communis* regime of the treaty, obliges states to conduct their activities according to international law, as well as the UN charter in the interest of maintaining international peace and security and promoting international cooperation and understanding.<sup>56</sup>

It could be deduced from the *res communis* regime of the OST that the number of space activities is not enumerated or a clear classification on the permitted activities are not provided, so the regime provides freedom of use and exploration with some limitations.<sup>57</sup> This wording of the *res communis* regime has led the international community to assume that there is a legal loophole regarding regulating new space activities as well as space mining.

The international community is right to have this assumption; however, this assumption will not help determine a specific applicable rule on space mining. This paper argues that it is a matter of interpretation, and that a more concrete solution could be set forth with the dynamic interpretation

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52 Jakhu, Pelton, Nyampong, p. 115; Neger, Walter, pp. 235, 241.

53 Tronchetti, 2013, p. ix.

54 B. Cheng, Bin, Studies in Space Law, Clarendon Press, Oxford, 1997, p. 216.

55 Cheng, p. 229.

56 For the correlation argument between Article I and III and article I and II, see also Tronchetti, 2013, p. 8; Lee, pp. 217-219; p. 13, Jakhu, Pelton, Nyampong, pp. 115, 125.

57 Jakhu, p. 11.

method. This paper has already stated the general scope and characteristics of space law above, and it will now examine the UN General Assembly resolution 2222 in which the Treaty's text was adopted, and the OST itself, as well as its preamble and *travaux préparatoires*, in order to reveal its object and purpose.

In the General Assembly resolution in which the treaty text was adopted, the importance of international cooperation in peaceful space activities was reaffirmed, and furthermore, the GA underlined the importance of developing the rule of law for space activities.<sup>58</sup>

In the preamble, the common interests of humankind have been recognized, and the belief on exploration and use of outer space as being carried out for the benefit of humankind has been stated. Furthermore, the contribution to broad international cooperation in the scientific and legal aspects of the use of outer space is said to be desired. It is obvious from the preamble that the treaty has the intention on the continuation of the international cooperation by technical and legal means.<sup>59</sup>

In the *travaux préparatoires*, from the very beginning of the enactment process of the OST, international cooperation and the conducting of space activities for the benefit of humankind have been the main principles drawn by the state parties.<sup>60</sup>

At the 29th to 37th meetings of Legal Subcommittee of the Committee on the Peaceful Uses of Outer Spaces (LSC) between 9 and 29 March 1964, the discussion was on the necessity of transforming outer space principles into a treaty or focusing on draft treaties on the liability for the damages caused by space objects and the rescue of astronauts. Even though the Subcommittee could not mainly focus on the possible draft treaty on the principles of outer space, they made general statements on the characteristics of a possible treaty on outer space. They have underlined the importance of international cooperation on the conducting of activities and the equal access to outer space no matter the degree of development of states.<sup>61</sup> It was also stated that

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58 General Assembly Resolution, 2222, 19 December 1969 [https://documents-dds-ny.un.org/doc/RESOLUTION/ GEN/NR0/005/25/IMG/NR000525.pdf?OpenElement](https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/005/25/IMG/NR000525.pdf?OpenElement) (accessed: 01.08.2017).

59 *Ibid.*

60 For detailed information about the drafting process see. I. A. Vlastic, 508-512; P.G. Dembling, D.M.Arons, The evolution of the outer space treaty, *Journal of Air Law and Commerce*, 33 (1967), 420-455; Von der Dunk, pp. 37-43.

61 Statement of the USSR representative at the thirtieth Meeting of the LSC, 10 March 1964, p. 11-12, available: [www.unoosa.org/pdf/transcripts/ legal/AC105\\_C2\\_SR029-037E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR029-037E.pdf) (accessed. 21.08.2017); Statement of Representative of Lebanon, at the thirty-second meeting of the LSC, 12 March 1964, p. 50; Statement of Representative of Mexico, at the thirty-third meeting of the LSC, 13 March 1964, p. 66; Statement of representative of India, at the thirty fourth meeting of the LSC, p. 78. Statement of Argentinian Representative at the thirty-second meeting of the LSC, 12 March 1964,

as the number of space activities would grow, international cooperation would be more desirable and more effective in practice.<sup>62</sup> It was suggested that the system should be set in the common interest of the humankind and not on any selfish national interest.<sup>63</sup>

At the time when the first draft of the OST was brought to the international community, the principles of freedom of use and prohibition of the sovereignty, as well as the importance of cooperation in scientific activities relating to celestial bodies, had been underlined in the letter dated 9 May 1966 from the permanent representative of the United States of America (USA) to the UN Secretary General.<sup>64</sup> In the letter of the Union of Soviet Socialist Republics (USSR) requesting for the inclusion of an item in the provisional agenda of the twenty-first session of the GA the similar approach on the freedom of use and promotion of international cooperation was defended.<sup>65</sup>

