

THE DOCTRINAL GENESIS OF SPACE LAW AS AN EMERGENT BRANCH OF PUBLIC INTERNATIONAL LAW DURING THE COLD WAR

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ABSTRACT

This article seeks to define the doctrinal historical events that contributed to the improvement in space law during the Cold War. We also analyze the development of the main statutes responsible for the construction of the legal framework of Public International Law, as well as its respective perspectives and challenges.

Keywords: Space Law. Outer Space. Cold War. Public International Law. COPUOS.

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HISTORICAL-PHILOSOPHICAL ASSUMPTIONS: THE FUTURE OF THE PAST

Eighteenth-century science fiction literature paved the way for twentieth-century imagination regarding scientific advancement and the conquest of outer space. The works by Jules Verne and H. G. Wells were the great forerunners of such a movement. After the Protestant Reformation of the early sixteenth century, historical time—as perceived by human beings rather than its measurement—began to accelerate intensely and increasingly. The concept of ‘progress’ appeared during the eighteenth century and had a specific meaning and hope, namely the continuous improvement in humanity, and the belief of this realization being supported by reason and science (KOSELLECK, 2006: 317ss.).

The Second Thirty Years’ War (1914-45), whose unprecedented destruction levels afflicted humankind, opened new expectation horizons for the scientific-technological dimension. New weapons were introduced such as chemical gases, armored vehicles, submarines, airplanes, missiles and nuclear fission bombs. Military science even pioneered in a new kind of battlefield: the sky. The fighter aircraft—which serves for observation, bombing and hunting—evolved during the period from a weapon available for armies and navies to the creation of an armed force dedicated exclusively to airspace. After the 1920s, military technology was used extensively in the creation of civil air transport.

As already imagined in the literature, the expectation that the conquest of airspace would be the logical step before space conquest became commonplace in post-1945 thought. Cinematography has also done much to establish this futuristic imagery in the popular imagination. German flying bombs served as the basis for the development of rockets to go beyond the atmosphere. German technicians and technologies were eagerly disputed by Americans and Soviets. The propaganda emanating from these events, ranging from the orbit of Sputnik (1957) to the landing of Apollo 11 on the moon (1969), was exhaustively added to the propaganda of the economic political regimes that promoted them.

Despite all the hype and excitement of the public imagination, there was a subtext in the space race. It was the subject of nuclear war. The fission bombs detonated at Hiroshima and Nagasaki in August 1945 had indeed not been the last shots of World War II, but the first of the Cold War (1947-91). The matter of nuclear war ended the practice of total war ongoing

during 1914-45. Total war consists in using all national, human and material resources to crush the enemy. Part of the population is sent to fight on the front, while another part is engaged in the production of weapons and food to sustain the war effort. Public expenses went almost entirely to war as well. Allocating all national resources yields terrifying results. During the first Great War (1914-18), the rates of human loss in the Western Front trenches were at around 350% (ARGUELHES, 2013: 68). Death estimates over the two world wars range from 60 to 75 million human beings.

Practicing total war was no longer possible because of the obvious: such warfare waged with nuclear weapons would lead to the extermination of humanity. Though obvious, such an inference was not an immediate mental operation. Until the early 1980s, strategists on both sides still tried to conjecture a limited nuclear war, in which tactical nuclear bombs would only be used in the operation scene. Despite such mistakes, a certain level of prudence prevailed. The Korean War (1950-3) represented an essential turning point. The dismissal of General MacArthur from the UN forces command by President Truman marked the transition from total war to a limited war mentality.

It must be noted that politics among nations do not operate purely rationally; after all, the human condition is not a mechanism of action/reaction. At a system level, the logic of the Cold War rested on deterrence. In strictly military terms, deterrence consists in stopping the opponent from attacking on the grounds that any expected gain would be nullified by guaranteed retaliation. In practice, destroying the enemy country with nuclear weapons would do the same in the attacking country—the famous Mutual Assured Destruction (MAD). Any deterrence depends on ‘credibility’. The opponent must know what will happen afterwards—or even during—the hostile action. This point is essential to such logic.

