DOI: 10.51634/2307-5201_2024_4_6 УДК 341.1/8 ГРНТИ 10.87.75

TRAJECTORIES OF NORMATIVE DEVELOPMENT FOR OUTER SPACE HERITAGE CONCEPT



A. ILIN, Shanghai Jiao Tong University, KoGuan School of Law (Shanghai, China) e-mail: alexeyilin@sjtu.edu.cn

Landing astronauts on the moon is one of the greatest achievements of humanity, but the status of historic lunar landing sites in international law is uncertain. There is a general consensus in the literature on space law and policy that Apollo landing sites deserve a recognition of their outstanding universal value and appropriate protection by the entire international community. However, enforcing such protection might be problematic from a legal perspective, since there is no legally binding norm in the current body of international law that would authorize or oblige states to identify and protect heritage sites on the moon or other celestial bodies.

There is a nascent concept of outer space heritage in the field of international space law. The notion has been introduced through soft law instruments which are not binding upon states, such as the 2020 Artemis Accords, or policy recommendations by various expert panels (e.g. the Hague Working Group Building Blocks). The Outer Space Treaty and the other four UN space treaties do not contain any provision about heritage sites in outer space. International cultural law, and the World Heritage Convention in particular, is not applicable to outer space because the Convention's provisions limit the identification and protection of cultural heritage sites to the territories of States parties, but the moon and other

celestial bodies are areas beyond national jurisdiction.

This paper analyzes possible trajectories of normative development in international law to introduce a legally binding norm for recognition and protection of humanity's heritage in outer space. These trajectories include amending existing treaties, such as the Outer Space Treaty or the World Heritage Convention, concluding implementation agreements to the existing treaties, drafting a new international treaty, developing norms of customary international law, as well as a possibility of extension of state sovereignty to certain areas in outer space. The paper complements the existing literature by considering trajectories of normative development that have been omitted by previous studies, as well as by comprehensively analyzing all possible trajectories within the same piece of research. By assessing advantages and challenges of every trajectory, the study identifies the easiest initiatives to implement, as well as the ones that will be the most robust and efficient.

Keywords: international space law; space heritage; normative development.

1. Introduction

What is the greatest achievement of humanity? One of the most common answers given by individuals, search engines, or generative AI might be "landing on the moon." Neil Armstrong took his legendary "one small step for a man, one giant leap for mankind" almost 55 years ago, but it continues to inspire generations of astronauts, scientist, entrepreneurs, and space enthusiasts all around the world. The moon is the first and only celestial body other than Earth that humans have ever set foot on. Tranquility

[©] A. Ilin, 2024

Base, the site of Apollo 11 landing on July 20, 1969, contains unique artefacts – the Lunar Module Eagle, the American flag planted by Armstrong and Aldrin, the steel plaque with a statement "We came in peace for all mankind," astronauts' footprints, as well as a number of smaller items. Nevertheless, the site of this epochal event has not received any protection under the norms of international law. While the most precious sites on Earth, such as Parthenon in Greece, the Great Pyramids of Egypt, or the Great Wall of China, enjoy the status of World Heritage Sites under the 1972 World Heritage Convention, there is currently no such norm in international law that could enforce recognition and protection of human-created sites on celestial bodies.

In the recent years, the concept of "outer space heritage" has been promoted by space law and policy scholars, introduced in domestic legislation of the United States, and included in soft law instruments such as the 2020 Artemis Accords. Yet the protection of space heritage has not yet become a binding norm of international law. This paper describes possible normative developments through which a binding norm for recognition and protection of humanity's heritage in outer space can be introduced into the body of international law. It is based on the analysis of international treaties, conventions, declarations, national legislation of certain countries, as well as proposals of new legal instruments. The research relies on generally accepted rules and principles of identification, interpretation, and application of norms of international law. This paper does not aim to suggest or predict the exact verbal content of the future biding norm, as it will be left for the drafters to decide. The procedural rules and institutional arrangements for the identification and protection of heritage sites of outer space, as well as technical aspects of managing these sites are also outside of the scope of the present research.

The paper is divided into nine parts. Part 1 is the introduction. Part 2 presents the concept of outer space heritage as it appears in the literature, national and international legal instruments, and other documents related to the development of international law. It also explores the possibility of defining the term "outer space heritage." Part 3 reviews the writings of scholars devoted to normative development of the outer space heritage concept and identifies gaps in the current body of research. Part 4 explores the possibility of introducing a binding norm on the identification and protection of outer space heritage through amending the existing international treaties and conventions. Part 5 considers drafting implementation agreements and optional protocols. Part 6 touches upon the ideas about drafting a new international treaty. Part 7 identifies trends in development of customary international law in regard to the outer space heritage concept. Part 8 discusses the possibility of states extending their sovereignty to the moon and other celestial bodies. Finally, Part 9 draws a conclusion.

2. Conceptualizing and Defining Outer Space Heritage

The earliest scholarly opinions about the existence of heritage sites on the moon and the necessity for their protection date back to 2004 [1, p. 5-6; 2, p. 279-290]. The earliest official policy document to contain the concept of outer space heritage was issued by NASA on July 20, 2011, and it is titled "Recommendations to Space-Faring Entities: How to Protect and Preserve the Historic and Scientific Value of U.S. Government Lunar Artifacts [3] (hereinafter NASA's Recommendations). The document declares the existence of heritage landing sites on the moon, as well as artifacts that belong to the U.S. government. It identifies five categories of such artefacts: 1) Apollo landing sites and roving hardware; 2) Unmanned landing sites; 3) Impact sites; 4) Tools, equipment, and hardware left on the lunar surface; and 5) Footprints, rover tracks, and other indicators of human or human-robotic presence on the moon [3, art. 5]. At the same time, the document does not provide concrete definitions for the terms "heritage lunar sites" or "lunar artefacts." The Recommendations were initially not legally binding, and their purpose was to provide guidance for entities that were planning future missions to the moon [3, art. 5].

In March 2018, the U.S. Office of Science and Technology Policy (OSTP) published a paper titled "Protecting & Preserving Apollo Program Lunar Landing Sites & Artifacts" [4]. The paper reiterates the importance of protection and preservation of the U.S. lunar artefacts, but it also recognizes the existence of other countries' hardware on the moon which has "similar historic, cultural, and scientific value to their country and to humanity" [4, art. 1]. This document also does not contain any official definition of outer space heritage.

At the end of 2020, the U.S. adopted the One Small Step to Protect Human Heritage in Space Act

(hereinafter One Small Step Act) [5]. The Act obliged NASA and any other entities working with NASA to adhere to the 2011 NASA's Recommendations (5, art. 3a), essentially making them legally binding within the U.S. legal system.

The concept of outer space heritage sites is contained in several legal guidelines drafted by international research teams. The 2019 Building Blocks for the Development of an International Framework on Space Resource Activities (hereinafter Building Blocks) produced by the Hague International Space Resources Governance Working Group (hereinafter Hague Working Group) call for establishing "the list of designated and internationally endorsed outer space natural and cultural heritage sites" [6]. The 2020 Vancouver Recommendations on Space Mining published by Outer Space Institute of the University of British Columbia (hereinafter Vancouver Recommendations) contain the terms "natural and cultural heritage sites" and "international heritage site lists (natural and cultural)" [7]. Both Building Blocks and Vancouver Recommendations differentiate between natural and cultural heritage, but neither document properly defines the term "heritage site," nor does any of them provide criteria for designation of such heritage.

A non-profit organization *For All Moonkind*, which has been a permanent observer to the United Nations Committee on the Peaceful Uses of Outer Space (hereinafter UN COPUOS) since 2018 [8], proposed to adopt a separate binding convention devoted exclusively to the matters of protection, preservation, and memorialization of human heritage in outer space [9]. In 2019, they proposed a draft document titled "*Declaration of Objectives and Activities Regarding Cultural Heritage in Outer Space*" (hereinafter Space Heritage Declaration). The Declaration uses the term "*Cultural Heritage Sites in Outer Space*," which refers to "sites on the surface of the Moon and an increasing number of sites throughout outer space that bear evidence of human activity" [10] It also contains the clause of being guided by the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage (hereinafter World Heritage Convention). We may hereby assume that the draft Space Heritage Declaration refers to the definition of cultural heritage sites contained in the World Heritage Convention:

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view [11].

