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SOVEREIGNTY RACE FOR RESOURCES IN THE INTERNATIONAL SEAS AND AREAS BEYOND THE NATIONAL JURISDICTION OF STATES (INCLUDING AIRSPACE AND SPACE): A TRANSNATIONAL SECURITY THEORY

KENAN ŞAHİN[1]
LEVENT KIRVAL[2]

ABSTRACT

Throughout history, states have primarily designated lands as their areas of sovereignty. However, with the development of technology, they have entered a race to establish dominance and domination in the seas and the air. In this context, international seas (high seas) and international airspace have been determined as the common property of all humanity. Recently, space has also been defined as a common property of all humankind beyond nation-state sovereignty's borders. In all these areas, various states and companies carry out activities such as fishing, deep sea mining, laying pipelines and fiber optic cables to the seabed, airflow flights, and communication by placing satellites in space. The race for the use of resources in these areas, which are indeed the common property of humanity, brings about various discussions. It is essential to discuss whether a state or company's use of these areas as it wishes harms the rights of people who do not have this technology or capability in these areas. In this context, this article will focus on sovereignty struggles in sea, air, and space areas that are outside the national sovereignty of states, and it will mainly analyze the race for the use of resources in these areas. Moreover, it will also attempt to develop a theory of transnational security that delineates the limits of collective sharing by states on the use of these zones.

Keywords: *Sovereignty, International Seas, Airspace, Space, Race for the Use of Resources, Common Property of Humanity, Transnational Security*

[1] Asst. Prof. Dr., National Defence University, Turkish Naval Academy, Istanbul, Türkiye. Email: kenan.sahin@msu.edu.tr ORCID: 0000-0001-7404-6608

[2] Prof. Dr., Istanbul Technical University, Maritime Faculty, Istanbul, Türkiye. Email: lkirval@itu.edu.tr ORCID: 0000-0001-8884-5427

ULUSLARARASI DENİZLERDE VE DEVLETLERİN ULUSAL YETKİ ALANLARININ ÖTESİNDEKİ ALANLARDA (HAVA SAHASI VE UZAY DAHİL) KAYNAKLAR İÇİN EGEMENLİK YARIŞI: ULUSÖTESİ BİR GÜVENLİK TEORİSİ

ÖZ

Tarih boyunca devletler egemenlik alanları olarak öncelikle karaları belirlemişlerdir. Ancak teknolojinin gelişmesiyle denizler ve havada hakimiyet ile egemenlik kurma yarışına girmişlerdir. Bu bağlamda uluslararası denizler (açık denizler) ve uluslararası hava sahası tüm insanlığın ortak malı olarak saptanmıştır. Son zamanlarda uzay da ulus-devlet egemenlik sınırlarının ötesinde tüm insanlığın ortak malı olarak tanımlanmıştır. Tüm bu alanlarda çeşitli devletler ve şirketler, balıkçılık, derin deniz madenciliği, deniz dibine boru hatları ve fiber optik kablolar döşenmesi, hava akımı uçuşları, uzaya uydular yerleştirerek haberleşme gibi faaliyetler yürütmektedir. Aslında insanlığın ortak malı olan bu alanlardaki kaynakların kullanım yarışı çeşitli tartışmaları da beraberinde getirmektedir. Bir devletin ya da şirketin bu alanları dilediği gibi kullanıp bu teknolojiye ya da kabiliyete sahip olmayan insanların haklarına zarar verip vermediğinin tartışılması önemlidir. Bu bağlamda bu makale, devletlerin ulusal egemenlikleri dışında kalan deniz, hava ve uzay alanlarındaki egemenlik mücadelelerine odaklanarak söz konusu alanlardaki kaynakların kullanım yarışını analiz edecektir. Ayrıca, bu alanların kullanımı konusunda devletlerin kolektif paylaşımının sınırlarını belirleyen bir ulus ötesi güvenlik teorisi geliştirmeye çalışacaktır.

Anahtar Kelimeler: Egemenlik, Uluslararası Denizler, Hava Sahası, Uzay, Kaynakların Kullanımı için Yarış, İnsanlığın Ortak Mülkiyeti, Ulusötesi Güvenlik

1. INTRODUCTION

When states establish sovereignty, they primarily target land areas. However, with the increasing use of technology over time, it has become clear that it is necessary to establish sovereignty in the seas and airspace. Today, even space and distant planets are considered a new sovereignty area for states. Over time, companies have also increased their activities in sea, air, and space areas. Today, it is even possible to send satellites into space and communicate through the infrastructure established by companies

through these satellites. State and company activities in these areas outside the state's land, sea, and air borders (Aksar, 2015: 239) are this article's main subject. The areas beyond the national sovereignty of the states have always been an issue of discussion in academic circles, particularly for scholars of International Relations. Several international treaties have also been enacted to provide a framework for these areas.