Bernard Brodie, an American military thinker, however, rightly remarked that the logic of nuclear deterrence was not, is not and will not be perfect. If nuclear deterrence were perfect, the United States and the Soviet Union could have fought conventional wars. Each side would be absolutely sure that the other would not dare to use nuclear warheads, limiting the conflict. But the degree of uncertainty that governs human decisions is so high that there is no guarantee of such perfect deterrence, nor can it even exist. Thus, the fear of a military escalation that would result in a nuclear disaster led the great powers to avoid even a conventional limited war. Nuclear deterrence, in practice, works because it is imperfect

(ŽIŽEK, 2003: 11) and must be kept imperfect to function. According to this mechanism, at first sight paradoxical, nuclear weapons become peace factors. Up to the present moment, in writing these lines, countries holding fission or atomic fusion weapons have never entered war with each other.

In the early Cold War, from the 1940s to the 1960s, a key element for deterrence was the transport of the bomb from point A to point B, from the bases to the targets in enemy territory. Until the full development of ballistic missiles, launching was the responsibility of strategic bombers. If the great powers were able to develop rockets to carry equipment and beings into outer space, they would be able to make rockets that carry warheads to the target. Technology would be both responsible for making wonders available to ordinary citizens—energy, transport, communications, medical applications—as well as for destroying the planet or extinguishing humanity.

Such duality was well marked in US 'B' films—that is, low-cost science-fiction or horror films with bad scripts, photographs and acting. Excessive pollution, be it industrial or radioactive, created monsters or aliens that attacked humans, either to enforce peace (*The Day the Earth Stood Still*, 1951) or even for pure and simple conquest (*Plan 9 from Outer Space*, 1959). In the first movie, the alien attempts to convince humanity of the dangers that advancing technology without a moral counterpart can bring to Earth. In the second, greedy space beings attempt a desperate and ridiculous plan: the transformation of the dead into an army of zombies for the conquest of Earth. The symbolism between such an evil galactic empire and the 'red scare' was no mere coincidence. Object of dispute and fascination, outer space could not escape the imagination and legal framework of the time.

HISTORICAL BACKGROUND TO THE BIRTH OF AIR & SPACE LAW AND THE ROLE OF THE PREVIOUS DOCTRINE

The reasons that led the specialized doctrine of the *Ius Gentium* to concern itself specifically with the study and theoretical construction of space law date back to the fierce disputes for the conquest of the outer space during the Cold War riots. The corresponding symbolic date (HAGEN; JÜRGEN s/d: 273-298), even though academic discussion concerning this had popularized earlier in this same scenario (mainly in US universities), was 1957, when the Union of Soviet Socialist Republics (USSR) successfully

managed to launch aboard an artificial satellite called “Sputnik I”, the first living creature beyond the earth’s atmosphere, Laika, the dog that would become world famous due to such a huge event. Soon the moment would come when the two hegemonic powers at the time forced themselves to sit down to deal with the legal issues inherent in this subject while considering that the problems generated by the arms race are inherent in such technological endeavors. Thus, in 1958, within the UN itself, this important forum for strategic debate was created, the “United Nations Committee on the Peaceful Uses of Outer Space” (COPUOS).

The Soviets would accomplish yet another great feat: Yuri Gagarin (1934-1968) would be the first man to remain in space for almost two continuous hours, circling Earth’s orbit. The US responded shortly thereafter, fulfilling, now in a definitive manner, the old dream that President John Fitzgerald Kennedy (1917-1963) announced in the celebrated historical speech at Rice University in Houston, Texas, still in 1961. Thus, on July 20, 1969 (and thus less than a decade, as Kennedy had predicted), the Apollo 11 aircraft, controlled by Neil Armstrong (1930-2012), Buzz Aldrin (1930) and Michael Collins (1930), touched the lunar soil for the first time in human history, causing a huge commotion in global society. It is known that these events that marked these years immediately raised, as previously mentioned, many legal issues demanding reconsideration, since the legal controversies at that time were gaining momentum.

However, it should be noted that the legal debates that advocated the birth of space law arise primarily as a derivation of the speculation responsible for the birth of air law. All of these issues involved the possession of the most modern technology, a reality not always accessible to all countries. It must be noted that it would not be surprising that the theoretical construction inherent in space law springs only among nations endowed with scientific development in this field of navigation. Similarly, the challenge consists in determining the genesis of this new branch of law. However, we can trace some works that must be cited thanks to their inventive pioneering spirit, since precisely because of them that the construction of the first legal diplomas would revolve *a posteriori*.