As per Articles 3, 4, and 11 of the World Heritage Convention, only properties situated on the territory of states can be identified as heritage sites and receive appropriate legal status and protection from the international community [11, arts. 3, 4, 11]. Since outer space and celestial bodies are not subject to national appropriation as per Article II of the Outer Space Treaty [12], the Convention currently does not cover these areas, and thus lunar sites cannot be inscribed on UNESCO World Heritage List or List of World Heritage in Danger. Nevertheless, nothing in the World Heritage Convention suggests that cultural heritage cannot exist in outer space, or the definition of heritage sites existing in Article 1 of the Convention is not applicable to the sites of similar properties in extraterrestrial areas. The related literature also suggests that the definition of heritage sites per se does not have any geographical restrictions [13, p. 57, 66].

Finally, the 2020 Artemis Accords contain their own definition of the term "outer space heritage." The Signatories intend to preserve outer space heritage, which they consider to comprise *historically significant human or robotic landing sites, artifacts, spacecraft, and other evidence of activity on celestial bodies* in accordance with mutually developed standards and practices (emphasis added) [14].

The Artemis Accords declare common principles and represents a political commitment [14. Sec. 1], but the document itself is not a legally binding international treaty [14, sec. 13 (2)], so its clause about the preservation of outer space heritage is also not legally binding upon the Signatory States.

The concept of outer space heritage is not contained in any legally binding instruments of international law. It is promoted by either national legislation, such as the 2020 U.S. One Small Step Act, or international soft law instruments, such as the 2020 Artemis Accords. There is a view that the definition of cultural heritage sites from the World Heritage Convention is applicable to similar sites in outer space, and this view has not been met with any objections. Nevertheless, the Convention itself is currently not applicable to areas beyond national jurisdiction (ABNJs).

3. Literature Review and Research Significance

There is a general consensus [13, p. 109-130] in the literature on space law and policy that humanmade sites and objects on the moon that bear cultural and historical significance should enjoy the same protection level as the sites and objects of similar value on Earth. Scholars from the United States [1, p. 5-6; 15, p. 234-243], Europe [13, p. 13-26; 72-84], China [16], Australia [2], and Africa [13, p. 109-130] all agree that protection of outer space heritage is in the interest of the entire humanity, and there is virtually no author or organization that would argue the opposite.

Scholars offer various ways of bringing space heritage sites under the protection of international law. Zajackowski [13, p. 13-26] and Martin [13, p. 53-64] analyze the applicability of the 1972 World Heritage Convention to heritage sites in outer space, while Rogers directly proposes that the U.S. government should request the United Nations to enlarge the World Heritage Program to include the entire Solar system [1, p. 5-6]. Martin [13, p. 53] and Bohdan [13, p. 65-71] discuss the possibility to amend the existing international treaties, such as the 1967 Outer Space Treaty or the 1972 World Heritage Convention. The UNESCO experts themselves have previously discussed the extension of the 1972 World Heritage Convention's legal framework to ABNJs, i.e. the high seas. Among the measures they proposed was drafting an Implementation Agreement to the 1972 Convention [17] or drafting an optional protocol to the same Convention [17, art. 51], which could theoretically be applicable to areas on celestial bodies.

A number of scholars explore the possibility of drafting a new legally binding international treaty that would specifically address the issue of heritage sites in outer space. Rotola draws the inspiration for a new treaty from the 1972 World Heritage Convention and the 2001 Underwater Heritage Convention [13, p. 1-12]. In addition to that, Walsh proposes to take into account the experience of the 1959 Antarctic Treaty [15, p. 234-243]. Su and Li suggest that UNESCO and UN COPUOS establish a joint working group "to draft international documents for the protection of outer space heritage [16, p. 9]." In addition, Bohdan and Farsaris analyze the challenges associated with drafting a new treaty on space heritage and subsequently obtaining state's consent to be bound by this new instrument [13, p. 65-71, 73-84].

Scholars (see, for example, Kanungo [13, p. 85-94]) also examine the protection of lunar heritage sites from the perspective of customary international law. In particular, Bartóki-Gönczy and Nagy [18, p. 888-898], as well as Deplano [19, p. 799-819], analyze the 2020 Artemis Accords as an instrument that coordinates state practice in regard to the protection of outer space heritage.

As the literature review demonstrates, scholars consider several different trajectories of normative development for the outer space heritage concept. They mainly focus on amending the 1972 World Heritage Convention or drafting a new international treaty, with some attention given to the development of the norms of customary international law. At the same time, there are considerable gaps in the literature that this article intends to fill. First, scholarly articles omit some possible trajectories of normative development, such as amending the 1979 Moon Agreement, or the possibility that a number of states withdraw from the Outer Space Treaty and appropriate areas on the moon or other celestial bodies. Second, role of the Artemis Accords in the conceptualization and promotion of the space heritage concept has not been properly studied yet, possibly due to the fact that the Accords have been signed less than four years ago, and their acceptance among nations has been spreading rapidly. Third, the research on normative developments of space heritage concept is patchy. There has been no such work that would comprehensively access all possible trajectories within the same piece of writing.

4. Trajectory 1. Amendments of Existing Legal Instruments

The amendment process of any particular international treaty is primarily governed by the provisions of the treaty itself. Generally accepted rules of modification and amendment of treaties are also outlined in Part IV of the 1969 Vienna Convention on the Law of Treaties (hereinafter Vienna Convention), which is considered to reflect the rules of customary international law binding on all states [20, p. 43]. Amending a treaty is usually a lengthy process that requires all States Parties to participate in negotiations and decision-making [21, art. 40(1)]. Furthermore, even if the amendment is accepted, it will only bind those States that become parties to the amending agreement [21, art. 40(4)]. In other words, if a certain state does not accept the new norm prescribed by the amendment, this norm will not apply to that state.

4.1. Amending the Outer Space Treaty

The 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty) remains the foundation of international law of outer space. As of March 2024, 114 states have ratified the Treaty [22; 23]. The Treaty's virtually universal acceptance by spacefaring nations and no opposition from any state mean that at least some elements of the Treaty have already passed into customary international law [24, p. 71]. The provisions of the Treaty neither suggest nor preclude the recognition and protection of outer space heritage – the concept is simply not present in the text. Other norms and principles of the Treaty that could be connected to the management of heritage sites are the freedom of exploration and use of outer space (Article I) [25], free access to all areas on celestial bodies (Article I), prohibition of national appropriation of outer space (Article II), the principle that international law applies in outer space (Article III), States' international responsibility for the actions of their nationals in outer space (Article IV), States' jurisdiction and control over their space objects (Article VIII), as well as the principle of cooperation, mutual assistance, and due regard to the interests of other States Parties (Article IX). Article XV outlines the amendment procedure:

Any State Party to the Treaty may propose amendments to this Treaty. Amendments shall enter into force for each State Party to the Treaty accepting the amendments upon their acceptance by a majority of the States Parties to the Treaty and thereafter for each remaining State Party to the Treaty on the date of acceptance by it.

From our understanding of Article XV, after a certain State Party proposes to amend the Outer Space Treaty, more than half of States Parties will need to accept it in order for the amendment to enter into force for those States Parties that have accepted it (if the word 'majority' is understood as 'simple majority'). However, other States Parties will still have a choice whether to accept the amendment, and if they choose not to, they will not be bound by its provisions.

