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THE END OF *RES COMMUNES OMNIUM*

Sommario: 1. Introduction. – 2. The original regime of 'res communes omnium'. – 3. Seashore and adjacent waters in Medieval legal sources. – 4. The consolidation of the concept of territorial waters in the Age of Discovery. – 5. The decline of 'res communes omnium' in the XX century. – 6. Conclusory remarks.

1. *Introduction.* – We are returning to the Moon.

By the end of this decade, we will look at our satellite knowing that humans are there. In the next few years, astronauts, rovers and robots will start populating the rocky surface of the Moon with a clear aim: creating the first stable and long-lasting province of Earth in the Solar System.

Unlike in the past, this time the '*New Moon Race*' is not going to be the effort of one Nation opposed to another. This time, multiple entities, public and private, from different parts of the world, are pointing their fingers at the Moon, investing in lunar projects and spurring a competitive international endeavor.

China, Russia, India, South Korea, Japan, Israel, UAE, USA and a coalition of European States have set up ambitious plans to reach our satellite[1]. But all this excitement and agitation around the Moon

[1] The Moon program that is stealing most of the limelight is NASA's Artemis Program, thanks to which we will see a new boot print on the Moon in the second half of this decade. A number of European States are also participating in the program under the umbrella of specific agreements, called Artemis Accords. At the same time, the European Space Agency is joining forces with NASA for the development of the Orion and Lunar Gateway projects. In the Eastern part of the world, China is successfully

raises the question: why going back? Why returning to a place where we have already been more than 50 years ago and that we left with no apparent interest in visiting again[2]?

The Moon is not just a place where we can study the origins of life, the formation of Earth or the primordial conditions of the Solar System. The Moon is also a giant deposit of minerals[3].

Locked under its surface lay some of the most important resources for our technological needs: rare earth elements (REE)[4]. They consist of a group of 17 metals used in smartphones, laptops, electric vehicles and solar panels. Without them, the digital and ecological revolution of modern societies would not be possible[5].

On Earth, these metals can be found in a limited number of locations and only very few Nations own most of the quarries from which they can be extracted. Moreover, mining and processing them has a significant environmental impact and a high risk of health hazards[6].

On the Moon, however, the current problems related to exploiting REE on Earth will not be a concern, thanks to the fact that our celestial neighbor is a vast and mineral-rich body without atmosphere or life.

With that in mind, the '*New Moon Race*' may appear much more similar to a '*New Gold Rush*'.

Spacefaring Nations will search for the most advantageous areas where they can set their bases, build their infrastructures and exploit

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moving forward its Moon program with the Chang'e missions. Moreover, the Red Dragon has set up a collaboration with Russia for the development of the International Lunar Research Station. Russia, however, has also reinstated its own Moon program, with new Luna landers set for launch in the next years. South Korea's Korean Pathfinder Lunar Orbiter, Japan's Smart Lander for Investigating the Moon, UAE's Emirates Lunar Mission, India's Chandrayaan and Israel's Beresheet are all projects aiming at demonstrating the capacity of the respective Nations to take part in the exploration and colonization of the Moon. If successful, they will set the basis for a stronger involvement of each of them in Moon matters.

[2] In 1972 the American astronaut Eugene Cernan – commander of the Apollo 17 mission – became the last man who walked on the Moon.

[3] For a comprehensive and influential account of lunar mineralogy see: Levinson - Ross Taylor 1971. See also: Papike - Taylor - Simon 1991, 121 ff. For a recent study on lunar samples see: Li *et al.* 2022, 14 ff.

[4] The presence of REE on the Moon has been analyzed extensively by McLeod 2018, 110 ff. See also Balaram 2019, 1285 ff.

[5] See Raimondi 2021.

[6] See Nayar 2021.

lunar resources. Once found, they will try to stabilize their presence there, unhampered and undisturbed. But how will they coordinate their respective interests over the lunar environment? What will happen if two different Nations will identify the same area as the most advantageous one where to settle?

An internationally agreed set of rules on the exploitation of lunar resources is yet to be established[7] and – without it – the next Moon missions may be a prelude to tensions and conflicts there and on Earth. In order to avoid this scenario, the international community is called to find new legal and political solutions. The success or failure of such effort will make the difference between a future of peace or war for humans beyond the atmosphere.

In April 2022, the '*Working Group on Legal Aspects of Space Resources Activities*' – established under the auspices of the UN Committee on the Peaceful Uses of Outer Space (COPUOS) – proposed a five year work plan to formulate a set of principles on space resources activities. The latter is meant for the consideration of and consensus agreement by the UN COPUOS, followed by possible adoption by the UN General Assembly as a dedicated resolution or other action[8].

Through the Working Group, the international community is addressing some of the most impellent issues related to the exploitation of resources on the Moon and other celestial bodies. Namely, the legal risk and uncertainty for private investments in commercial projects; the equitable access to space resources for all States without discrimination; the mechanisms to avoid conflicts between actors; the sustainability of space exploration missions (public and private); the development of an independent international framework to govern space resources activities[9].