Among these, we should mention the comments in Paris made by the Belgian lawyer Emile Laude, whose text was published in the “International Journal of Air Transit Law”. Also in 1910, the lawyer anticipated to the academic world his concern that “air law”, by itself, would no longer be able to bring solutions to this new and immense

range of legal situations and problems in the future, given there would be the need to conceive a kind of “Ethereal Law”, that is, a “Law of Space” (LAUDE, 1910: 16-18; DOYLE, 2002: 1).

Following the thoughts and proposals by Emile Laude, the Soviet lawyer V. A. Zarzar speaks at a legal conference in Moscow in 1926 about a series of legal discussions on various issues related to sovereignty in airspace, arguing for the need to differentiate it from extra-atmospheric space (although he had not defined such borders), above all, for the sake of national security. At the same time, he foresaw the futuristic reality glimpsed by aircraft circling the earth, and likewise sought to suggest the need to create a kind of “interplanetary transport law” as these same technologies were developed. However, Zarzar’s digressions make him lose academic and epistemological strength, though in some ways they are pioneering and equally important at their time, precisely because the author does not shy away from expressing his political concern with the possible attacks on the air navigation field by noncommunist countries (DOYLE, 2002: 2-3).

The deepening of the doctrinal nature of space law, however, was largely due to the work of Berlin professor Alex Meyer (1878-1979). This notorious master of the University of Cologne was a specialist in aviation law. Meyer may be said to have been one of the first, if not the indoctrinator who were at the forefront of concerns with the delimitation of the legal regime concerning activities in outer space, especially with the unrealistic possibility of their exploitation for unpeaceful purposes. He would also soon be the one to realize that the navigational rules governing maritime law (HOBE, 2013: 9) such as that of *res nullius* could not be applied due to the new reality that was being constructed. Seeking to renew interest in the production of studies in this field, Meyer refounded the former Institute of air law (formerly commanded by his compatriots Otto Schreiber and Hans Oppikofer) in 1951, now under the name “Institute of Air and space law”, and the following year he became the editor responsible for publishing a specific journal in this field, namely the *Journal of Air and space law* (*Zeitschrift für Luft und Weltraumrecht*).

The many technological advances made by Soviet pioneers in the exploration of outer space sparked a series of debates throughout the public in the United States of America. Amidst these discussions arises the name of John Cobb Cooper Junior (1887-1967), author of “The Right to Fly” (1947), one of the nation’s greatest works (JAMESON, 1954: 179). His

close connection with civil aviation issues since the years of his military career, combined with a remarkable legal knowledge in this field, has made this McGill University Professor a reliable reference in dealing with such legal issues. At the same institution he taught international aviation law between 1951 and 1957. Already in the admission year, he published the article “High Altitude Flight and National Sovereignty”. Considering the context of Cold War disputes, Cooper Jr. followed V. A. Zarzar’s earlier approach to sovereignty in extra-atmospheric space. He also created several proposals to regulate the use of orbital satellites. Not coincidentally, and at least in America, Cooper Jr. was called the “Father of Air space law,” since there were already solid doctrinal studies devoted to the subject at hand in other countries. Thanks to scientific discoveries, air or aviation law was continuously detaching itself from space law, which, in turn, already achieved greater autonomy.

In 1957, Eugene Pepin (1887-1988), a renowned Chinon historian and lawyer, known for his broad general culture and dedication to aeronautical law, published an interesting article in France entitled “The Legal status of the airspace in the light of progress in aviation and astronautics” (KERREST, 2013: 21-34). As early as 1962, a denser study on the subject came to light, the famous paper named “The space law” (Le droit de l’espace). A third contribution in 1970 is included in his bibliography: “The Legal Problems of Space”, marking his career in this field of scientific knowledge. Many of his theses were debated at the prestigious Institute of International Relations of Paris, where Pepin taught for many years.

This context is what allows the notorious study by Andrew G. Haley (1963) entitled “space law and Government” (1962) to gain prominence. It is worth noting that legal issues resulting from technological advances have always been part of the jurist’s career and rhetoric, so this piece was not unknown to its time. Stephen Doyle, in this regard, points out that Haley, as a lawyer, was already one of the greatest authorities on telecommunications law, since the early days of “radio and television” broadcasting (DOYLE, 1965: 214-217). As such, he developed the basic concepts inherent in the new branch of public international law (including a corresponding terminology), thus combining the natural law royal principles that guided his innermost conscience.