Introducing a new provision to the Outer Space Treaty allowing identification and protection of heritage sites is legally permissible in principle. When such activity is carried out in conformity with international law, including the Treaty's provisions, it may be considered a type of "use" of celestial bodies which is allowed under Article I of the Treaty [13, p. 30]. On the other hand, a unilateral declaration of a heritage site on the moon will amount to national appropriation of the area and clash with the non-appropriation principle of Article II [13, p. 77; 14, p. 811].

The most difficult part about amending the Outer Space Treaty might be obtaining the consent of at least 58 states – that is the current simple majority of the 114 member states. The support of states that possess a technical capability of reaching the moon will be even more crucial. At this moment, there are five states that have succeeded in landing their spacecrafts on the moon – the U.S., Russia, China, Japan, and India. If any of these states disagrees, any measures to protect heritage sites on the moon will make little or no sense at all – the 'moonfaring' state or states that have not ratified the amendment will have the right to ignore those measures. Important above all might be obtaining the consent of the United States – the first and only state to land humans on the moon. Washington has already considered this option, acknowledged its possible benefits, but nevertheless deemed it undesirable due to high risks and costs.

Amending existing multilateral agreements, such as the OST, or drafting and negotiating an additional agreement specifically relating to preservation of lunar artifacts could provide explicit and detailed international legal protections. Depending on the content, new rules could protect artifacts in a variety of ways, such as by creating setoff zones, specifying particular liability rules, and/or creating whatever other protections might be warranted. However, the difficulties and risks of negotiating and bringing such an agreement or amendments into force would likely outweigh any benefits [25, art. 5].

In fact, the Outer Space Treaty has never been amended in its entire history. This indirectly proves the idea that amending it is a very challenging task, and States Parties may choose rather not to undertake it.

4.2. Amending the World Heritage Convention

The 1972 World Heritage Convention is the most authoritative source of international law for identification and protection of heritage sites and also "one of the world's most ratified treaties" [9,

agenda item 3] with more member states than the United Nations itself [26]. It was adopted by the General Conference of UNESCO on November 16, 1972. The Convention does not explicitly declare its object and purpose, but it from reading and interpreting its text, we can assume that the Convention's object and purpose are to provide a legal framework for protection of natural and cultural heritage in the interest of all humankind [13, p. 66].

The World Heritage Convention differentiates between natural and cultural heritage. There are three categories of cultural heritage - monuments, groups of buildings, and sites. Since there are no architectural structures on the moon yet, we believe that the category of "sites" is the most applicable one for the lunar landing sites. The Convention defines sites as "works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view." [26, art. 1] The Apollo landing sites, such as the Tranquility Base, may serve as a perfect example of the "combined works of nature and man" where man-made state-of-the-art technology is joined with the lunar terrain [13. P. 16]. At the same time, we must bear in mind that as per Articles 3 and 4 of the World Heritage Convention, States can identify and preserve only those objects that are situated on their territory [26]. Since the moon and other celestial bodies are ABNJs, no state can nominate lunar landing sites for the inscription on the UNESCO World Heritage List. Moreover, article 11(3) of the Convention dictates that "the inclusion of a property in the World Heritage List requires the consent of the State concerned." [26] As the moon is not subject to any state's sovereignty, there is no state to consent the inclusion of the lunar landing sites in the World Heritage List. Consequently, the Convention is not applicable for identification and protection of heritage sites in outer space in its current form.

If any State Party intends to use the World Heritage Convention as in instrument for protection of outer space heritage, it will need to propose amendments. The Convention does not contain any specific provisions regarding the amendment procedure, which means that the rules of amendment outlined in the 1969 Vienna Convention on the Law of Treaties shall apply. If a certain number of States Parties reach a consensus and conclude an amending agreement, it will only bind those States Parties that become parties to such agreement and not all the States Parties to the Convention.

In principle, the Convention does not contain any provision that would preclude the possibility of existence of heritage sites in ABNJs. Amending the Convention in order to enable the protection of space heritage sites can take two possible paths. First, Articles 3, 4, and 11 can be amended so that they acknowledge the existence of heritage sites in ABNJs. Second, a new article or even a whole chapter with a series of articles outlining a special procedure for identification and protection of heritage sites in ABNJs (and outer space in particular) can be added.

The appropriateness of such amendments can be questionable. On the one hand, extension of the Convention's legal force to ABNJs might be interpreted as undermining its purpose, which some scholars view as "enabling state parties to better protect the heritage sites located within their territory." [13, p. 91-92] On the other hand, there has been a precedent when a state nominated a heritage site that was situated outside of its territory and over which it had no sovereignty. In 1981, Jordan nominated the Old City of Jerusalem and its Walls, the nomination was approved by the World Heritage Committee, and the site was successfully inscribed on the World Heritage List [27; 28, p. 123-124; 13, p. 19-20]. In the future, this precedent can be used to justify amending the World Heritage Convention in a manner that will permit states to nominated heritage sites outside of their territory. Moreover, the UNESCO itself has considered various legal solutions to extend the applicability of the 1972 Convention to ABNJs, in particular – the high seas [17, art. 49-51]. If this idea was contrary to the Convention's object and purpose, the UNESCO experts would never publish a report that endorses it.

Amending the World Heritage Convention will be challenging, but not impossible. This process will face the same challenges as amending the Outer Space Treaty. Negotiations between all 195 States Parties can be extremely protracted and cumbersome [13, p. 60], and amendments will only bind those states that accept to be bound by them. Nevertheless, there are factors in favor of the amendment. The Convention has been ratified by virtually every state on the planet, which means that the international community unanimously supports the necessity for protection and preservation of heritage sites. Moreover, the literature review demonstrates a consensus among scholars that a similar legal regime should be established

for the areas of cultural and historical significance on the moon and other celestial bodies. Absence of principle objections means that consensus on this matter might be within a hand's reach.

4.3. Amending the Operational Guidelines for the World Heritage Convention

The Operational Guidelines for the Implementation of the World Heritage Convention (hereinafter Operational Guidelines) set forth the procedure for the inscription of properties on the World Heritage List and the List of World Heritage in Danger, the protection and conservation of these properties, as well as granting international assistance and mobilizing national and international support [29, art I A.1]. The Operational Guidelines are periodically revised to reflect the decisions of the World Heritage Committee [29, art. I.A.2], which is comprised of 15 States Parties to the Convention elected by the other States Parties [26, art. 8 (1)].

The Operational Guidelines already include procedures for nominating properties on the territory of States Parties, as well a special procedure for nominating transboundary properties, a term that refers to a property located on the territory of several states having adjacent borders [29, art. III.C.134]. For the next version, the Committee could amend the Guidelines to include new procedures for nomination and protection of heritage sites in outer space (as well as other ABNJs). In this case, simply proclaiming the existence of heritage sites in ABNJs would not suffice. As no country has control over extraterrestrial territories, the protection of heritage sites on the moon or any other celestial bodies would require a coordinated effort from all States Parties to the World Heritage Convention, or more practically – those States Parties that have the technical capability to reach these areas. The mechanism for such coordinated effort should also be added to the amended Guidelines.

In the past, the World Heritage Committee has already extended the legal coverage of the World Heritage Convention through adapting the Operational Guidelines. For example, it inscribed sites in the areas beyond the territorial sea of coastal states [17]. The UNESCO experts believe that incremental changes to the Operational Guidelines can be acceptable in the future, although they call to exert caution and warn that some States Parties may consider inscription of sites in ABNJs not being purely "operational" in nature [17]. This issue is especially sensitive in the context of international space law, as one state's nomination of a heritage site on a celestial body may be perceived by other states as an attempt of national appropriation through occupation, which clashes with the non-appropriation principle of Article II of the Outer Space Treaty.

As a matter of fact, amending the Operational Guidelines does not change the content of the World Heritage Convention itself. The Convention's provisions still prescribe that the heritage sites in question should be situated on the territory of any of the States Parties. In this context, adding a procedure for nomination and protection of space heritage sites to the Operational Guidelines should be considered an exceptional measure and a short-term solution. A permanent solution to the issue of outer space heritage will still require amending the World Heritage Convention or drafting a completely new international treaty.