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[7] The only treaty on the regulation of lunar activities is the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, or 'Moon Agreement', A/RES/34/68, 1979. However, it only has 18 parties as of June 2022, none of which is a major spacefaring Nation. It is therefore considered a failed treaty at the international level.

[8] Co-Chairs' Proposed Five Year Workplan and Methods of Work for the Working Group on Legal Aspects of Space Resource Activities (2022).

[9] Report of the Committee on the Peaceful Uses of Outer Space, Sixty-fourth session (25 August - 3 September 2021), A/76/20, 25.

In sum, at the center of the Working Group's mandate is one crucial task: the attempt to provide the basis for an international lunar governance regime[10].

This ambitious effort will be conducted building upon the existing legal framework and trying to adapt it to the needs of the '*New Moon Race*'. The starting point will be the Outer Space Treaty (OST) of 1967 and, in particular, the three core principles applicable to the Moon: freedom of access, freedom of use and prohibition to appropriate it[11]. With these fundamental rules the international community attributed to our celestial neighbor the legal status of a *res communis omnium*, analogous to the high seas or the international airspace[12].

However, nothing in the mandate of the Working Group precludes it from recommending to the UN COPUOS a modification of such status, either through a revision of the Outer Space Treaty or through the development of new rules on the possibility to exercise jurisdictional powers over the Moon. It is significant, in this regard, that the amendment of the non-appropriation principle (Art. II, OST) has actually been submitted by Greece as an element of discussion in the five-year work plan[13].

Will the legal status of the Moon change? Will its free and common nature be modified in view of the arrival and settlement of spacefaring Nations on our satellite?

The answer to these questions will come only in five years from now when the Working Group will produce its final report. However, from an historical perspective, it is interesting to notice that the legal issues posed by future lunar missions and the discussions that they have raised today represent the last example of an old and recurring debate over international domains.

It is not the first time in the history of *res communes omnium* that the principle of non-appropriability and the principle of free and

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[10] For the mandate of the Working Group see above at 7: Report, 53 ff.

[11] See: Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, or 'Outer Space Treaty', A/RES/2222(XXI), 1967, Articles I, II and III.

[12] See Capurso 2019.

[13] See Questionnaire related to the discussion of item 15 on potential legal models for the exploration, exploitation, and utilization of space resources (Working Paper submitted by Greece), A/AC.105/C.2/2022/CRP.13, 2022, 2.

common use appear unsuitable to the context in which they have to be applied. As it will be shown, in several occasions jurists were forced to rethink the *communes omnium* regime, either extending sovereignty over common areas or creating an international authority to control the activity of users therein.

Therefore, the following sections of the present paper will shed a light on the most significant instances in history where *res communes omnium* became the object of a legal debate, focusing in particular on the factors and the reasons that imposed a reconsideration of the original regime codified in Roman times. The aim is to provide useful insights on how, through the centuries, the principles of *res communes omnium* evolved and changed, as they need to do again with regard to the Moon.

Starting from a brief analysis of the main features of *res communes omnium* in Latin documents (Section II), the discourse will then move on to investigate three pivotal moments in the legal history of such *res*: the disgregation of the Roman Empire (Section III); the Age of Discovery at the time of the so-called '*battle of the books*' (Section IV); the 20th century in international conventions (Section V). A final section will be dedicated to some conclusory remarks.

2. *The original regime of 'res communes omnium'.* – For more than a century, Roman scholars have studied the category of *res communes omnium*. At times, with a sense of despise for its evanescence. At times, with renovated interest for its social and economic value in Roman societies. Two aspects, more than others, captured the interest of those who dedicated their work to outline the true meaning and function of such *res*: firstly, their moment of birth in Roman legal theories; secondly, the precise extent of the regime applicable to the areas considered common to everyone[14].

Despite the various theories developed on both aspects, scholars

[14] Among the various contributions on the topic, it is possible to mention the monograph of Dursi 2017. At the beginning of 20th century, eminent romanists investigated this category of *res*: Bonfante 1926 and Scialoja 1928. Other relevant works are the ones of Dell'Oro 1963, 237 ff., Grosso 2001, 1 ff., Sini 2008, 2 ff., Dani 2014, 1 ff., Fiorentini 2019, 153 ff. and Falcon 2016, 114 ff.

have agreed on a few general concepts, which can be summarized as follows.

The perception that certain domains were open for access and use to everyone is quite old. It existed in the minds of Romans many centuries before it became a proper legal principle. We have proof of that in the literary sources of the Republic era: the comic dramatist Plautus (250-184 BC) in his *Rudens* talks about the 'common sea' and the appropriability of its resources (namely, the fish)[15]; the statesman Cicero (106-43 BC) refers to the sea and the seashore as common domains[16]; and so does, later on, the poet Ovidius (43 BC-18 AD) with regard to the air[17]. Therefore, there was a general understanding – rooted in philosophical and logical reasons – that the use of environments like the sea, the seashore and the air was common to all and the resources contained therein were appropriable[18].