The most crucial treaty in this regard for the seas has been the 1982 United Nations Convention of the Law of the Sea (UNCLOS). The most critical treaty defining the airspace is the 1944 Convention on International Civil Aviation, also known as the Chicago Convention. By international law, a state "has complete and exclusive sovereignty over the airspace above its territory", which corresponds with the maritime definition of territorial waters as being 12 nautical miles (22.2 km) from a nation's coastline. Airspace not within any country's territorial limit is considered international, analogous to the "high seas" in maritime law. For space, in the aftermath of the Cold War, 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 (the "Outer Space Treaty") and the International Telecommunication Union (ITU) have served as the constitutional legal framework. These pieces of legislation set the principles and procedures constituting space law. In this context, the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and its Legal, Scientific, and Technical Subcommittees are today responsible for debating international space law and policy issues.

The sea, one of the three zones mentioned, is the first zone where states have established sovereignty beyond their national land borders. Hence, the law of the sea has been the starting point of all the discussions about sovereignty in areas beyond the land borders (Toluner, 2019). In this context, the development of the law of the sea and the maritime law will be briefly summarized in the following section. Afterward, an analysis of the existing legislation on airspace and space will again be briefly made to set the stage for discussing the issue of transnational security. In this context, it will be emphasized that the struggle for dominance at sea and in the air

reflects the efforts of states to seize control, pursue their economic interests, and influence the global order by taking advantage of technological advances and geographical advantages.

2. SOVEREIGNTY AND INTERNATIONAL SEAS

Sovereignty is often defined as setting and enforcing norms, being the source of legal authority, and having supreme power. Sovereignty has two basic meanings: internal and external (Krasner, 1999: 11-25). The fact that the state is the sole and superior authority in determining the rules over its territory shows the internal aspect of sovereignty. On the other hand, the state's capacity to act independently and autonomously on a global scale is the external aspect of sovereignty. In this context, sovereignty has long referred to the monopoly of lawmaking using force over a particular group of people in a place with clear territorial boundaries and the right to represent these people vis-à-vis others. However, sovereignty has always been controversial among actors in international politics, where states compete with other actors within political, legal, and military borders.

Sovereignty is a concept that can be understood when it is considered within the framework of the historical-political relations that gave rise to it. The meaning of modern sovereignty has always been open to transformation. Historically, wars, border changes, socio-economic developments, the search for different political models, and the sharing of authority have necessitated the reconstruction of states' perceptions of sovereignty and legitimacy. However, sovereignty is always decisive in the state's birth, development, and existence. In the formation of the modern state, sovereignty has been the most essential characteristic of the centralized kingdom from the 17th century and of the nation-state from the 19th century onwards. The principles of sovereignty, equality, and non-interference in each other's internal affairs have formed the normative elements of the modern world of nation-states. Besides that, in the 20th century, European integration, embodied in the aftermath of two major world wars, attempted to experience state sovereignty differently as a phenomenon that can be shared and redefined through cooperation and integration. Therefore, it is

inevitable that there will be different transformations in the future in terms of the areas where the sovereignty of states will extend.

Also, the race for dominance over the seas has undergone many political and historical phases. Since sovereign states have long tried to establish sovereignty over various parts of the globe, the seas have also experienced this struggle. The seas have been an essential means of transportation, trade, and communication throughout history and an area for extracting and using natural resources. Historically, civilizations such as the Phoenicians, Greeks, and Romans used their maritime capabilities to expand their trade networks and project power in the Mediterranean. However, these efforts were more concerned with controlling coastal regions than dominating the high seas. In the Age of Geographical Discoveries (15th-17th centuries), maritime dominance became a cornerstone of state power. European powers such as Portugal, Spain, and later the Netherlands, England, and France sought to gain control of sea routes and overseas territories.

The search for order at sea led to forming a maritime law based on customs and traditions. Hugo Grotius (1609) defended the mare liberum principle (freedom of the seas), arguing that the oceans are international waters open to all for navigation and commerce. In contrast, states like Spain and Portugal pushed for *the mare clausum* (closed sea) to assert exclusive control over specific maritime regions. By the 18th and 19th centuries, nations began asserting sovereignty over territorial waters, extending three nautical miles from the coast (based on the range of a cannon shot). During this period, customary rules on sovereignty rights in territorial waters became clear. Steamships, ironclads, and later submarines allowed states to project power far beyond their coastlines. Control of key maritime chokepoints became a strategic priority. With its dominance of the world's seas in the 19th century, the British Empire could secure trade routes, colonies, and economic supremacy.