4.4. Amending the Moon Agreement

The literature on outer space heritage largely neglects the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (hereinafter Moon Agreement) for quite obvious reasons – it has a very low recognition level within the international community and thus not considered an authoritative source of international space law. As of March 2024, there are only 17 States Parties to the Agreement. Saudi Arabia withdrew from the Moon Agreement on January 5, 2024 in accordance with article 20 of the Agreement. None of the five current 'moonfaring' nations, namely – the U.S., Russia, China, Japan, and India, are parties to the Agreement. Sceptics might say that paying attention to the Moon Agreement is irrelevant, although we have three reasons to argue the opposite.

First, the Moon Agreement contains unique terms and concepts that are not found in any other international treaty and can be related to the space heritage concept. Paragraph 3 of Article 7 allows to establish international scientific preserves under special protective arrangements.

States Parties shall report to other States Parties and to the Secretary-General concerning areas of the moon having special scientific interest in order that, without prejudice to the rights of other States Parties, consideration may be given to the designation of such areas as international scientific preserves for which special protective arrangements are to be agreed upon in consultation with the competent bodies of the United Nations [30].

The concept of scientific preserves is more related to the concept of natural heritage rather than cultural heritage. Nevertheless, a similar provision prescribing the identification and protection of cultural heritage sites might also be inserted into the Moon Agreement through the amendment process.

Paragraph 1 of Article 11 also designates the moon and its natural resources as "common heritage of mankind" (CHM) [30]. Although CHM is a concept used in the context of law and policy applicable to natural resources and does directly relate to the norms of international cultural law, recognition of the entire moon as a "heritage area" might also make the recognition of cultural heritage sites on its surface more appropriate.

Second, a small number of States Parties to the Moon Agreement makes the amendment process easier and faster. It is regulated by Article 17 of the Agreement [30, art. 17] which is identical to Article XV of the Outer Space Treaty [25] and requires the acceptance of amendments by a majority of States Parties. Currently, a simple majority of Parties is only nine states.

Third, several States Parties to the Moon Agreement are also Signatories of the Artemis Accords. As of February 2024, these states are Australia, Belgium, Mexico, the Kingdom of Netherlands, and Uruguay [14]. They could use their position to transpose a norm that prescribes preservation of outer space heritage from a soft law (the Artemis Accords) instrument into a legally-binding treaty (the Moon Agreement). Although this norm will be binding on only a handful of states, it will be a binding norm of international law nonetheless – perhaps a first step on a path towards a wider acceptance among nations.

5. Trajectory 2: Implementation Agreements and Optional Protocols

When amending an international treaty is problematic or undesirable, a smaller group of States Parties may seek to modify the treaty's interpretation and implementation within their own circle by concluding implementation agreements or optional protocols. In a similar fashion with amendments, these agreements will be in effect only for those states that accept them, although they will not change the content of the treaty. Article 41 of the 1969 Vienna Convention on the Law of Treaties guides the modification of treaties between certain of the parties only. This type of agreement is possible when the treaty provides for such a possibility or at least does not prohibit it [21, art. 41(1) (a, b)]. Furthermore, the modification must be compatible with the treaty's object and purpose and must not "affect the enjoyment by the other parties of their rights under the treaty or the performance of their obligations." [21, art. 41(1) (b).].

The Outer Space Treaty, the World Heritage Convention, and the Moon Agreement do not prohibit the conclusion of implementation agreements and optional protocols, which means that such normative development is possible.

5.1. Agreements to Implement the Outer Space Treaty

A de-facto implementation agreement to the Outer Space Treaty already exists in the form of the 2020 Artemis Accords. Section 1 of the Accords states that the principles described in this instrument "provide for operational implementation of important obligations contained in the Outer Space Treaty." [14, sec. 1]. At the same time, the Artemis Accords are not legally binding, which is evident from paragraph 2 of Section 13 stating that the document is "not eligible for registration under Article 102 of the Charter of the United Nations." [14, sec. 13 (2)]. Being a 'soft law' instrument, the Accords also influence the development of customary international law, which will be discussed in Part 7 of this paper.

5.2. Agreements to Implement the World Heritage Convention

The 2016 UNESCO report titled "World Heritage in the High Seas" endorses the possibility of extending the World Heritage Convention's application to ABNJs by concluding an agreement akin to the 1994 Agreement on the Implementation of Part XI of the UN Convention on the Law of the Sea (hereinafter UNCLOS) [17. Art. 55]. Although the Organization's experts call this approach "radical" and

"theoretical," they also highlight its advantages, such as the opportunity to "avoid the formal amendment procedures of the 1972 Convention" [17, art. 49]. Nevertheless, the authors of UNESCO paper admit that this approach would "require a very high level of consensus and political will among a substantial number of the States Parties," and that "the modification would only be effective between the states that had agreed to it, causing some potential implementation complexities" [17, art. 51].

The same 2016 UNESCO report explores the possibility of negotiating an optional protocol to the 1972 Convention. Drafting such a protocol would require a preliminary technical and legal study under consideration and examination by the UNESCO Executive Board, and a round of negotiations to which all States Parties will be invited [17, art. 51]. Since the optional protocol is not equal to an amendment, it will only require the participation of those States Parties which are interested in it thus making the negotiating process easier and faster. The UNESCO experts envisage a possible result the following way:

As a protocol to the 1972 Convention, it would only be open for signature to States Parties to the 1972 Convention and would be a parallel text which expands the ambit of the Convention without detracting from its existing achievements. Such a process would have the advantage that the negotiators could re-examine the most appropriate nomination and inscription procedures for ABNJ sites as well as further develop the 'system of international cooperation and assistance designed to support States Parties to the Convention in their efforts to conserve and identify that heritage' as envisaged by Article 7 of the Convention [17, art. 51].

While implementation agreements and optional protocols seem an easier path to introduce the concept of outer space heritage into the body of international cultural law, it also poses a risk that such instruments will be deemed incompatible with the object and purpose of the 1972 World Heritage Convention. Some scholars believe that the purpose of the Convention is to "enable state parties to better protect the heritage sites located *within their territory*" (emphasis added) [13, p. 91-92]. As such, applying the provisions of the Convention to protect outer space heritage may be considered as an over-inclusive interpretation and over-extension of its legal force.

5.3. Agreements to Implement the Moon Agreement

Since 2017, an American non-profit organization named Space Treaty Project has been developing a Model Resource Agreement that can serve as an implementation agreement to the 1979 Moon Agreement or also stand alone as a self-sufficient legal instrument [31]. The project has been published in the journal *Advances in Astronautics Science and Technology in* 2020 [32]. The project's primary goal is to elaborate a legal regime of exploitation of space resources, but it also addresses the issue of identification and protection of space heritage sites. The most recent version of the Model Resource Agreement contains Section 7 titled "Protection of Natural Environment; Cultural Heritage Sites." The section also refers to Article 7 of the Moon Agreement, which provides for establishing scientific preserves on the moon.

The States Parties, in accordance with Treaty Article 7, agree to develop standards and recommended practices to prevent the disruption of the existing balance of a celestial body's environment. The States Parties further agree to protect natural and cultural heritage sites, and/or to designate another entity/process for making such determinations that will be binding on the States Parties. Until such process is established, the States Parties agree to prohibit the use or disturbance of any location on the Moon or other celestial body that is the site of a mission that occurred prior to the year 2000 CE. This prohibition applies to the location of any equipment and any evidence of presence, including footprints and tracks [33].

The Model Resource Agreement has not been signed or ratified by any state yet. Nevertheless, it offers a valuable experience in international normative development, which could be used in the process of drafting future international treaties applicable to outer space and celestial bodies.