Only a few centuries later, between the II and III century BC, these principles assumed the form of a proper legal theory. The long process of trying to include 'common domains' in a specific category of *res* was brought to maturity by the works of the jurists Ulpian and Marcianus[19].

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[15] The *Rudens* (211 BC) tells the story of a great storm at sea caused by the star Arcturus. In the storm, a ship is wrecked, its passengers swept away by the water and all the objects carried on board are lost in the sea. Among those objects, there is also an old and precious chest. The day after the storm, a young man sees it from the shore, floating not far away in the water, still intact. In that moment, however, a fisherman sails by and catches the chest with his net. But the young man waits and, as soon as the fisherman returns, he approaches him and grabs an end of the net, claiming the property of the chest: «You took it from the sea – the young man says to the fisherman – and the sea is common to all. Hence, we should at least share the content». The fisherman refuses to be deprived of what he took with his net, because «indeed the sea is common to all, but the product of fishing is the property of fishermen. If the opposite was true – he argues – and any person could claim a share of their work, poor fishermen! No one would buy their fish at the public market. In fact, everyone could pretend a quota simply because the fish was taken from the 'common' sea. And that cannot be». Through the arguments of his fisherman, the author Plautus provides us a clear and practical description of the rationale behind the principles of free access, free use and prohibition to appropriate res communes omnium: the essential economic/commercial value of the activities conducted in such *res*.

[16] Cic. *Rosc*. 26.

[17] Ov. *met*. 6.349.

[18] See Dell'Oro 1963, 242. See also Ortu 2017, 160 ff.

[19] Many Roman jurists before them investigated the regime applicable over domains considered *communes omnium* by Ulpian and Marcian: namely, Celsus, Papinian, Scevola, Giovenzio and Paulus.

Ulp. 57 *ad ed.* D. 47.10.13.7: *Et quidem mare commune omnium est et litora, sicuti aer*.

Marcian. 3 *inst*. D. 1.8.2.1: *Et quidem naturali iure omnium communia sunt illa: aer, aqua profluens, et mare, et per hoc litora maris*.

The air, the flowing waters, the sea and the seashore became known in the III century as *res communes omnium* and were characterized by three specific features: free access, free use and the prohibition to permanently appropriate entire parts of them[20]. In practical terms, this meant that Romans had to be free to access and exploit the resources contained in them and they could not be excluded from such right by others[21]. The *rationale* was that activities like fishing, sailing or hunting had a fundamental economic and commercial value for the society of the time. Hence, the environments where they were conducted had to be freely accessible and freely usable[22].

Moreover, it was established that the actual *res* – intended in its entirety – was not subject to appropriation: no Roman citizen could own the entire sea or the whole airspace for obvious physical, other than legal, reasons. However, Roman jurists recognized the possibility to occupy *pro parte* and temporarily *res communes omnium*[23]. This was possible not only with simple constructions like beach huts for fishermen or wooden stands for their nets, but also with much more durable buildings and infrastructures, like waterfront villas, sea pillars, fish farms and piers[24].

The general principle was that a building – or any infrastructure, from the simplest to the grandest – could be erected in the 'common

[20] For a comprehensive analysis of the features of each common domain under Roman law see: Dursi 2017.

[21] Marcian. 3 *inst*. D. 1.8.4 pr.

[22] The same activities were conducted also on land and in inland waters, but the latter (like lakes, forests or rivers) were confined within borders, unlike the open sea or the air. As for the seashore, the regime of *res communes omnium* applied to it only '*per hoc*', as Marcianus specifies in D. 1.8.2.

[23] See Marcian. 3 *inst*. D. 1.8.6 pr. See also Pomp. 6 *ex Plaut*. D. 1.8.10, Ner. 5 *membr.* D. 41.1.14, Pomp. 34 *ad Sab.* D. 41.1.30.4.

[24] On the regime of buildings over *res communes omnium* see for all: Lambertini 2020, Fiorentini 2010.

domains' under the condition that it did not interfere with the activities of other users[25]. Once the building was finalized, the owner became *dominus* of the area occupied, but only as long as the building stood[26]. If the building collapsed, the occupied area returned to its original state as *communes omnium*.

Clearly, this system was ideal for simple and small constructions, but it was quite problematic in practice with regard to those constructions, which – as the archeological studies show – were erected to endure solidly through the passing of time[27]. The 'non-interference' and the 'until-it-collapses' rules were unable to cope with the fact that certain uses – especially large-scale commercial ones – required stable and long-lasting infrastructures, which rendered *de facto* other activities (*e.g.* fishing and sailing) in the same spot almost impossible.