At the 57th to 73rd meetings of LSC held in 1966, delegates evaluated both American and Soviet proposals on the draft treaty governing the exploration of the Moon and Other Celestial Bodies. According to the statements of the Subcommittee members, the need for international cooperation and use and exploration of outer space for the benefit of humankind were once again drawn in addition to the other provisions of the draft. The following statements of the delegates at the meetings exemplify these sentiments:

“...since there had been new technical developments and advances in space exploration, both at the national level and through international organizations, and the joint ventures undertaken showed the imperative need for co-operation in work of such great international importance.”<sup>66</sup>

“considering that the draft treaty should serve the interest of all mankind not those of any one State, his delegation would take its stand on the following four basic principles;... they should constitute a sphere of international co-operation, not of controversies and conflicts;..”<sup>67</sup>

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p. 42; Statement of the Representative of India, at the Thirty Fourth Meeting of the LSC, p. 78.

62 Statement of the Representative of Hungary at the thirtieth meeting of the LSC, 10 March 1964, p. 14.

63 Statement of the Representative of the United Arab Republic, thirty-second meeting of the LSC, 12 March 1964, p. 45.

64 See A/6327, 10 May 1966, available: [www.unoosa.org/pdf/gadocs/A\\_6327E.pdf](http://www.unoosa.org/pdf/gadocs/A_6327E.pdf) (accessed 21.08.2017).

65 See request letter of USSR for the inclusion of an item in the provisional agenda of the twenty-first session of the General Assembly, Doc. A/6341, 31 May 1966, available: [www.unoosa.org/pdf/gadocs/A\\_6341E.pdf](http://www.unoosa.org/pdf/gadocs/A_6341E.pdf) (accessed. 21.08.2017).

66 Statement of the Representative of the UK at the fifty-seventh Meeting of the LSC, 12 July 1966, p. 18.

67 Statement of the Representative of Argentina at the sixtieth Meeting of the LSC, 15 July 1966, p. 2, available: [www.unoosa.org/pdf/transcripts/legal/AC105\\_C2\\_SR060E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR060E.pdf) (23.08.2017).

“space should be explored and used for the benefit of all countries,...Moreover, all states, large and small, developed and developing, must enjoy equal rights in outer space, and all States without exception must be allowed to accede to the treaty. ... Close co-operation among states should be fundamental principle in space matters.”<sup>68</sup>

“the Treaty should be based on certain fundamental principles. Firstly, space law in general and the treaty, in particular, should serve the interests of all mankind and all States whatever their level of economic, social or scientific development... A corollary of that principle was the need for international co-operation, ..., a need to ensure that the exploration and use of outer space caused no harm to mankind or to other states,...”<sup>69</sup>

“the most important concept it should stress was that the exploration and use of outer space should be on the basis of genuine co-operation among all states regardless of the level of their economic or scientific development.”<sup>70</sup>

At the fourteen hundred and ninety second meeting of the First Committee of the GA, the delegates also mentioned that space activities should be carried out for the benefit of all humankind and the equal access to outer space and celestial bodies should be highlighted. In order to achieve this goal, delegates referred to the importance of international cooperation among the states:

“it is wise and proper that the treaty should secure these rights and benefits to all parties, including the non-launching state... In addition, maximum benefits from the exploration of outer space depend on the co-operation of the international scientific and technical community in all nations, large and small alike. No nation has a monopoly of wisdom in this area.”<sup>71</sup>

“I should like to point that the Declaration of legal principles provided that the activities of states in the exploration and use of outer space shall be carried on in the interest of maintaining international peace and security and promoting international cooperation and understanding.”<sup>72</sup>

“States freedom of activity in outer space was further limited by the requirement that its exploration and use must be for the benefits and interest of all countries, irrespective of their degree of economic and scientific development. Not only must

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68 Statement of the Representative of Bulgaria at the sixty-first meeting of LSC, 18 July 1966, p. 3 – 4, available: [www.unoosa.org/pdf/transcripts/legal/AC105\\_C2\\_SR061E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR061E.pdf) (accessed 23.08.2017).

69 Statement of the Representative of United Arab Republic at the Sixty-Second Meeting of the LSC, 19 July 1966, available: [www.unoosa.org/pdf/transcripts/legal/AC105\\_C2\\_SR062E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR062E.pdf) (accessed 23.08.2017).

70 Statement of the Representative of United Arab Republic at the sixty-fifth meeting of the LSC, 22 July 1966, available: [www.unoosa.org/pdf/transcripts/legal/AC105\\_C2\\_SR065E.pdf](http://www.unoosa.org/pdf/transcripts/legal/AC105_C2_SR065E.pdf) accessed 23.08.2017).