6. Trajectory 3: A New Internatinoal Treaty 6.1. Inspiration from Previous International Treaties

Concluding a new international treaty to protect heritage sites in outer space would follow an established practice of concluding separate treaties to protect natural or cultural areas in ABNJs. The first treaty of such character is the 2001 UNESCO Convention on the Protection of the Underwater Cultural

Heritage (hereinafter Underwater Heritage Convention). The second is the 2023 High Seas Treaty, also known as the Biodiversity Beyond National Jurisdiction Treaty (hereinafter BBNJ). The experience of the 1959 Antarctic Treaty might also be relevant [15; 13, p. 21]. Furthermore, the 1972 World Heritage Convention should definitely be taken into consideration as the most authoritative source of international cultural law. The drafters of a new international convention on the protection of cultural heritage in outer space, including the moon and celestial bodies may build their work upon the regulations, practices, and mechanisms established by the abovementioned treaties.

The Underwater Heritage Convention establishes a mechanism for preservation or disposal of objects of an archaeological and historical nature found in the Area (deep seabed). First, the persons or vessels that discover objects of cultural heritage have the obligation to report the discovery to their state of nationality or flag state [34]. Second, States Parties to the Convention shall notify the Director-General of UNESCO and the Secretary-General of the International Seabed Authority about the discovery 34, art. 11 (2)]. Third, the Director-General promptly distributes the information about the discovery among all other States Parties [34, art. 11 (3)]. Fourth, any State that has a verifiable link to the cultural heritage site, especially if it is a State of cultural, historical or archaeological origin, may declare to the Director-General its interest in being consulted on the protection of the site [34, art. 11 (4)]. Fifth, the Director-General invites all States Parties that declared their interest to consult on how to protect the heritage site and to appoint a State Party that will coordinate these consultations as the "Coordinating State." [34, art. 12 (2)]. The International Seabed Authority should also be invited to participate. In addition, States Parties may take all necessary and practical measures in conformity with the Convention to prevent any immediate danger to the cultural site, e.g. looting, before the consultations commence [34, art. 12 (3)]. Finally, the Coordinating State shall implement the protecting measures which have been agreed by the consulting States and issue all the necessary authorizations for such measures [34, art. 12(4)]. At the same time, such an arrangement does not mean that the Coordinating State receives a de-facto control over the cultural heritage area since the Convention prescribes it to "act for the benefit of humanity as a whole, on behalf of all States Parties." [34, art. 12 (6)].

The 2023 BBNJ is the 'youngest' international treaty to regulate ABNJs. As of April 9, 2024, BBNJ has been signed by 85 and ratified by 3 states [35]. The ratification process is still underway, and the Treaty shall enter into force only 120 days after the 60th State Party ratifies it. BBNJ introduces "area-based management tool," which includes "marine protected areas" [35, art. 1 (1)] beyond national jurisdiction [35, art. 18]. Any State Party to the Treaty can propose the establishment of a marine protected area to the secretariat [35, art 19 (1)]. After a process of review [35, art. 20], consultations, and assessment [35, art. 21] of this proposal, the decision shall be made by consensus [35, art. 23 (1)], or by a qualified majority of the Parties (at least three-fourths) if consensus is unattainable [35, art. 23 (2)].

The 1959 Antarctic Treaty effectively turned Antarctica (which it defines as the area south of 60° South Latitude [36]) into one huge scientific preserve by "freezing" all sovereignty claims [36, art. IV.2] and prohibiting military activities (except for the usage of military personnel for peaceful purposes) [36, art. I] in the area for the time while the Treaty is in force.

The practice established by the abovementioned treaties and conventions suggests that a new treaty on the identification and preservation of heritage sites in outer space may include provisions about procedure how the site is identified and managed, and also give overseeing authority to either an existing international body, e.g. UNESCO Director-General or World Heritage Committee, or a new international body (a secretariat, a committee, an authority, a board, etc.) specifically designed to perform such duties.

6.2. Procedures and Challenges of Drafting a New Treaty

When it comes to drafting a new international treaty on the protection of outer space heritage, scholars and policymakers come up with various procedural arrangements. A robust solution might be produced through collaboration between UNESCO and UN COPUOS. Martin suggests that "an international conference on space heritage between the United Nations Office for Outer Space Affaires (UNOOSA) and UNESCO, with experts on heritage and environmental protection, should be held and produce guidance and guidelines on the protection of human heritage in outer space." [13, p. 60]. Su and Li support this proposition:

[I]t would be reasonable for UNESCO and UNCOPUOS to form a joint working group of experts in international heritage law and experts in outer space law to draft international documents for the protection of outer space heritage, establish a management body (such as a management committee) to compile and update the Outer Space Heritage List, and oversee the implementation of protection measures [13, p. 9].

For All Moonkind, a nonprofit organization and a permanent observer to UN COPUOS, invites all interested states to sign its Space Heritage Declaration. The document prompts states to work together with the Organization, as well as legal and archeological experts to develop and promulgate standards (the "Standards") "regarding the appropriate protection of each of the Cultural Heritage Sites in Outer Space." [10, sec. 2 (2)]. These Standards will include certain practices and procedures, which will be applied either generally, or on a site-by-site basis. Furthermore, the Standards should be transparent, flexible, and balance development of space exploration and use with preservation of cultural heritage. In addition, the participating states should "avoid disturbance and damage to any Cultural Heritage Sites in Outer Space" before the development of relevant Standards [10, sec. 2 paras. 4-5].

It is not specified whether the Declaration should be legally binding or not. As the document does not propose concrete measures and rules but rather lays a foundation for their development (the Standards), it evidently constitutes a declaration of intentions, which should be classified as a soft law instrument. At the same time, the Standards that the Declaration proposes to develop may become the basis for the provisions of a binding Convention, which For All Moonkind sees as a pinnacle of their work yet to be attained.

A faster and easier way to draft a new international treaty might be to start with a "mini-agreement" only encompassing those nations that have the technical means of reaching the moon. As we remember, only five states have proved having such means – the U.S., Russia, China, India, and Japan. Farsaris suggests first to reach an agreement between the major spacefaring nations and then make it open to other states which might develop the technology of accessing the moon later [13, p. 82]. This approach seems pragmatic, but it is not without flaws. First, new spacefaring nations that emerge in the future might decide not to join the treaty. Second, it is possible that the nationals of States Parties to the treaty will launch their spacecrafts to the moon from the territory and/or on the register of States not Parties, which will allow them to avoid its regulations. These actions might be similar with contemporary seafaring practice of "flags of convenience." [37].

Third, even a small number of 'moonfaring' nations might find it difficult to come to an agreement. Science knows no proven correlation between the number of negotiating states and the promptness of the negotiation process. In fact, a stalemate in negotiations between only two states can seal a treaty's fate, especially if these states are key players in the international arena. The success of the Outer Space Treaty is largely attributed to the compromise between the United States and the Soviet Union [38, p. 64], which allowed other members of their respective blocs to join the Treaty. By contrast, the failure of the draft treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects (hereinafter the PPWT), which was jointly proposed by Russia and China at the Conference of Disarmament in 2008 and 2014, might have been a result of a resolute opposition from the U.S. and as a consequence, their allies and partners [13, p. 25].

Practically every scholar admits that the process of drafting a new international treaty will be very long and challenging. In addition, Zajackowski points to a lack of ratification for similar legal instruments, such as the 2001 Underwater Heritage Convention, which might also be the problem of a new convention on the protection of space heritage [13, p. 23]. Furthermore, Farsaris warns that drafting a new treaty might only delay the protection of lunar artefacts "to a point when nations and private companies will be already active on the moon." [13, p. 82].

7. Trajectory 4: Customary International Law

International custom is one of the oldest sources of international law, yet it might be also one the most vague and difficult to identify. The 2018 Draft Conclusions on Identification of Customary International Law, which were drafted by the International Law Commission (ILC), applies a two-element approach to the identification of the existence and content of rules of customary international law in all fields of international law [39]: "To determine the existence and content of a rule of customary international law,

it is necessary to ascertain whether there is a general practice that is accepted as law (opinio juris)." [39, p. 124] Conclusion 4 provides that this general practice "refers primarily to the practice of States," practice of international organizations "also contributes to the formation, or expression, of rules of customary international law" in certain cases, while conduct of other actors is not regarded as such practice, but it may be relevant when assessing the practice of states and international organizations [39, p. 130].