In the 20th century, the use of the sea gained a new dimension with the advancement of technology, particularly in areas such as archaeological excavations and scientific research. With the increase in sea communication, the applications of passing communication cables and energy pipelines through the seabed have become

widespread. Technological advances that have facilitated the exploitation of ocean resources stretching from the coast to vast areas have justified claims that a state's economic and environmental interests must be protected, broadening its understanding of security (Klein, 2011: 7). On the axis of these developments, rules to counter risks and threats that transcend national borders at sea began to be addressed more systematically after the Second World War. Modern debates have centered on whether the seas can be subject to a state's exclusive sovereignty. In this process, the United Nations Convention on the Law of the Sea (UNCLOS), which emerged because of maritime law codification efforts, defined the rights and obligations of the state parties. In other words, the Convention outlines the various maritime spaces that coastal states can claim and the rights and obligations of states concerning all maritime spaces. The Convention includes provisions on the coastal state's sovereignty over territorial waters, innocent passage through territorial waters, freedom of the high seas and navigation, continental shelf, contiguous zone, exclusive economic zone, and exclusive jurisdiction over the flag state's ships, as well as provisions on many issues ranging from fisheries to marine pollution.

According to UNCLOS, coastal states have sovereign powers over the exploration and exploitation of natural resources on the continental shelf. They can also regulate fishing, energy production, and other economic activities within their exclusive economic zones, which extend 200 nautical miles from their territorial waters. In these areas, states have sovereign rights to exploit, conserve, and manage living marine resources. Companies that do not have direct sovereign rights over marine areas can only engage in certain activities at sea. These activities usually take place within the continental shelf and exclusive economic zones. Many companies seek to profit through port operations, cargo transportation, and maritime services. Some private companies carry out mining activities on the seabed with permission from coastal states. Companies may operate in marine areas to harness wind, wave, or undersea energy resources. However, legal regulations are often required for such activities. Indeed, companies operating in marine areas must comply with national and international rules, assess environmental impacts, and obtain permits when necessary.

As seen in the post-World War II arrangements, states primarily aim to protect their security and economic interests by establishing control over the boundaries of their territorial waters. However, no state's sovereign borders include the "high seas" areas not included in its territorial or internal waters. Order in these areas, open to all states, has become customary by flag laws and conventions signed by states. At this point, Renée de Nevers (2015) draws attention to three key features of maritime sovereignty. First, the connection with sovereign states provides flag-state protection to ships. Since the sovereign state has jurisdiction over flagged ships that do not belong to any other state, merchant ships are not interfered with. Only the flag state's navy can legally board, inspect, or seize vessels flying its flag. Second, ships must be linked to a state. Without this, they are considered stateless, lose the protection afforded by the state, and become vulnerable to interference by any state. Third, any state can grant ships the right to sail under its flag. Sovereignty has thus functioned as a regulatory principle at sea. Materially, flag state authority clarifies property rights. Institutionally, it creates a social environment and rules in an anarchic setting and thus provides a means to regulate the activities of ocean travelers.

Within the framework of a global commons, the use of the high seas is determined by the principles of cooperation, seabed protection, and respect for the rights of all states. According to UNCLOS, the rights and obligations of states on the high seas are equal (UNCLOS, 2(1), 17, 87, 89). In this context, states can organize navigation on the high seas with ships flying their flags. Aircraft registered in any state can fly over the high seas without restriction. States may lay submarine cables and pipelines on the high seas, provided they do not interfere with existing cables or pipelines. They may build artificial islands and installations if they refrain from interfering with established sea lanes and other legitimate uses of the high seas. States with the right to fish on the high seas are also subject to specific conservation and management measures to prevent overfishing and ensure the sustainability of fish stocks. On the high seas, states may conduct marine scientific research for peaceful purposes and in the interests of other states. In doing so, states shall take measures to prevent pollution, waste

discharge, and other environmental damage from ships within the obligation to protect and preserve the marine environment.

States have the right to board and inspect ships sailing on the high seas if they reasonably suspect they are engaged in maritime banditry, slave trade, unauthorized broadcasting, or are of no nationality (UNCLOS, 110). This right also applies if the vessel flies the flag of another state than the one in which it is registered. Regarding the conservation and management of living marine resources, UNCLOS grants state sovereignty over marine biological resources but requires that this right be exercised by sustainable use and cooperation with other states. UNCLOS grants states the right to control specific areas such as submarine telecommunication cables and submarine tunnels. However, states should exercise these rights in such areas without harming the principle of free navigation. Likewise, states can conduct scientific research on the seabed and submarine areas on the high seas without harming other states.