In December of the following year (1963), another manual would come to light: it was the book signed by Myres Smith MacDougal (1906-1998), Harold Lasswell (1902-1968) and Ivan Vlasic (1926-2011)—“Law and

Public Order in Space” (1963: 704-717)—which likewise became a reliable doctrinal reference on the subject, including in its 1147 pages a new and necessary analysis of space law. In addition to being one of the most prominent names among space law scholars, Myres Smith MacDougal was a great and renowned philosopher of law (ROSTOW 1975: 704-717). His career was developed at the Yale and Illinois Universities. Ivan Vlasic, in turn, has made a huge contribution to the development of the theoretical lines that make up modern space law. After escaping his homeland from Nazi persecution, he pursued a solid career at the Institute of Space and air law at Mc Gill University Law School.

TERMINOLOGIES

Emile Laude (1910: 16-18), in the academic circle of Paris, is well known in the first decade of the twentieth century for having proposed the terminology “Ethereal Law”, which in his own words would be a “Law of Space”.

Nevertheless, in Portuguese, three terminologies have achieved greater prominence regarding the study and delimitation of the legal matter in question, namely: “Direito Extra-Atmosférico”, “Direito Aerospacial” and “Direito Espacial”. From the beginning, the latter was outlined by Andrew G. Haley (1963) in his major work.

It would thus not be surprising that the English language would be very clearly established with the expression “space law”, a *nomen iuris* which is present in most manuals on the subject. In addition, the preference of Russian authors for “Cosmic Law” should not be surprising (ZHÚKOV, 1973: 303).

However, it should be noted that there are many possibilities, many of which are more in the taste of the professors of *Ius Gentium*, such as “International space law” (HOBE, 2004: 4; HAGEN and JÜRGEN, s/d: 273), “International Law of Outer Space” (VIKARI, 2008: 55), or “Cosmic International Law” (ZHÚKOV, 2008: 303).

CONCEPT

The greatest challenge posed by the conceptual delimitation of space law was the determination of its physical scope and the range of norms that would directly affect this “space”. Dietriks-Verschoor (2008:3),

for instance, identifies it as space beyond the atmosphere around the Earth. However, some have proposed to demarcate it within 110 kilometers above sea level (HOBE: 2004, 4). Alex Meyer, in turn, initially suggested setting the border between 200 and 300 km above sea level, and then changed his mind to 80 km, in accordance with the Von Karman Line (HOBE, 2013, 9-10). In any case, the COPUOS (Committee on the Peaceful Uses of Outer Space) continues to raise any suggestions made by the experts on the subject, especially within the Working Group on the Definition and Delimitation of Outer Space of the Office of Legal Matters.

According to Moscow Professor G. Zhukov (1973: 303), the emergent "Cosmic Law" is "a set of norms of international law that regulate relations between states, as well as between them and international organizations, relations arising from their activities in the cosmic space, which establish the international legal regime of that space and the celestial bodies in line with the basic principles of international law".

Thus, we take care to conceptualize it as the branch of public international law responsible for the study of the rules that apply to any and all activities that occur daily in outer space, focusing, in this same process, on the maintenance of the greater interests of humanity.

LEGAL NATURE

There seems to almost exist a consensus among scholars that space or extra-atmospheric law is a new and emergent branch that arose autonomously (DIETRICKS-VERSCHOOR and KOPAL, 2008: 5) from the leafy tree of public international law (LAFFERRANDERIE, s/d: 7), because the interests combined in this legal orbit have always represented the greatest desire of humanity, to whom they are invariably related in legal terms, although, effectively, the actors involved in the negotiation and formalization of the treaties handle such matters, or the States.

THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE (COPUOS)

The Committee on the Peaceful Uses of Outer Space (COPUOS) was created within the framework of the United Nations General Assembly at its thirteenth session and by means of Resolution No. 1348 (XIII). A priori and that year, its establishment still took place with an ad hoc function. It

is currently funded by the UN Office for Outer Space Affairs (UNOOSA), whose headquarters are in Vienna.

In its internal structure, COPUOS also has two important subsidiary bodies, both established in 1961: I) The Scientific and Technical Subcommittee and, in turn, also the II) The Subcommittee on Legal Affairs.