Conclusion 6 provides that state practice may take wide range of forms, including both physical and verbal acts, and it may also include inaction [39, p. 133]. As such, when states conclude agreements between each other, or when states' leaders make public statements, all these actions contribute to the expression state practice. Furthermore, states' treatment of their nationals should be also taken into account. The Commentary to Conclusion 5 of the ILC 2018 Draft Conclusions provides that "the relevant practice of States is not limited to conduct vis-à-vis other States or other subjects of international law; conduct within the State, such as a State's treatment of its own nationals, may also relate to matters of international law." [39, p. 133] This is especially relevant in the field of international space law, as Article VI of the Outer Space Treaty requires states to authorize and continuously supervise their nationals, and also holds states internationally responsible for their nationals' actions in outer space [25, art. VI]. In this regard, national space laws contribute to the development of customary international law as well.

At present, only the United States has enacted a law regulating the protection of heritage sites in outer space – the 2020 One Small Step Act. Nevertheless, we may expect more states to follow suit in the future. As of March 2024, already 36 states have signed the U.S.-led Artemis Accords. The Accords establish common principles that all Signatories commit to, among them – preserving outer space heritage (Sec. 9). The implementation of the Accords requires the Signatory States to take "appropriate steps to ensure that entities acting on its behalf comply with the principles of these Accords." [14, sec. 2 (1) (d)] This clause may be interpreted as a requirement to enact national laws that will ensure that the nationals of Signatory States' comply with the provisions of the Accords.

There are other international initiatives that call states to harmonize their practices by establishing lists of natural and cultural heritage sites in outer space, such as the 2019 Building Blocks (article 10 (h)), or the 2020 Vancouver Recommendations (article VII.21). Many research organizations participate in the UN COPUOS sessions, and a number of them have the status of permanent observers [40]. The issue of outer space heritage has already been repeatedly discussed within the Legal Subcommittee of COPUOS [9]. If the members of the Committee find the issue urgent and important enough, they may initiate drafting of an appropriate legal instrument to address it, which may be either a soft law instrument (declaration, resolution, set of principles), or a legally binding treaty. As we have previously discussed, treaties and conventions may take years, if not decades, to negotiate and elaborate, and the succuss of their ratification is not guaranteed. Therefore, COPUOS members might first reach a consensus on a set of voluntary principles and guidelines and submit them to the UN General Assembly in a form of a resolution. If a resolution urging the protection of heritage sites in outer space gets adopted, it may provide a considerable contribution to the development of customary international law, although it will not yet be a comprehensive solution.

Conclusion 12 of the ILC 2018 Draft Conclusions specifies that resolutions of international organizations may "provide evidence for determining the existence and content of a rule of customary international law, or contribute to its development," or they may "reflect a rule of customary international law if it is established that the provision corresponds to a general practice that is accepted as law (opinio juris)." [39, p. 147] The ILC particularly distinguishes the resolutions of the United Nations, since this organization enjoys a virtually universal participation [39, p. 147]. Nevertheless, even the UN resolution cannot create or independently constitute a rule of customary international law – it has to be accompanied by or preceded with relevant state practice. Furthermore, the ILC advises that there is no such thing as "instant custom" arising from these resolutions on their account [39, p. 147].

If the recognition and protection of outer space heritage becomes a widespread practice among spacefaring nations and accepted as legal under the current body of law, it may give rise to a new rule of customary international law. This rule, in turn, may be later codified in a new legally-binding treaty. A report by the Atlantic Council suggests that it might be the long-term plan of the United States government until the year 2050. First, develop rules of customary international law by forging consensus with likeminded

nations, and second – codify these new standards into a new space treaty to replace the "outdated" 1967 Outer Space Treaty [41, p. 50]. This, however, will require an absence of opposition from other states, in particular – China and Russia, a fact that the authors of the report also admit [41, p. 52].

Worthy of note, the requirements for recognition of a certain norm as a rule of customary international law are very strict. In the North Sea Continental Shelf case, for example, the International Court of Justice (ICJ) sets the bar very high requiring state practice to be "both extensive and virtually uniform." [42] Moreover, unlike the norms of treaty law, rules of customary international law are particularly difficult to identify and interpret. It is not enough for the practice to exist and be acceptable as lawful – someone has to identify and document its existence. A norm of customary international law may be identified in a report by International Law Commission, mentioned in a decision or advisory opinion by an international court or tribunal, such as the ICJ, or endorsed in the writings of the most highly qualified scholars, which are recognized as sources of international law by virtue of Article 38 of the ICJ Statute [43, art. 38]. These developments, however, are unlikely to unravel in a short period of time, and we should only expect them years after certain states commence their practice of identification and protection of outer space heritage.

8. National Appropriation of Celestial Bodies

Although outer space, the moon, and other celestial bodies are ABNJs not subject to national appropriation as per Article II of the Outer Space Treaty, their status may change in the future. The nonappropriation principle remains in force as long as the Outer Space Treaty retains its wide acceptance and meets with no opposition within the international community. However, if any State Party deems its participation in the Treaty impractical, it may withdraw with a one-year prior notification as per Article XVI of the Treaty 25, art. XVI. If only one state withdraws, it may not affect the status of the non-appropriation principle as a norm of customary international law (it is widely regarded as one by scholars of space law) [43, p. 528; 44, p. 277-305; 45, p. 30; 46, p. 22]. One state's appropriation of an extraterrestrial area will be probably viewed as a violation of international law, not its change. In Nicaragua v. United States, the ICJ concludes that if a state's action contradicts the current norms of international law, it shall be deemed an internationally wrongful act and not an indication of a new rule: "In order to deduce the existence of customary rules, the Court deems it sufficient that the conduct of States should, in general, be consistent with such rules, and that instances of State conduct inconsistent with a given rule should generally have been treated as breaches of that rule, not as indications of the recognition of a new rule." However, if at least several states withdraw from the Treaty, especially if they are major spacefaring nations, the rule will most likely lose its previous status, as state practice will not be uniform anymore, as it was required in the North Sea Continental Shelf case. A massive withdrawal from the Outer Space Treaty may be an unlikely event, but from the legal standpoint, it is possible and permissible. Therefore, lawyers and policymakers should account for it. In fact, the Atlantic Council has already considered the possibility for the United States and its allies and partners of entering diplomatic reservations to the Outer Space Treaty or even withdrawal from it 41, p. 74.

Should the abovementioned development take place, the road towards establishing space colonies under the jurisdiction of states will be open. In case the lunar landing sites appear to be under the control of states, the amendment of the World Heritage Convention will not be necessary. Articles 3, 4, and 11 already provide for the protection of heritage sites on State Parties' territory, and they do not specify whether this territory should be on Earth or on another celestial body.

9. Conclusion

The necessity for protection and preservation of human heritage sites in outer space, such as the Apollo 11 Tranquility Base on the moon, has been endorsed by the U.S. legislators, a number of international research organizations, and considered within the UN COPUOS. There is also a broad consensus in scholarly literature that such protection and preservation are necessary. Nevertheless, the current body of international law does not have any legally binding norm that could allow states and the international community to identify and protect heritage sites on the moon (or elsewhere in outer space). We have examined four different trajectories of normative developments how this binding norm could be introduced into the body of international law. The first trajectory is amending the existing international treaties, such as the 1967 Outer Space Treaty, the 1972 World Heritage Convention, or the 1979 Moon Agreement. Amending Operational Guidelines for the Implementation of the World Heritage Convention also falls within this category. The most effective and lasting solution might be amending the World Heritage Convention, although extending its legal force to ABNJs might be deemed contrary to the Convention's object and purpose. Amending Operational Guidelines is a faster solution, but it might create the same legal confusion as the amendment to the 1972 Convention.