71 Statement of the Representative of the USA at the at the fourteen hundred and ninety-second meeting of the First Committee of the General Assembly, 17 December 1966, p. 17, available [www.unoosa.org/pdf/gare\\_cords/A\\_C1\\_SR1492E.pdf](http://www.unoosa.org/pdf/gare_cords/A_C1_SR1492E.pdf) (accessed 23.08.2017).

72 Statement of the Representative of Austria at the at the fourteen hundred and ninety-second meeting of the first committee of the GA, 17 December 1966, p. 47.

States not abuse their rights, but they must respect those of others...the pressure of events meant that the law of outer space had to be developed rapidly. Because of the rate of scientific progress, the law of outer space could not evolve at the leisurely pace of the law of the sea or the air. Its rules must reflect the most progressive tendencies in international law and the great changes taking place in the world. They must be adjusted to the realities of modern life...<sup>73</sup>

“the Treaty further the aims of the Charter by greatly reducing the danger of international conflict and by promoting the prospects of international co-operation for the common interestt in the newest realm of human activity.”<sup>74</sup>

Consequently, due to the scope of space law and purpose and object of the OST shown above, the *res communis* regime could be adapted to the recent necessities of the space community. This dynamic version of the regime should permit any peaceful activities, not just exploration and use of outer space, but also any private activities of any space actor. However, the regime should prohibit any space activity which only serves to the individual interests of space actors and provide a strong promotion of international cooperation.

## 5. In Lieu of Conclusion

Consequently, through dynamic interpretation, space mining activities are said to be covered by the *res communis* regime of the OST.

The OST does not prohibit space mining explicitly, therefore, the activity may be described as legal in the light of this uncertainty.<sup>75</sup> In order to be innovative on the application and interpretation of the *res communis* regime of the OST, the OST has to be set free from this hesitant assumption. Furthermore, the analysis concerning the illegality of space mining activities to the OST would be against to dynamic interpretation and unables us to adapt the OST to the present day conditions.

The *res communis* regime is founded on the non-appropriation principle and the freedom of use and exploration of space for the benefit of all humankind. Since the freedom of use and exploration given to the humankind is in the center of the OST, freedom of use could be expanded to the mining of the natural resources of outer space.<sup>76</sup> However, this freedom of exploitation

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73 Statement of the Representative of Poland at the fourteen hundred and ninety first meeting of the first committee of the general assembly, 16 December 1966, p. 418, available: [www.unoosa.org/pdf/garecords/A\\_C1\\_SR1491E.pdf](http://www.unoosa.org/pdf/garecords/A_C1_SR1491E.pdf) (accessed 23.08.2017).

74 Statement of the Representative of the USA at the fourteen hundred and ninety-ninth plenary meeting of the Twenty-First Session of the General Assembly, 19 December 1966, p. 56 available: [www.unoosa.org/pdf/garecords/A\\_PV1499E.pdf](http://www.unoosa.org/pdf/garecords/A_PV1499E.pdf) (accessed 23.08.2017).

75 *Supra* n. 2.

76 Lee, 2012, p. 197; Jakhu, Pelton, Nyampong, p. 125.



could not be free without any limits. An updated freedom of exploitation of space resources should impose some obligations on the actors in order to perform it.<sup>77</sup>

As stated above, according to the *res communis* regime provided by the OST, space activities must be performed for the benefit of humankind and in the light of international cooperation. Since these are among the objects and purposes of the Treaty itself, there must be checks and balances between the freedoms of the actors and the risks and vulnerabilities of the legal system.<sup>78</sup> Hence, exploitative activities could only be performed within the framework of international cooperation on the activity. This means that exploitative activities could only take place under the auspices of international cooperation; otherwise, they could be in breach of the OST.<sup>79</sup>

After examining the main scope of space law and the object and purpose of the OST, the outcome of the application of dynamic interpretation to the *res communis* regime is needed. However, this study aims to take the first step in order to underline the possibility of interpretation of the *res communis* regime dynamically. The next step on the issue should be the clarification of the evolved version of the *res communis* regime, which requires a more detailed study in the future.

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<sup>77</sup> Lee, 2012 p. 159; Von der Dunk, 2015, p. 58.

<sup>78</sup> De Mann-Hobe, 2017.

<sup>79</sup> De Mann-Hobe, 2017; G. Oduntan, Who owns space? US Asteroid-mining Act is Dangerous and Potentially Illegal”, available at: <https://theconversation.com/who-owns-space-us-asteroid-mining-act-is-dangerous-and-potentially-illegal-51073> (accessed 01.08.2017).

Since national jurisdiction would apply only to the private actors on the territory or the private actors who has the nationality of a certain state, one state could not regulate any space mining activity beyond its jurisdiction. Von Der Dunk, 2015. This would also weaken the harmony and co-operation which the OST obliges so.

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