In practice, UNCLOS is designed to ensure the freedom of states on the high seas to use the seas peacefully and sustainably while respecting the interests of other states. On the other hand, many states and companies want to use the seas beyond these rules. These include exploiting living and mineral resources in the sea, generating energy from waves, currents, or surface winds, deep mining activities, and laying cables and pipelines on the seabed. Due to the limitations of the resources within their sovereignty, states and companies are turning their attention to areas outside their national jurisdiction, such as the high seas and deep seabed, to search for valuable resources such as minerals, oil, and gas. In current international law, the seabed and ocean floor beyond the limits of national jurisdiction are designated as the common heritage of humanity. These searches, supported by technological developments, create a fiercely competitive environment, resulting in legal gaps in resource exploitation rights. Undoubtedly, exploiting resources in international waters raises significant environmental concerns such as habitat destruction, pollution, and degradation of marine ecosystems. The "Anthropocene" themed discourses, which emphasize that the earth's ability to renew itself is decreasing and entering a complex process to return to, also draw attention to these problems (Crutzen, 2006).

Despite all this, some states and companies see themselves as having unlimited rights to exploit the seas. Control over vital waterways remains a flashpoint in international relations, with nations deploying naval power to assert dominance. Marine areas beyond national jurisdiction, representing 64% of the total surface area of the oceans and about half of the planet's total surface area, are being subjected to increasingly unsustainable human activities through technological advances (Houghton & Rochette, 2014). Technological advances have enabled the exploitation of deep-sea and Arctic resources, prompting disputes over sovereignty in these regions. States or companies that can extract valuable resources such as fish, minerals, and oil leave little for those who need the technology to compete. Industrial-scale fishing fleets deplete fish stocks in areas that small-scale fishers exploit. Likewise, technology-equipped actors with access to seabed minerals in international waters potentially monopolize these resources (Lambert, 2024). Activities such as deep-sea drilling, shipping, and waste dumping cause marine pollution that affects ecosystems globally, harming coastal communities with limited capacity. The International Seabed Authority (ISA) does not provide sufficient authority over the ability to balance resource extraction and environmental protection. However, as states and private companies pursue these resources, the potential for conflict over environmental degradation and access increases.

Several rules have been established recently to prevent overexploitation of marine resources, protect aquatic biodiversity, and manage marine ecosystems sustainably. For example, the International Agreement on Port State Measures (PSMA), which aims to prevent illegal, unreported, and unregulated fishing in the seafood trade, empowers states to avoid such fishing and control the trade of illicit products. In addition to this, “The 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 (BBNJ Agreement)” was adopted on 19 June 2023 by the Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction convened under the auspices of the United Nations. The BBNJ

Agreement became the third implementing Agreement to the United Nations Convention on the Law of the Sea. Under the overall objective of the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, for the present and in the long term, through effective implementation of the relevant provisions of the Convention and further international cooperation and coordination, the Agreement addressed four main issues:

- Marine genetic resources, including the fair and equitable sharing of benefits;
- Measures such as area-based management tools, including marine protected areas;
- Environmental impact assessments and
- Capacity-building and the transfer of marine technology.

The Agreement also addressed several "cross-cutting issues, "establishing a funding mechanism and setting up institutional arrangements, including a Conference of the Parties and various subsidiary bodies, a Clearing-House Mechanism, and a secretariat. This recent Agreement can be a precursor for developing similar legislation for airspace and space in the future. Undoubtedly, the impact of the marine industry is significant on global trade, the world economy, and the biosphere. Like the seas, the states soon started to use airspace and establish sovereignty in this zone with the advancement of technology. More recently, the space has become a new area where states and companies perform several activities. Like maritime law and the law of the sea, a corpus of legislation has also started to develop for airspace and space. In this development, maritime law and the law of the sea have functioned as an inspiration for the development of international law for these areas. These pieces of legislation about airspace and space, which are indeed very limited, will be analyzed in the following pages.

3. SOVEREIGNTY AND AIRSPACE

In international law, air space is the space above a particular national territory and is defined as the space belonging to the government controlling the land territory. It does not include outer

space, which, under the Outer Space Treaty of 1967, is defined as a free area and not subject to national sovereignty. Aviation law governs the use of airspace and associated commercial activities. It includes bilateral agreements, national laws, and international treaties.