The second trajectory is drafting implementation agreements and optional protocols to the legal instruments mentioned in trajectory 1. They are easier to conclude because they do not require to follow a formal amendment procedure, but they will only be effective among the states that conclude them, while other states might still find these new instruments contradictory to the original treaty or convention.

The third trajectory is drafting a new treaty or convention to specifically address the issue of outer space heritage. This work may rest on the experience and existing practice of the 1959 Antarctic Treaty, 1972 World Heritage Convention, 2001 Underwater Heritage Convention, and the 2023 High Seas Treaty. This method is the most effective, but it is also the longest and the most laborious, while the end result may not be guaranteed. A new treaty risks to share the fate of the 1979 Moon Agreement, or the draft PPWT.

The fourth trajectory is the development of rules of customary international law. This process is already underway with the adoption of the 2020 Artemis Accords, the expansion of the Artemis network of states, and the adoption of national laws, such as the 2020 U.S. One Small Step Act. Development of international custom may be a long and complicated process, as it requires uniformity and consistency of state practice, as well as acceptance of this practice as legal under the current norms of international law.

The easiest and fastest trajectories involve drafting optional protocols to the World Heritage Convention, or amending the Operational Guidelines for this Convention. However, this is a short-term solution of exceptional character which might be not sustainable in the long-term perspective. The most reliable and comprehensive way would be drafting a new international treaty, but is also the longest and most challenging method. Development of rules of customary international law might accelerate this process. The adoption of national laws and international soft law instruments can establish and harmonize the relevant state practice, which will lay a foundation for a new treaty or convention.

А. Ильин, Shanghai Jiao Tong University, KoGuan School of Law (Шанхай, ҚХР): Ғарыштық мұра тұжырымдамасының нормативтік даму траекториялары.

Ғарышкерлердің айға қонуы адамзаттың ең үлкен жетістіктерінің бірі болып табылады, бірақ халықаралық құқықтағы тарихи Айға қону орындарының мәртебесі белгісіз болып қалуда. Ғарыштық құқық және саясат әдебиеттерінде «Аполлон» қону алаңдары өзінің ерекше әмбебап құндылығы мен бүкіл халықаралық қауымдастықтың тиісті қорғанысын мойындауға лайық деген ортақ пікір бар. Алайда, мұндай қорғауды қамтамасыз ету заңды тұрғыдан проблемалы болуы мүмкін, өйткені халықаралық құқықтың қолданыстағы жинағында мемлекеттерге Айдағы немесе басқа аспан денелеріндегі мәдени мұра объектілерін анықтауға және қорғауға мүмкіндік беретін немесе міндеттейтін юридикалық норма жоқ.

Халықаралық ғарыш құқығы саласында ғарыштық мұра тұжырымдамасы енді пайда болып келе жатыр. Бұл тұжырымдама 2020 жылғы Артемида келісімдері немесе әртүрлі сарапшылар топтарының саяси ұсыныстары (мысалы, Гаагадағы «құрылыс блоктары» жұмыс тобы) сияқты мемлекеттер үшін міндетті емес «жұмсақ құқық» құралдарының көмегімен енгізілді. Ғарыш шарты және БҰҰның басқа төрт ғарыш шарты ғарыш кеңістігіндегі мәдени мұра нысандары туралы ережелерді қамтымайды. Халықаралық мәдени құқық, атап айтқанда дүниежүзілік мұра туралы Конвенция ғарыш кеңістігіне қолданылмайды, өйткені Конвенцияның ережелері қатысушы мемлекеттердің аумақтарында мәдени мұра объектілерін анықтау мен қорғауды шектейді, бірақ Ай және басқа аспан денелері ұлттық юрисдикциядан тыс.

Бұл мақалада ғарыш кеңістігінде адамзат мұрасын тану және қорғау туралы юридикалық міндетті норманы енгізу мақсатында халықаралық құқықтың нормативтік дамуының мүмкін траекториялары талданады. Бұл бағыттарға ғарыш Шарты немесе дүниежүзілік мұра туралы Конвенция сияқты қолданыстағы халықаралық шарттарға түзетулер енгізу, қолданыстағы халықаралық шарттарға имплементациялық келісімдер жасау, жаңа халықаралық шарттың жобасын әзірлеу, кәдімгі халықаралық құқық нормаларын әзірлеу және мемлекеттік егемендікті ғарыш кеңістігінің белгілі бір аймақтарына кеңейту мүмкіндігі кіреді. Бұл мақала қолданыстағы әдебиеттерді толықтырады, алдыңғы зерттеулерде алынып тасталған нормативтік даму траекторияларын қарастырады, сондай-ақ сол зерттеу шеңберінде барлық мүмкін траекторияларды жан-жақты талдайды. Әрбір траекторияның артықшылықтары мен қиындықтарын бағалай отырып, зерттеу авторлары іске асырудың ең оңай, сондай-ақ ең сенімді және тиімді бастамаларды анықтайды.

Түйінді сөздер: халықаралық ғарыш құқығы; ғарыштық мұра; нормативтік даму.

A. Ильин, Shanghai Jiao Tong University, KoGuan School of Law (Шанхай, КНР): Траектории нормативного развития концепции космического наследия.

Высадка астронавтов на Луну является одним из величайших достижений человечества, но статус исторических мест высадки на Луну в международном праве остается неопределенным. В литературе по космическому праву и политике существует общее мнение о том, что места посадки «Аполлона» заслуживают признания своей выдающейся универсальной ценности и надлежащей защиты со стороны всего международного сообщества. Однако обеспечение такой защиты может быть проблематичным с юридической точки зрения, поскольку в действующем своде международного права нет юридически обязывающей нормы, которая разрешала бы или обязывала государства выявлять и охранять объекты культурного наследия на Луне или других небесных телах.

В области международного космического права только зарождается концепция космического наследия. Это понятие было введено с помощью инструментов мягкого права, которые не являются обязательными для государств, таких как Артемидские соглашения 2020 года, или политические рекомендации различных групп экспертов (например, Гаагской рабочей группы «Строительные блоки»). Договор по космосу и другие четыре договора ООН по космосу не содержат никаких положений об объектах культурного наследия в космическом пространстве. Международное культурное право, и в частности Конвенция о всемирном наследии, неприменимо к космическому пространству, поскольку положения Конвенции ограничивают выявление и охрану объектов культурного наследия территориями государств-участников, но Луна и другие небесные тела находятся за пределами национальной юрисдикции.

В данной статье анализируются возможные траектории нормативного развития международного права с целью введения юридически обязывающей нормы о признании и защите наследия человечества в космическом пространстве. Эти направления включают внесение поправок в существующие международные договоры, такие как Договор по космосу или Конвенция о всемирном наследии, заключение имплементационных соглашений к существующим международным договорам, разработку проекта нового международного договора, разработку норм обычного международного права, а также возможность распространения государственного суверенитета на определенные районы космического пространства. Данная статья дополняет существующую литературу, рассматривая траектории нормативного развития, которые были опущены в предыдущих исследованиях, а также всесторонне анализируя все возможные траектории в рамках одного и того же исследования. Оценивая преимущества и трудности каждой траектории, авторы исследования выявляют инициативы, которые проще всего реализовать, а также те, которые будут наиболее надежными и эффективными.

Ключевые слова: международное космическое право; космическое наследие; нормативное развитие.

References:

1. Rogers T.F. Safeguarding Tranquility Base: Why the Earth's Moon Base Should Become a World Heritage Site. Space Policy 20 (2004), pp. 5–6.