Thus, not surprisingly, the legal sources of the time talk about frequent controversies between Romans on the activities conducted in 'common domains'[28]. The problem was that there were different and opposing economic interests at stake: the ones of fishermen, the ones of merchant-sailors, the ones of fish farmers, the ones of villas owners. And the principles which regulated them were not enough to provide adequate answers or to balance all positions involved[29].

The solution found was to allow Romans to access specific legal remedies in front of a judicial authority in order to settle their disputes over *res communes omnium*.

In particular, Roman jurists recognized the possibility to use the *actio iniuriarum* against those who unjustly impaired the use of certain common areas for the purpose of fishing or sailing[30]. A classic example was the situation in which the *dominus* of a villa – in force of its ownership over the occupied area – prohibited access to parts of the sea and the exploitation of the resources therein. With the *actio iniuriarum* fishermen and sailors could obtain a judicial order to

[25] Scaev. 5 *resp*. D. 43.8.4.

[26] Ner. 5 *membr*. D. 41.1.14.

[27] See Pringle 2016.

[28] See Ulp. 6 *opin*. D. 8.4.13 pr. But also Ulp. 68 *ad ed.* D.43.8.2.9, and Ulp. 57 *ad ed*. D.47.10.13.7.

[29] Erdkamp - Verboven - Zuiderhoek 2015, 187 ff. offers a thorough analysis of the different interests involved in the use of *res communes omnium*.

[30] Ulp. 57 *ad ed.* D. 47.10.13.7.

stop the illegitimate restriction of their rights over the common domain[31].

Another important legal remedy was the *interdictum* '*ne quid in loco publico facias*', which was granted to those who feared that certain activities could interfere with the enjoyment of their rights[32]. In other words, it was a judicial remedy that could be activated only in front of potentially damaging situations. For instance, if an angler deemed the construction of a sea-front villa detrimental to his fishing activities, he could request the *interdictum*, but only if the construction was not yet finalized and if there was an actual risk of being damaged by such construction. As a corollary to this condition, not only such legal remedy was inadmissible once the building or infrastructure was completed, but it could be used in reverse by the *dominus* of the villa to stop any interference with its peaceful enjoyment of the building[33].

From this brief outline of the main features of *res communes omnium*, it can be concluded that Roman jurists developed a legal theory which was much more elaborated than the simple recognition of a common use over certain environments. It allowed the erection of buildings and infrastructures of various forms and functions. It envisaged the temporarily occupation of entire portions of the sea and of the seashore. But, most importantly, it created a system which ensured that Romans could protect their rights, accessing legal remedies in front of a judicial authority.

This last aspect was pivotal in the feasible application of the principles of free access, free use and non-appropriation. The whole system revolved around the power of a judicial authority to settle disputes and to enforce its judgments. It should not be forgotten, in fact, that the interactions and relationships between Romans in common domains fell under the umbrella of private law. Any controversy over the activities conducted in *res communes omnium* was under the jurisdiction of the Roman public power.

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[31] For a comprehensive study of the judicial remedies available in case of controversies over the use of *res communes omnium* see: Schiavon 2019.

[32] Ulp. 68 *ad ed.* D. 43.8.2 pr.

[33] See Lambertini 2020, 75 ff., Schiavon 2019, 126 ff. and Fiorentini 2010, 267 ff.

This conception was reflected in the way jurists saw common domains at the public level: they were deemed to be under the 'protection' of the Roman Empire. A condition best described by the words of the jurist Celsus with regard to the seashore:

> Cels. 39 *dig*. D. 43.8.3 pr: *Litora, in quae populus Romanus imperium habet, populi Romani esse arbitror*.

In sum, the legal system of *res communes omnium* worked because behind it (and above it) there was a public power. And that is also why – when that power entered into crisis – the system started failing.

3. *Seashore and adjacent waters in Medieval legal sources.* – The year 476 AD conventionally signs the end of the Western Roman Empire. The centuries which followed were marked by profound changes in the Mediterranean basin: barbarians, Arabs and auto-proclaimed independent entities redefined the map of powers in the area, dividing it among different populations[34].

In this period of transformation, Roman law continued to represent the pillar of legal discussions among jurists. However, many theories and principles required to be adapted to the new context. Among them, the category of *res communes omnium* was the object of a substantial alteration, determined by two factors: one technological; the other political.

The first was connected to one of the most profitable activities conducted in the sea: fishing tunas[35].

In Roman times, their capture involved a complex technique, which can be summarized as follows. A system of nets was stationed in the open sea where migratory fluxes of tunas were known to pass by. Once a school of fish was spotted from wooden towers placed on the seashore, the nets worked as a barrier that re-directed the course of the school toward a bay or a cove. At that point, fishermen on the seashore used seine nets to pull tunas toward the beach, aided by

[34] See Fondazione Cisam 2011.