The earliest airspace legislation was a Paris police force regulation that forbade the flight of balloons without a special permit. In the following years, as aviation has an international character, most legislation concerning airspace has developed into international law (Haanapple, 2003). The Paris Convention (1919) established the principle of sovereignty over national airspace; the Warsaw Convention (1929) and its amendments established rules for international carriage, liability for damages, and passenger rights; The Chicago Convention (1944) established the International Civil Aviation Organization (ICAO), standardizing international aviation practices; and the Montreal Convention (1999) replaced the Warsaw framework and simplified liability rules for international air transport. These are essential treaties of airspace law.

Every state has sovereignty over the airspace above its territory and territorial sea. The principle of sovereignty over the airspace was accepted first with the Paris Convention on the Regulation of Aerial Navigation (1919). This principle was restated in the Chicago Convention on International Civil Aviation (1944). Airspace sovereignty gives the states the rights to regulate the entry of foreign aircraft into its airspace. Moreover, the persons entering its airspace are subject to the sovereign state's laws. The principle of airspace sovereignty in international law is probably well reflected in the maxim, "*Cuius est solum eius est usque ad coelum et ad inferos"* (he who owns the land -and thus seas- owns what is above and below it).

For scheduled air services, the privilege of operating commercial services through or into a foreign country was, at the time of the 1944 Chicago conference, split into five so-called freedoms of the air. The first is the privilege of flying across a country nonstop; the second is flying across with a stop for technical purposes only. These two freedoms are also known as transit rights. The other air freedoms are traffic rights, referring to passengers,

mail, or cargo carried on a commercial service. The third of the five freedoms is the privilege of bringing in and discharging traffic from the home state of the aircraft or airline; the fourth is that of picking up traffic for the home state of the aircraft or airline; the fifth is that of picking up traffic for or discharging traffic from third states in the territory of the state granting the privilege. This fifth freedom is the main bargaining point in exchanging traffic rights among states (Encyclopedia Britannica).

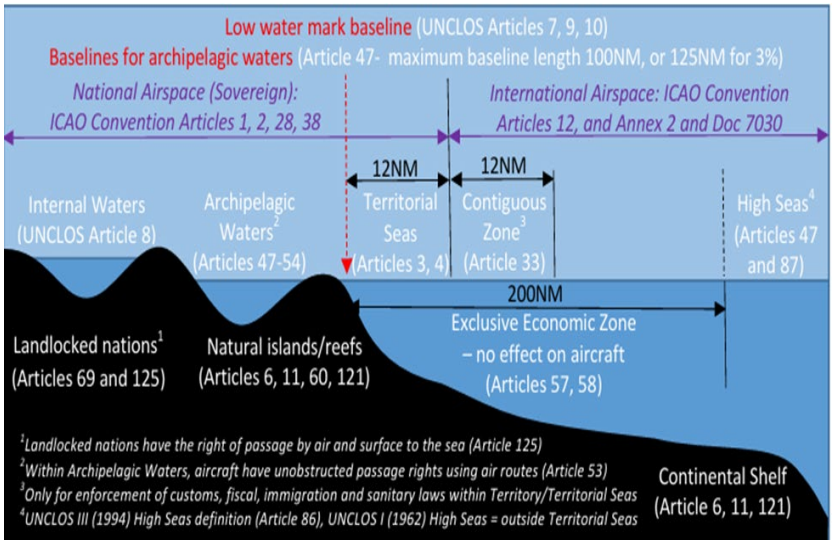

Figure 1: Maritime and Airspace Areas as Defined by UNCLOS (white/red = UNCLOS, purple = CC)
Source: ICAO (n.d)

UNCLOS defines areas of sovereign and international airspace (where States may make laws and where States may not make universal laws, respectively, Figure 1). In territorial waters, the coastal state has full sovereignty in the airspace. Flights in this area are subject to permission from the coastal state and regulations. However, the airspace in international waters is open to all states and is considered "international airspace". Although coastal states have the right to exploit marine resources in their declared Exclusive Economic Zone, they do not have sovereignty over the airspace in this zone.

The airspace above a state's territory, internal and territorial waters (12 nautical miles) is the airspace over which that state exercises sovereignty. The sovereign state has the right to regulate, permit, or restrict flights in this area subject to the complete and exclusive sovereignty of the relevant state. No civilian or military aircraft may enter this area without its authorization. According to the Chicago Convention, aircraft trespassing in sovereign airspace are entitled to diplomatic protest, forced landing, or, if necessary, military intervention.