2. Dirk H.R. Spennemann, The Ethics of Treading on Neil Armstrong's Footprints. Space Policy 20 (2004), pp. 279–290.

3. NASA's Recommendations to Space-Faring Entities: How to Protect and Preserve the Historic and Scientific Value of U.S. Government Lunar Artifacts, July 20, 2011. URL: https://www.nasa.gov/wp-content/uploads/2023/12/nasa-usg-lunar-historic-sites-reva.pdf

4. Office of Science and Technology Policy, Protecting & Preserving Apollo Program Lunar Landing Sites & Artifacts in Accordance with the NASA Transition Authorization Act of 2017 (March 2018), https://csps.aerospace.org/sites/default/files/2021-08/Protecting%20Lunar%20Sites%20OSTP%20 report%20Mar18.pdf

5. U.S. Congress, S.1694 - One Small Step to Protect Human Heritage in Space Act, https://www.congress.gov/bill/116th-congress/senate-bill/1694

6. The Hague International Space Resources Governance Working Group, Building Blocks for the Development of an International Framework on Space Resource Activities, art. 10(h).

7. The Outer Space Institute of the University of British Columbia, Vancouver Recommendations on Space Mining, VII.21, URL: http://www.outerspaceinstitute.ca/docs/Vancouver_Recommendations_on_Space_Mining.pdf.

8. "The Organization," For All Moonkind, https://www.forallmoonkind.org/about/the-organization/

9. For All Moonkind – Agenda Item 3, Statement by Bailey Cunningham, United Nations Representative, For All Moonkind, 60th Session of the Legal Subcommittee, Committee on the Peaceful Uses of Outer Space, Vienna, Austria, June 4, 2021. URL: https://www.unoosa.org/documents/pdf/copuos/ lsc/2021/statements/item_3_For_All_Moonkind_ver.1_4_June_PM.pdf

10. Declaration of Objectives and Activities Regarding Cultural Heritage in Outer Space (Space Heritage Declaration), For All Moonkind. URL: https://www.forallmoonkind.org/about/the-declaration/

11. Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) art. 1, Nov. 16, 1972, 27 U.S.T. 37, 1037 U.N.T.S. 151.

12. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty) art. II, Jan. 27, 1967, 610 UNTC 207.

13. Protection of Cultural Heritage Sites on the Moon, ed. Annette Froehlich. Vienna: Springer, 2020.

14. The Artemis Accords: Principles for Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids for Peaceful Purposes, Sec. 9(1), Oct. 13, 2020, 62 I.L.M. 888.

15. Justin St. P. Walsh, "Protection of Humanity's Cultural and Historic Heritage in Space," Space Policy 28:4 (2012). Pp. 234-243.

16. Jinyuan Su and Jinxuan Li. Toward an International Legal Framework for the Protection of Outer Space Heritage. Space Policy (2024), https://doi.org/10.1016/j.spacepol.2024.101625

17. UNESCO, World Heritage in the High Seas: An Idea Whose Time Has Come (Paris: UNESCO, 2016), 51. URL: https://unesdoc.unesco.org/ark:/48223/pf0000245467/PDF/245467eng.pdf.multi

18. Balázs Bartóki-Gönczy and Boldizsár Nagy. Introductory Note to the Artemis Accords. International Legal Materials 62:5 (2023). Pp. 888-898.

19. Rossana Deplano. The Artemis Accords: Evolution or Revolution in International Space Law? International and Comparative Law Quarterly (2021). Pp. 799-819.

20. Zachos A. Paliouras, "The Non-Appropriation Principle: The Grundnorm of International Space Law," Leiden Journal of International Law 27 (2014).

21. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331.

22. According to the official records of the UN COPUOS, 112 states have ratified the Outer Space Treaty as of 1 January 2023: Status of International Agreements Relating to Activities in Outer Space as at 1 January 2023, Mar. 20, 2023, U.N. Doc. A/AC.105/C.2/2023/CRP.3, https://www.unoosa. org/res/oosadoc/data/documents/2023/aac_105c_22023crp/aac_105c_22023crp_3_0_html/ AC105 C2 2023 CRP03E.pdf;

23. Croatia and Panama joined the Treaty later on in 2023, see Status of International Agreements Relating to Activities in Outer Space: Latest Depository Notifications, United Nations Office for Outer Space Affairs, https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/status/index.html.

24. Francis Lyall and Paul B. Larsen, Space Law: A Treatise (Surrey: Ashgate, 2009)

25. Outer Space Treaty.

26. As of August 2023, there have been 195 States Parties to the World Heritage Convention. This is more than the official number of the United Nations members, which is 193. See States Parties, UNESCO World Heritage Convention, https://whc.unesco.org/en/statesparties; Member States, United Nations, https://www.un.org/en/about-us/member-states.

27. Old City of Jerusalem and Its Walls, UNESCO World Heritage Centre, https://whc.unesco.org/ en/list/148

28. Archaeology and Heritage of the Human Movement into Space, ed. Beth Laura O'Leary and P. J. Capelotti. Springer, 2015.

29. Operational Guidelines for the Implementation of the World Heritage Convention art. I.A.1, WHC.23/01, 24 September 2023 https://whc.unesco.org/en/guidelines/

30. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement), Dec. 5, 1979, 1363 U.N.T.S. 23002.

31. The Space Treaty Project, https://www.spacetreaty.org/

32. Dennis O'Brien. Legal Support for the Private Sector: An Implementation Agreement for the Moon Treaty. Advances in Astronautics Science and Technology 3 (2020): 49-64.

33. Model Resource Agreement for the Moon Treaty (The Space Treaty Project: updated November 2022) Sec. 7, https://www.spacetreaty.org/modelimplementationagreementcurrent.pdf.

34. Convention on the Protection of the Underwater Cultural Heritage (Underwater Heritage Convention), Nov. 2, 2001, 2562 U.N.T.S. 45694.

35. Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (hereinafter BBNJ), New York, 19 June 2023 https://treaties.un.org/Pages/ViewDetails.aspx.

36. The Antarctic Treaty, Dec. 1, 1959, 402 U.N.T.S. 5778.

37. Gohar A. Petrossian et. al. Flags for Sale: An Empirical Assessment of Flag of Convenience Desirability to Foreign Vessels. Marine Policy 116 (2020) 103937.

38. Joanne Irene Gabrynowicz. One Half Century and Counting: The Evolution of U.S. National Space Law and Three Long-Term Emerging Issues. Journal of Space Law 37, no. 1. Spring 2011.

39. Draft Conclusions on Identification of Customary International Law, with Commentaries, U.N. Doc. A/73/10, at 126 (2018).

40. Committee on the Peaceful Uses of Outer Space: Observer Organizations, UNOOSA https://www.unoosa.org/oosa/en/ourwork/copuos/members/copuos-observers.html.

40. Clementine G. Starling et al., The Future of Security in Space: A Thirty-Year US Strategy. Washington, D.C.: Atlantic Council, 2021.

41. North Sea Continental Shelf, Judgment, 1969 I.C.J. Reports

42. Statute of the International Court of Justice https://legal.un.org/avl/pdf/ha/sicj/icj_statute_e.pdf.

43. Fabio Tronchetti. The Non-Appropriation Principle under Attack: Using Article II of the Outer Space Treaty in its Defense. Proceedings of the 50th Colloquium on the Law of Outer Space. 2008

44. Fabio Tronchetti. The Non–Appropriation Principle as a Structural Norm of International Law: A New Way of Interpreting Article II of the Outer Space Treaty. Air and Space Law 33:3 (2008), pp. 277-305

45. Stephan Hobe and Kuan-Wei Chen. Legal Status of Outer Space and Celestial Bodies. Routledge Handbook of Space Law, eds. Ram S. Jakhu and Paul Stephen Dempsey. Routledge, 2017.

46. Paliouras. The Non-Appropriation Principle"; Paul A. Berkman et al, "Outer Space Law: Russia – United States Common Challenges and Perspectives," Moscow Journal of International Law 1 (2018).

Для цитирования и библиографии: Ilin A. Trajectories of Normative Development for Outer Space Heritage Concept // Право и государство. № 4(105), 2024. – С. 6-22. DOI: 10.51634/2307-5201_2024_4_6