The Scientific and Technical Subcommittee has three Working Groups handling pressing issues concerning the subject:

- **Working Group of the Whole; – Working Group on the Use of Nuclear Power Sources in Outer Space;**
- **Working Group on Long-Term Sustainability of Outer Space Activities.**

The Legal Subcommittee, in turn, has the same number of teams. They are as follows:

- **Working Group on the Status and Application of the Five United Nations Treaties on Outer Space;**
- **Working Group on the Definition and Delimitation of Outer Space;**
- **Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space.**

Regarding its membership of COPUOS, Brazil is an original member (and therefore has been participating in these discussions since 1958) together with four of the “permanent members of the Security Council”, namely, the United States, the USSR (now Russia), Great Britain and France (China is not included in this first listing). The others are Argentina, Australia, Belgium, Canada, Czechoslovakia (currently represented by two countries, the Czech Republic and Slovakia), India, Iran, Italy, Japan, Mexico, Poland, Sweden and the United Arab Republic (now Egypt). Over the years, many other states have joined.

MAIN INTERNATIONAL TREATIES REGARDING THE USE OF COSMIC SPACE: THE POSITIVATION OF SPACE LAW

Among all the relevant legal texts and despite the discussions and debates that have resulted in the preparation of important documents

in the UN General Assembly, certainly no other text has assumed such historical relevance as the *'The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies'* (1967). The celebrated American feat of the moon landing, which would occur only two years later, practically demanded that a new legal regime, now made up of a completely *sui generis* body of rules, should come to address the main legal gaps in the exploration of outer space. Much more than the Cold War symbolism represented by the programmed initiative of the astronaut that inserted the flag of the United States on the celestial body, this international agreement anticipated that the act itself meant a great achievement for mankind, and the latter, as a whole, would ultimately benefit from its respective scientific research, regardless of the stage of economic development in which a particular population or nation is circumstantially situated (art.1). Due to the new agreement, art.2 immediately confirmed that no celestial body would be susceptible to subjection to the sovereignty of any state, and similar *occupation* or *use* for this purpose was forbidden. This way, any and all potential pretensions once based on the doctrine in the traditional solutions offered by maritime law and the rule of *res nullius* would be buried forever. That is, the disciplinary right of navigation, at least in its classical form, was acknowledged to no longer be capable of sustaining itself within this legal sphere. Thus, although the Treaty makes a direct reference to international law, through more than one of the legal provisions present in the instrument (as stated, for example, arts. 1 and 3) the autonomy of space law undeniably gains new breath as a branch of *ius gentium*. Another very important aspect that must be considered, especially given the context in which this agreement was created, is the commitment to the greater idea of attaining *world peace* assumed by the covenant States that engage in exploration activities of extra-atmospheric space. Art.4 concerned this commitment by prohibiting the placing of 'nuclear' or 'mass destruction' weapons in orbit around the earth, while also seeking to ban any possibility of 'military bases, installations or fortifications' being inserted unless the focus is the accomplishment of a scientific expedition, which contains, above all, as a *sine qua non* condition, peaceful purposes.

The "Moon Treaty", as this diplomatic document would later be known, would also enshrine the Principles of *International Cooperation* and *Mutual Assistance* for activities to be exercised in extra-atmospheric space (arts.9 and 10). In addition, of course, it would encompass the principles of

the “*Common Interest of Humanity*” and those of the “*Peaceful Use of Outer Space*”. Another important factor is the legal liability of the State that eventually causes damage to third parties due to its incursions beyond the earth’s orbit (art.7). Such a hypothesis would become quite real and plausible, considering Skylab wreckage crashed into the ocean in 1981. Likewise, the text of the international agreement recognizes the *State’s right of jurisdiction over the object it has launched*, since it is practically peaceful in current doctrine to accept the claim that state sovereignty in no way reaches outer space, the lack of definition about its virtual demarcation notwithstanding (art.8). However, despite the scope and ingenuity given to the terms of the agreement, Fabio Tronchetti (2009: 10) observed that no legal provision was made about the exploitation of natural resources in celestial bodies, perhaps because this was a rather remote possibility at the time. The following year (1968), the ‘*Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space*’ was signed. The treaty in question seeks to support all possible situations involving the occurrence of any accident with any aircraft, guaranteeing the crew the necessary mechanisms for their safety and rescue, whether these procedures are taken at sea or on land (arts.1 to 4). As for the objects or other components that may fall on the ground of any of the signatories of the agreement, they must, as soon as possible, be duly returned to the ‘launching State’ (art.5).