On the other hand, airspace beyond a state's sovereign borders, especially over the high seas, is international airspace. No state has the right to claim sovereignty in this airspace, which is freely used by civil aircraft of all states. Flights in international airspace are carried out according to the rules and standards of the International Civil Aviation Organization (ICAO).

There are many intersecting elements of maritime and air law. While maritime law regulates maritime transport through strategic passages such as straits and canals, air law regulates air corridors over these areas. The regulation of pollution from ships, air pollutant emissions and gases emitted by aircraft requires regulation under both air and maritime law. Encounters are also possible in terms of search and rescue activities. For example, coastal states must participate in rescue operations under UNCLOS and the Chicago Convention when a plane crashes into the sea.

Concerning the landlocked nations, despite their geographical limitations, they have protected rights concerning airspace space and sea access. These rights are upheld by international agreements and institutions to ensure global equality and fair participation in trade, travel and exploration.

The main point that intersects maritime and air law is that they contain similar global trade, security, and environmental protection regulations. They contain complementary rules on sovereignty, international cooperation, military activities, and rescue operations. That said, today, the activities of the states and companies in the global airspace have increased a lot, and indeed, further development of legislation is necessary for this zone that belongs to all humanity. Moreover, the space activities of the states

and companies have also increased, and thus, a similar necessity for the development of international law also exists for space activities. In this context, the following pages will give the current legislation in international law about space.

4. SOVEREIGNTY AND SPACE

The corpus of legislation regulating space-related activities, including international and state agreements, regulations, and principles, is known as space law. When we look at the primary texts that form the basis of space law and the resolutions of the UN General Assembly, we see that space is defined as an area that should be explored for the common benefit of all humanity without being subject to sovereignty claims. Also, the essential principles of space law are the use of space for peaceful purposes within the framework of the objectives stipulated in the UN Charter, the non-placement of satellites equipped with nuclear weapons in orbits, and the prohibition of the deployment of nuclear weapons and military bases on celestial bodies and space stations. International jurists often claim that space is *res communis* (land that belongs to everyone). *Res communis* is the antithesis of *res nullius* (belonging to no one). It requires that territories over which sovereignty is not allowed to be exercised should be used for the common good of the international community (Başlar, 1998).

Today, space exploration, damage liability, the use of weapons, search and rescue operations, environmental preservation, information exchange, new technology, and ethics are some of the parameters of space law. Space law began in 1919 when international law recognized national sovereignty over the airspace immediately above their borders. This recognition was further strengthened at the Chicago Convention in 1944 (United Nations, 2024).

A subset of international law known as "space law" regulates human activity in space to promote peaceful and cooperative exploration. Several essential treaties and guidelines have been established to encourage responsible behaviour in space. The 1967 Outer Space Treaty (OST), sometimes called the "Magna Carta" of space law, is the foundation of space law. It emphasizes that outer

space is a space designated for peaceful uses and forbids the stationing of nuclear or other weapons of mass destruction in orbit or on celestial bodies. As resources for the benefit of all people, the OST also prohibits national appropriation of space or heavenly bodies.

The Rescue Agreement of 1968, which supplements the OST, requires states to help astronauts in need and to return spacecraft and astronauts to their home country. Accountability is strengthened by the Liability Convention of 1972, which states are accountable for any harm their space objects cause, whether on Earth or in space. Similarly, the 1976 Registration Convention ensures clarity in using space assets by requiring states to register their space objects with the UN.

The start of domestic space programs during the Cold War propelled the official creation of international space policy (i.e., the International Geophysical Year) initiated by the International Council of Scientific Unions (Finch, 1986). The United States Congress established the National Aeronautics and Space Administration (NASA) through the Space Act, passed in response to the Soviet Union's 1957 launch of Sputnik 1, the first artificial satellite in history. This was when space law separated from regular aircraft law since space exploration necessitated crossing international borders.

The International Telecommunication Union and the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty"), have functioned as the fundamental legal framework and set of guidelines forming space law since the end of the Cold War. The UN also debates international space law and policy matters in the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and its Legal, Scientific, and Technical Subcommittees. The committee's secretariat, the United Nations Office for Outer Space Affairs (UNOOSA), also advocates "access to space for all" through various conferences and initiatives to enhance capability.

Recently, the activities of states in space have increased. Several countries have sent spacecraft with astronauts to space and

have done several activities, including scientific research in international space stations. For instance, Elon Musk's SpaceX company sends spacecraft to space with astronauts in them. Additionally, various companies have started to use space for other commercial purposes. Again, Elon Musk's Starlink company sends satellites to space and provides communication services via these satellites. This may end the future use of fiber optic cables for communication. Hence, all communication activities can be done by using the signals in the space and airspace provided by the satellites.