[35] The practice of fishing tunas has been extensively analyzed from a legal perspective by Purpura 2007, and Purpura 2008.

small boats who pushed the fish from the open water. Once stranded on the beach, tunas either died of asphyxiation or were killed with sticks and harpoons. Next, they were placed in specific tanks made of stone where they were cleaned, salted and treated, in view of their consumption and commercialization[36].

This technique – commonly used for centuries in the Mediterranean[37] – became however obsolete between the IX and the X century with the invention in the Eastern Empire of the so called 'death chamber'[38].

The latter consisted of a sophisticated maze of underwater nets, which conducted tunas into an artificial 'pool' installed in the open sea. As the tunas swam in, the entrance to the pool was sealed behind them creating a cage from which they were unable to swim out again. One by one fish were pulled out of the water and collected onboard of boats moored around the pool.

Unlike the old system, the death chamber did not need the seashore for the capturing phase, but relied on fixed installations in the sea, which ensured, with less effort and less manpower, much greater results in terms of fish caught. Therefore, as it can be imagined, the death chamber rapidly became the ordinary method of fishing tunas.

What is particularly interesting for the purpose of the present paper is that the change in technology brought not only larger profits for fishermen, but also frequent legal disputes. The main controversial points were the occupation of parts of the sea to the detriment of others (*e.g.* sailors) and the coordination between different fishermen who wanted to install death chambers in the same portion of the sea.

The disputes became so relevant and so controversial that the Emperor Leo VI the Wise had to intervene. Between 886 and 912 AD, he issued a set of rules (*Novellae)* which revolutionized the legal principles of *res communes omnium*.

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[36] For a comprehensive study on fishing activities in ancient times see: Marzano 2013.

[37] Evidence of the diffusion of this method of fishing tunas comes also by the fact that the compilers of the Digest decided to include a passage on the legal problems connected to it in Ulp. 6 *opin.* D. 8.4.13 pr. For a commentary of the latter, see Lambertini 2020.

[38] See Purpura 2008.

The most significant norm was contained in his Nov. 56:

> «Just like on land nobody can take the fruits of one's property without the permission of the owner – and if that happens it is only because the owner allows it or because the owner is being paid – we decide that the same shall happen on the sea»[39].

And further below referring to the seashore:

> «There is a law [D. 47.10.13.7; Bas. 60.21.13] which appears unjust. It is the one that deprives a dominus of his property rights on the seabed, or on the seashore, and it recognizes the possibility to recur to the *actio iniuriarum* against such dominus when he hinders the use of the shore for fishing purposes».

The *Novella* concluded establishing that every coastal owner shall be considered the undisputed *dominus* over his property and shall have the right to ban all others who wished to access it without his authorization.

It is clear that with this *Novella* the ancient regime of *res communes omnium* was radically altered. The owners of coastal properties were equated to land owners, with the right to exclude others from the seashore and the adjacent sea. The natural corollary of this right was that they could legitimately install death chambers and other structures in the sea without the risk of legal actions against them. In other words, the regime evolved from 'access and use common to all' to 'exclusive rights in favour of coastal owners'.

However, the legislative intervention of Leo VI the Wise was not limited to recognizing property rights over what was once considered a *res communis omnium*. It also dealt with the consequential issues brought by the presence of multiple subjects who could advance exclusive claims over entire areas of the sea in front of their properties.

In four other *Novellae* (57, 102, 103 and 104), he established the necessary rules to coordinate the exploitation of tunas by neighbouring coastal owners. He set a conventional distance of 700 meters between death chambers and – in case it was not possible to respect that

[39] The text of Nov. 56 has been translated by the author, based on the passages reported by Purpura 2008, 544.

distance – he envisaged a system of mandatory 'communal use' by those owners who had to share adjacent waters[40].

It can be said that behind this legislative choice, there was a clear intention to legitimize and stabilize the growing economic interests around the exploitation of marine resources. As Scearce summarizes it: «The development of a thriving trade in preserved marine products pushed shipbuilders to build higher capacity boats, navigators to explore well beyond the limits of their shores, and fishermen to develop more sophisticated gear»[41]. All this determined a change of paradigm in the governance of *res communes omnium*. Those who invested in commercial fisheries could not accept anymore a shared and common use of the sea and the seashore. They did not want to have the risk of conflicts over the occupation of portions of the sea. Hence, they demanded the recognition of private and exclusive rights over the areas used for their activities.

For these reasons, the regime of *res communes omnium* – for the first time in history – was 'shrunk'. The principles envisaged by Ulpian and Marcian ceased to be applied to the seashore and to the part of the sea in front of coastal properties.

From a first point of view, the effect of the *Novellae* was internal: it changed the management of domains within the jurisdiction of the Emperor and it affected the position of 'citizens of the Empire' with regard to their use of *res communes omnium*.