In 1972, another statute provides a new implementation of space law — the ‘*Convention on International Liability for Damage Caused by Space Objects*’ — which aims to better regulate the subject previously addressed in the Moon Treaty, in its art.7. In this respect, the obligations assumed by the launching State become perennial and indistinctly reach individuals or legal entities, acknowledging the real possibility of damage to third parties, always in a very broad and absolute manner. Here, the characterizing form of ‘damage’ is typified, which may affect the life or physical integrity of an individual or group of persons, in addition to, of course, the property of others (arts.1 to 4). However, if the technological undertaking mentioned is the result of joint technologies or some form of cooperation in this area involving two or more countries or using the launching base of one of them, they will all be considered joint and as such should bear any financial charges arising from indemnities (arts.5 and 8). The convention in question even takes care of establishing a deadline (one year after the occurrence of the fact) and the appropriate processing

procedures for the injured State to formally submit its claim (art.10). Regarding the international dispute settlement mechanisms, diplomatic means are recommended (art.14) and if the parties disagree on the matter, a special committee will be set up to decide the dispute. The body will be constituted of members chosen by mutual agreement by the complainants (arts. 15 to 20) or, in the event of a mistake, by the UN Secretary-General.

Due to several legal issues that required better appreciation and, considering the success of the United States in reaching lunar soil for the first time in history, the 'Agreement Governing the Activities of States on the Moon and Other Celestial Bodies' was created. (1979). In a way, much of what was previously adjusted by the 1967 Treaty is reaffirmed by the new statement, notably those commitments alluding to the peaceful exploration of heavenly bodies, only now with greater emphasis on the specific activities to be developed in lunar soil. As in the previous document, States should relinquish any form of belligerence or hostile intent, which matters in arms practices (arts.2 and 3), but being within the law for them to establish "habitable or uninhabitable stations" on the moon, to send astronauts there or any other objects necessary for analyses to be performed (arts.8 and 9). Taking advantage of this opportunity, the 1979 Agreement anticipates the need to scale the natural resources existing in the lunar soil to establish, in the future, a viable 'international regime' for the major interests of humanity (art.11).

CONCLUSION

Space law was born as an inevitable doctrinal development of air law as technological advances began to take shape in the first half of the twentieth century. Given this context, it should be noted that the pioneering works on the subject in question appear even before the outbreak of the Cold War, in which the hegemonic disputes established between the United States of America and the Union of Soviet Socialist Republics more effectively take shape, generating among other things the arms race and the introduction of a series of strategic initiatives aimed at conquering outer space.

From the beginning, the rules on navigation would no longer serve as a beacon to meet the different situations required by the new reality that intervened in this scenario. The continuous development of space law, which emerges as an emergent branch of international law, is

the immediate response to curbing any pretensions of extra-atmospheric domains for unpeaceful purposes, or the real possibility that a state could temporarily extend its sovereignty to the heavenly bodies, founded on the obsolete rule of *res nullius*. From the process of building this legal regime of which the Moon Treaty (1967) is a true legal framework, much of it is due to the work of entities such as COPUOS (Committee on the Peaceful Uses of Outer Space), created under the UN jurisdiction. COPUOS experts are tirelessly dedicated to improving this legal system, seeking to assess other normative challenges that always point to the horizon, such as the scaling of the legal concept of 'outer space' (still to be defined) and the economic exploitation of the celestial bodies through mining.

Despite what the theoretical lines of the so-called 'principle of the common interest of humanity' advocate, the set of rules in question proves to be practically intangible for those countries that do not have real access to the technologies in question, which demand massive sums of financial investment from governments interested in keeping their space programs and agencies active. The benefits of exploration of outer space do not yet reach those populations of states that do not have this kind of knowledge.

AGÊNESE DOUTRINÁRIA DO DIREITO ESPACIAL COMO INSURGENTE RAMIFICAÇÃO DO DIREITO INTERNACIONAL PÚBLICO DURANTE A GUERRA FRIA

RESUMO

O presente artigo objetiva estabelecer os marcos históricos doutrinários que contribuíram para o aprimoramento do Direito Espacial durante a Guerra Fria. Ainda nesse contexto, analisa-se o desenvolvimento dos principais diplomas legais que foram responsáveis pela construção do arcabouço jurídico da referida ramificação do Direito Internacional Público, avaliando, ainda, as perspectivas e desafios presentes nesse mesmo cenário.