Therefore, orbital space is becoming increasingly populated, with satellites, space stations, and space planes becoming increasingly congested, competitive, politicized, and even weaponized. Human politics are, therefore, no longer limited to terrestrially bound politics (Bergesen, 2018). Today, 4256 satellites are orbiting the planet, but only 1419 are operational, according to the Union of Concerned Scientists. These include 713 dealing with communications, 374 with earth observation and science, 160 with technology, demonstration, and development, 105 with navigation and global positioning, and 67 with space science. Also, some 65 countries have launched these satellites, with the most significant number being the United States (576), China (181), and Russia (140) (Lavender, 2016).

Similarly, the 1976 Registration Convention ensures clarity in using space assets by requiring states to register their space objects with the UN. Significant historical turning points have influenced space exploration and utilization, each significantly affecting space operations and the laws governing them. These turning points, which range from the first artificial satellite to the emergence of private space actors, demonstrate the dynamic interaction of politics, science, and business in space.

The Space Age began in 1957 when the Soviet Union launched Sputnik I, the first artificial satellite. Sputnik I demonstrated the technological prowess of its designers and emphasized the necessity of international laws governing space operations. Its success highlighted the potential for peaceful and military applications of space technologies and sparked fierce competition and innovation, igniting the race to explore the cosmos.

Space emerged as a crucial area of strategic rivalry between the US and the USSR during the Cold War. The line between military and civilian uses became hazier with the development of dual-use technologies like satellites. The necessity of cooperative frameworks to strike a balance between peaceful space exploration and national security concerns was highlighted during this time. The 1967 Outer Space Treaty was one attempt to set fundamental guidelines for space operations, which included outlawing the use of WMDs in orbit.

The historically state-centric field of space exploration underwent a transformation in the late 20th and early 21st centuries with the rise of private space actors. By creating new commercial opportunities in satellite communications, space tourism, and resource exploration, companies like SpaceX, Blue Origin, and others started to challenge government domination. This change brought about unprecedented innovation and accessibility, but there were also serious regulatory issues. In contemporary space law discussions, ownership, liability, and the sustainable use of space resources have taken centre stage. These turning points show how space activities are changing and how they significantly affect global trade, security, and collaboration. The lessons learned from the past will continue to be crucial in creating a fair and inclusive framework for the future as humanity expands into space.

All these activities in space once again raise a very old question. Who owns the space, and who can make such activities in space? Currently, the laws and regulations about space permit any country and company to perform such activities. However, more detailed legislation about space will be necessary in the future as the number of such countries and companies active in space has been steadily increasing (Byers & Boley, 2023).

5. OVERVIEW: ARE AREAS BEYOND THE NATIONAL JURISDICTION OF STATES COMMON PROPERTY OF ALL HUMANITY?

It has often been said that traveling out into space is like earlier voyages across the world's oceans, and from "sea-faring people," we now speak of being a "space-faring species." The

distinction between "a people," which is more national or ethnic, and "a species," which is more transnational, humanity-wide, implies that identity is an essential step toward the emergence of a humanity-wide collective identity (Bergesen, 2018: 172). Thus today, areas beyond the national jurisdiction of states (including the international seas, international airspace, and space) may be considered as the common property of all humanity having the common identity of 'homo sapiens'.

However, there remains an essential question that one should answer. If a country has the technology to consume the resources of the international seas (including the seabed and the sea), international airspace, and space, does it have the right to do so? Hence, do the fish in the sea, and the mines/hydrocarbons of the seabed belong to the nation that can discover them, or do they belong to all of humanity? Or do the air space and space activities and resources belong to a specific country with the technology to reach these areas, or does all the international community have inalienable rights in these areas?

Currently, international law permits countries with the technology and capability to reach these areas and gives unlimited consumption rights to such countries. However, there is a discussion about the rights of the international community, particularly the poorer countries in these areas. For instance, Greenpeace is chasing and protesting the Spanish fishing companies around the Iberian Peninsula as they deplete the world's fishing resources. Similarly, it chases and protests the Japanese whaling ships as they have the potential to end the world's whale population (Weyler, 2004). Another similar discussion is going on in the deep-sea mining area. For instance, Norway recently started deep-sea mining activities, and there is a discussion about whether this country has the right to deplete the world's mining resources.

Indeed, these areas should be declared as humanity's common property, and the activities of the countries should be limited to some extent to protect the world's resources. In this line of thought, the international community has declared Antarctica as such an area. The Antarctic Treaty System achieved a certain degree of success in its aim of keeping the continent as a scientific research

area in the years after the relevant agreements were signed. Similarly, various international treaties have been signed to protect the whale and fish populations of the world. Also, several UN legislations protect airspace and space, particularly in preventing environmental pollution.