However, it also had an implicit external effect: it facilitated the creation of entities with exclusive powers over entire coastal areas of the Empire's territory. It was, in other words, a contributing factor in the formation of self-governing actors who eventually started to play an autonomous role in the political scene of the time.

In fact, as it was mentioned at the beginning of the present section, the technological innovations in fishing activities were not the only factor that reshaped the scope of application of *res communes omnium*: a significant and concurrent role was played by the evolving political context of the time.

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[40] See Purpura 2008, 534.

[41] Scearce 2009, 5. See also Hoffmann 2005, 22, where – with regard to the higher demand of fish in the Middle Ages – he finds a justification also in the diffusion of Christian culture in Europe, which required long periods of abstinence from meat during the year.

Undoubtedly, – as Vismara observes – the recognition by the Emperor of property rights over entire portions of the seashore and of the sea entailed an implicit idea of 'sovereignty' over such domains in his hands[42].

However, the fact that the Emperor granted such extensive rights to coastal owners was symptomatic also of the development of new centres of power (not only in the Byzantine Empire, but in the rest of Europe as well). They revolved around strong and influential subjects such as religious institutions, great lords, landowners and marine cities, who were growing in autonomy from the central power and in control over their territory[43].

In the centuries which followed, their status as independent actors became stronger and their authority in the Mediterranean basin more solid. A condition best described by the words of Fenn: «The long continued and uninterrupted practice of enclosing portions of the coastal waters culminated in the claim to jurisdiction over those waters, a claim which was inevitably followed by the assertion of sovereignty. The possession by the great lords of vast domains, many of which must have had an extended frontage on the sea; the possession of private fisheries in the sea; the grant of privileges and immunities by virtue of a royal or imperial grant; the right to levy customs and taxes on foreigners in ports. All of these rights and powers would naturally produce in the mind of the ruler possessing them a sense of proprietorship of the things over which he exercised them»[44].

The reality described here was very different from the one of the II and III century, when the category of *res communes omnium* came to light. With the Roman Empire firmly ruling the Mediterranean, the idea of 'jurisdiction' or 'sovereignty' over the seas was not a matter of concern. But when the control of Rome declined, the coasts were fragmented into a mosaic of areas governed by different actors, who needed to protect their interests at sea and to defend the zones of waters under their direct control.

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[42] Vismara 1978, 689 ff.

[43] In general, on the various public powers present in Europe in the Middle Ages and on their relations see: Padoa-Schioppa 2011, 1 ff. See also Fedele 2021, 168 ff. On the role of religious entities in the Middle Ages, especially with regard to fisheries, see: Monteleone 2013, 57 ff.

[44] Fenn 1926, 466.

The best example of this can be found in the treaty signed between Venice and the Emperor Frederick I in 1177[45]. In that occasion, the latter recognized a limit in the free access to the Adriatic Sea [46]. A limit called '*Veneticorum fines*'[47], where only Venetian ships could freely sail. With that, Venice was officially acknowledged as having 'sovereign powers' on the sea in front of the *laguna*[48].

From a legal perspective, the prerogatives of Venice (and in similar ways the ones of the other maritime republics, such as Genoa, Pisa and Amalfi) were the expression of a principle which became widely accepted between the XI and the XIV century: the extension of city jurisdiction over the waters adjacent to coasts[49].

It is self-evident that this was in clear contradiction with the *res communes omnium* principle according to which the sea and the seashore were common to all by natural law. A principle which was still widely accepted in the Middle Ages[50]. In order to find a coherent solution, medieval jurists sought to interpret classic Roman law in the light of contemporary practice, using arguments based on custom, prescription and analogy with territorial jurisdiction.

For instance, in his treatise *Tiberiadis*, the jurist Bartolus de Saxoferrato argued that the maritime city of Pisa rightly extended its jurisdiction to an island in the open sea where pirates were hiding. He based such extension of jurisdiction on the fact that analogous powers were exercised by cities on land: «Just as the governor of the province has to purge the province of wicked men on land, so must he do at sea. From this it appears that he also possesses jurisdiction over the sea, and, much more so, over the islands that lie in the sea»[51].

Another example is provided by the jurist Angelus de Ubaldis, who in order to support the position of the Republic of Genoa with

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[45] The original text of the Treaty can be found in the work of Kandler 1850, 301.

[46] A similar concession was made in favor of Pisa by the Emperor Frederick I in 1162 with his *Diplomata*, n. 356. With that, he gave as '*feodum*' to Pisa the '*litum maris*' from Civitavecchia to Portovenere together with the part of the sea in front of the relative coast. For more on this, see Cortese 2017, 59.

[47] Cortese 2017 see in particular footnote 297.

[48] See de Vivo 2003, 159 ff.

[49] Fedele 2021, 249.

[50] Fedele 2021, 249.