Palavras-chave: Direito Espacial. Espaço Sideral. Guerra Fria. Direito Internacional Público. COPUOS.

REFERENCES

- ARGUELHES, Delmo de Oliveira. (2013). *Sob o céu das valquírias: as concepções de heroísmo e honra dos pilotos de caça da Grande Guerra (1914-18)*. Curitiba: CRV.
- DIETRICKS-VERSCHOOR, Isabella Henrietta e KOPAL, Vladimir (2008). *An Introduction to space law*. 3 ed. Amsterdam: Kluwer Law International.
- DOYLE, Stephen E. "Space and Government by Andrew G. Haley" (1965). In: *Duke Law Journal*, pp.214-217.
- DOYLE, Stephen E. *Origins of International space law and the International Institute of space law of the International Astronautics Federation* (2002). San Diego, California: Univelt.
- LAUDE, Emile. "Questions Pratiques". In: *Revue Juridique Internationale de Locomotion Aérienne* (2010). Paris, 16-18.
- LAFFERRANDERIE, Gabriel. "Basic Principles Governing the Use of Outer Space in Future Perspective", pp.05-23. In: BENKÖ, Marietta e SCHRUGL, Kai-Uwe. *Essential Air and space law: Current Problems and Perspectives for Future Regulation (s/d)*. Utrecht: Eleven International Publishing.
- HAGEN, Regina e JÜRGEN, Scheffan. "International space law and Space Security: Expectations and Criteria for a Sustainable and Peaceful Use of Outer Space", pp.273-298. In: BENKÖ, Marietta e SCHRUGL, Kai-Uwe (s/d). *Essential Air and space law: Current Problems and Perspectives for Future Regulation*. Utrecht: Eleven International Publishing.
- HALEY, Andrew G. *space law and Government* (1963). New York: Appleton-Century-Crofts.
- HOBE, Stephan. "Alex Meyer (15.12.1879 – 21.08.1978)". In: HOBE, Stephan (org.) *Pioneers of space law: A Publication of the International Institute of space law*. Leiden; Boston: Martinus Nijhoff Publishers, 2013, pp.5-20. (A Publication of International Institute of space law).
- HOBE, Stephan. *Current and Future Development of International space law*. In: *United Nations Office for Outer Space Affairs: Disseminating and Developing International and National space law: The Latin America and*

Caribbean Perspective (2004). Viena: Associação Brasileira de Direito Aeronáutico e Espacial (SBDAY) e Governo do Brasil, pp.3-16.

JAMESON, William J. "The President's Page". In: American Bar Association Journal (March, 1954): CCH Topical Law Reports. New York; Chicago e Washington, vol.40, p.179.

KERREST, Armel. "Eugene Pepin (27.06.1887 – 27.04.1988)". In: HOBE, Stephan (org.) *Pioneers of space law: A Publication of the International Institute of space law* (2013). Leiden; Boston: Martinus Nijhoff Publishers, pp.21-34. (A Publication of International Institute of space law).

KOSELLECK, Reinhart. (2006). *Futuro passado: .* Rio de Janeiro: Contraponto; PUCRJ.

McDOUGAL, Myres Smith; LASSWELL, Harold e VLASIC, Ivan (1963). *Law and Public Order in Space*. Yale University Press.

ROSTOW, Eugene V. "Myres S. McDougal". In: *The Yale Law Journal* (1975), volume 84, pp.704-717.

TRONCHETTI, Fabio. *Exploitation of Natural Resources of the Moon and Other Celestial Bodies: A Proposal for a Legal Regime* (2009). Leiden; Boston: Martinus Nijhoff Publishers. (Studies in space law, n.4).

VIKARI, Lotta. *Environmental Element in space law: Assessing the Present and Charting the Future* (2008). Leiden; Boston: Martinus Nijhoff Publishers, 2008 (Studies in space law, n.3).

ZHÚKOV, G. "Los Principios Basicos del Derecho Internacional Cósmico". In: TUNKIN, G. et al. *El Derecho internacional contemporâneo* (1973). Moscou: Editorial Progreso, pp.303-338.

ŽIŽEK, Slavoj. (2003). *Bem-vindo ao deserto do real! Cinco ensaios sobre o 11 de setembro e datas relacionadas*. São Paulo: Boitempo.