However, further development of international law is necessary to protect all these areas, namely international seas, international airspace, and space. With the development of technology, humans' reach to all these areas (international seas, international airspace, and space) has increased, and there is undoubtedly a need to develop relevant legislation to protect all these areas as the common property of all humanity. Competition over resources leads states to extend their jurisdiction over more expansive territories. The race for resource dominance is inseparable from the legal frameworks established by international law and the geopolitical power dynamics between nations. As resource demands increase and environmental concerns grow, the management of these areas will require cooperative approaches that respect both national interests and international law.

Each of the three legal systems—maritime, air, and space law—regulates areas that cut across national boundaries: the oceans, the skies, and space. The fundamental ideas, frameworks, and precedents developed by maritime law have had a significant impact on the development of air and space law. These laws have similar issues and objectives, including maintaining safety, controlling trade, encouraging international cooperation, and striking a balance between sovereignty and the idea of the global commons.

6. GENERAL CONCLUSIONS

The transition from land-focused sovereignty to attempts to establish dominance over the seas and air reflects a dynamic interplay of technological advancements, economic ambitions, and geopolitical strategies. Since states have long tried to establish sovereignty over various parts of the globe, the seas and oceans have also experienced this struggle. Unrestricted use of the seas and oceans by only technologically advanced states or corporations can undermine the rights and interests of others with similar capabilities.

The overexploitation of the world's surface waters raises concerns about global equity, environmental sustainability, and the balance of power in international relations. Although the codification of the law of the sea reflects a global consensus, problems of maritime jurisdiction persist around the world. States manage the pressures on their maritime sovereignty in various ways. Strategies to minimize normative pressure while giving the appearance of complying with international law are often used. Despite everything, the race for maritime sovereignty continues. However, this race needs to be deeper to affect and transform the established order in the seas in the short term. There is a need for sustainable and responsible use of marine resources in the maritime sector. Against this backdrop, the following needs to be done to ensure the equitable and sustainable use of the seas and oceans:

- Effective implementation of UNCLOS and international governance are needed to promote fair benefit-sharing mechanisms for marine resources.
- There is a need to support less developed actors with knowledge and resources for sustainable marine use. Companies should adopt sustainable practices in recognition of their corporate responsibilities and respect the rights of all stakeholders.
- Global cooperation must be increased by promoting inclusive international agreements that protect environmental and social interests to prevent overexploitation.

Similar steps need to be taken about air and space resources. Concerning airspace, the conflicting sovereignty claims of states have already been a problem in international relations. Thus, airspace has been a precursor of the conflicts between states in space. Although airspace is generally used for peaceful means, particularly for air transportation, disputes between states occur occasionally. Therefore, further development of international law is necessary for airspace in the future, and mainly, solution attempts by the International Court of Justice to airspace jurisdiction area disputes of states are of utmost importance.

The development of international law is a more significant necessity in space. With the development of technology, states (and even companies) have started to reach the depths of space. In the future, sovereignty conflicts between states can also occur in space, and the first signals of such disputes have started to be seen in international relations.

In this context, maritime law and the law of the sea will function again as an inspiration for the development of international law for both the airspace and the space areas. Notably, the areas beyond the national jurisdiction of states in these domains require the development of international law. In this scope, the recent BBNJ Agreement can inspire the development of similar legislation for airspace and space. Furthermore, for space and airspace, an international regime identical to the Antarctic Treaty System may be developed, and the activities of the sovereign states in international relations can be limited in these domains. Undoubtedly, the UN may again play the initiator role in developing such regimes in areas beyond the national jurisdiction of states, both in the airspace and space.

Eventually, the ongoing race for sovereignty over resources in the international seas and outer space requires that resources be used relatively and peacefully in the light of environmental sustainability. Inter-state dialogue, avoiding conflict, and acting by the principle of humankind's common heritage can improve prospects for the future in these areas.

AUTHOR CONTRIBUTION

CONTRIBUTION RATE	EXPLANATION	CONTRIBUTORS
Idea	Pointing out the research idea or forming hypotheses	Author 1 and 2
Review of Literature	Conducting the literature review for the study	Author 1 and 2
Research Design	Forming the research design, including research methodology, deciding on scales and samples	Author 1 and 2
Data Collection and Editing	Data collection, editing, and analyzing	Author 1 and 2
Findings and Discussion	Reporting and discussing the findings	Author 1 and 2

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