[51] See *Bartolus de Saxoferrato's Tiberiadis* as reported and translated by Fedele 2021, 250.

respect to the Ligurian Sea, affirmed that Genoa had acquired 'ownership' (*dominium*) of its gulf by time immemorial (*prescriptione longi temporis*)[52].

Thus, using various legal instruments, medieval jurists started to provide the legal basis for the new reality which was unfolding in front of their eyes.

New maritime powers were appearing all over Europe. They sailed and fished the seas not anymore as Roman citizens, but as 'autonomous' entities. They could not rely on the administrative powers of a central authority to regulate their controversies over the use of a common sea (as Romans did with the recourse to legal actions in front of the *praetor*), but they had to defend by themselves their right to use and access the waters in front of their territories[53]. Their fortune and strength depended on the sea. Hence, they had to protect their activities therein, imposing their exclusive use of littoral waters, unhampered by foreign ships or pirate vessels. All this forced them to exercise powers which were *de facto* contrary to the principles considered applicable by natural law. With time, the factual situation that they created became permanent. The old Roman principles were definitely bended to reflect the new conditions on the use of the seashore and of coastal waters.

Reduced and narrowed, the scope of application of the *res communes omnium* regime was irreversibly affected by technological and political developments. Building upon them, later jurists combined the customs and legal arguments of this period into a theory which paved the way for the modern principle of the territoriality of the waters adjacent to a State[54].

4. *The consolidation of the concept of territorial waters in the Age of Discovery.* – By the end of the Middle Ages, the idea that the seashore and the adjacent sea belonged to coastal powers was not a matter of discussion anymore. The principle was well consolidated and commonly recognized.

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[52] See *Angelus de Ubaldis' Ad Dig. 41.3-45, f- 34v, n. 1* as reported and translated by Fedele 2021, 253.

[53] A similar conclusion is reached by Vismara 1978, 691.

[54] Fenn 1926, 470.

However, *res communes omnium* did not stop to be debated among European jurists. They returned at the center of international legal disputes during the 'Age of Discovery'[55]. Two aspects were particularly controversial: 1) the possibility to claim sovereignty over the oceans; 2) the extent of territorial waters.

As for the first, the legal debate stemmed from a combination of factors.

Europe was in that period divided between different kingdoms. The ones with maritime borders had secured their exclusive rights over the belt of waters surrounding their territory, at least from a legal perspective. However, they were expanding their ambitions over the open oceans, which were still considered a common domain.

They discovered new maritime routes, circumnavigating Africa, reaching south Asia and sailing through the Atlantic Ocean towards the Americas. Through them, Europe was connected to the rest of the globe.

Having access to oceanic routes meant having access to the abundant resources contained in foreign continents, which was translated in economic wealth, military power and a stronger political position in Europe[56].

Thus, one of the main interest of European kingdoms became the right to sail those routes on an exclusive basis, obtaining a monopoly over the trade of the resources taken from the other parts of the world. However, all this was contrary to the legal status of the oceans: *res communues omnium*.

To overcome that obstacle, the two major colonial powers of the world – Spain and Portugal – tried to use different instruments. In 1493, they obtained from Pope Alexander VI, who – as the Vicar of Christ – was deemed to have *plenitudo potestatis* over the world, the papal bull *Inter caetera*[57]. The latter stated a general prohibition on sailing without the king's permission to any of the overseas territories bestowed to the Spanish and Portuguese crowns[58]. This papal

[55] The expression 'Age of Discovery' refers to a period which spans from the XV to the XVII century.

[56] On the historical and geopolitical developments of the Age of Discovery see: Arnold 2002.

[57] For the original text of the bull see Davenport 1917, 56 ff.

[58] Benton - Straumann 2010, 19.

concession was followed in 1494 by the signing of the *Treaty of Tordesillas* between the two Iberian reigns[59]. With it, they defined the zones of the world under their respective control, dividing the Atlantic Ocean vertically in two. They also envisaged the possibility for Spanish ships to sail through the Portuguese zone, but with restrictions on their course[60]. Finally, in 1529, with the *Treaty of Saragossa*, Spain and Portugal established exclusive zones of navigation and trade in the East[61].

In sum, through these documents the two kingdoms tried to eliminate the conception of the high seas as *res communes omnium*, justifying their authority over the oceans on the basis of discovery, papal donation and acquisition by prescription for long use[62].

All this represented the most concrete attack to the Roman conception of the common sea.

The reason behind it was clearly economical. As Walter Raleigh, a famous English explorer of the time, put it: «Whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself»[63].

However, the positions advanced by Spain and Portugal met the opposition of other maritime powers. The most notable objection was made by Queen Elizabeth I in an official letter to the Spanish ambassador Mendoza in 1580[64]. She rejected the legality of the Spanish claims over the Atlantic Ocean adducing different reasons: the disavowal of the Pope's authority, the inapplicability of a bilateral agreement to third parties and the impossibility to acquire by prescription what is by natural law non-appropriable. Therefore, she concluded asserting the freedom of both sea and air: «The use of the sea and air is common to all; neither can any title to the ocean belong

[59] For the original text of the Treaty see Davenport 1917, 84 ff.

[60] See Benton - Straumann 2010, 19.

[61] Benton - Straumann 2010. For the original text of the Treaty see Davenport 1917, 146 ff.

[62] See the text of the above-mentioned treaties. See also the opinion of Fiorentini 2001, 323.

[63] Raleigh 1965, 325.

[64] The original text in Latin can be found in the work of Camden 1616, 325.

to any people or private man, forasmuch as neither nature nor regard of public use permits any possession thereof»[65].

In addition to the Queen's arguments, the idea of the freedom of the seas received the support of eminent legal scholars. In particular, the Dutch jurist Hugo Grotius wrote some of the most memorable and quoted pages in defense of that idea. In his *Mare Liberum*, published in 1609, the author offered his legal opinion on why his country had the right to access South East Asia through the Indian Ocean and trade with its peoples disregarding the claims of monopoly expressed by Portugal[66]. He used various arguments based on legal, philosophical and historical sources. His dissertation supported the idea that the common sea could not legally be the object of any claims of sovereignty. As he summarized it: «There appears to be nothing truer than what our learned jurists have enunciated, namely, that since the sea is just as insusceptible of physical appropriation as the air, it cannot be attached to the possessions of any Nation»[67].

However, at the center of *Mare Liberum* was not just the legal defense of the non-appropriability of the oceans. The work of Grotius revolved around the idea of free trade and free access to oceanic routes[68]. It is to that end that the author built all his arguments, including the ones against the occupation of the Indian Ocean. The centrality of such idea emerges constantly in the author's trail of thought: «Every Nation is free to travel to every other Nation and to

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[65] Camden 1616, 325. On the role of Elizabeth I in the development of the Law of the Sea see Colombos 1967, 74.

[66] Countless pages have been written on Grotius' *Mare Liberum*. For a comprehensive analysis of the text highlighting the importance of trade in his dissertation see: Borschberg 2005. The text analyzed and used for citations is the one edited by R. Van Deman Magoffin in 1916 (as published in 2000), hereinafter cited as Grotius 1609.

[67] Grotius 1609, 31. In order to confute the appropriability of the oceans he also turned his attention to medieval legal theories, observing that: «the opinion held by Johannes Faber, Angeli, Baldus, and Franciscus Balbus» on the possibility to acquire common domains by custom «would be contrary to natural equity … And far from justifying itself by any lapse of time, it rather becomes worse, and every day more injurious» (p. 42). Moreover, he defined the opinions in support of Genoese and Venetians claims on their acquisition by prescription of sovereign rights over the sea to be «extravagantly foolish» and «delusions» (p. 41).

[68] This appears evident by simply looking at the full title of the book: *Dissertation on the Right which belongs to the Hollanders to Engage in the Indies Trade*.

trade with it … All that which has been so constituted by nature that although serving some one person it still suffices for the common use of all other persons, is today and ought in perpetuity to remain in the same condition as when it was first created by nature»[69]. And again: «If a man were to enjoin other people from fishing, he would not escape the reproach of monstrous greed. But the man who even prevents navigation, a thing which means no loss to himself, what are we to say of him? … Why then, when it can be done without any prejudice to his own interests, will not one person share with another things which are useful to the recipient, and no loss to the giver?»[70]. Finally, citing the work of the Spanish jurist Fernando Vazquez: «The same primitive right of Nations regarding fishing and navigation which existed in the earliest times, still today exists undiminished and always will, because that right was never separated from the community right of all mankind»[71].

With these words, Grotius defended the Roman principles of *res communes omnium*.

He did not contest the possibility to occupy foreign lands and exploit their resources, but the idea that the possibility to do so – sailing through the oceans – was the exclusive right of a manifold of colonial powers. Free trade and free use of the high seas were too important for the European societies of the time. Thus, he demonstrated that the access to the richness of other continents through maritime routes had to be equal, common and unrestricted.

Eventually, the theory of *Mare Liberum* prevailed[72]: the positions of those kingdoms who advocated the closure and appropriation of the oceans were abandoned.

However, another question remained open: how far could maritime powers extend their own territorial jurisdiction over the waters adjacent to the coast?

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[69] Grotius 1609, 23.

[70] Grotius 1609, 30 ff.

[71] Grotius 1609, 42.

[72] Before becoming widely accepted, the theories of Grotius saw the contention of other influential jurists of his time. Most notably, the English John Selden wrote a treatise called *Mare Clausum*, in strong opposition with the Dutch. For more on the work of Selden and his theories, see: Ziskind 1973, 537 ff.

The answer to this question was the object of a long debate which kept jurists discussing for centuries.

Already in medieval times, various theories were put forward to assert the extension of a city's jurisdiction over its littoral waters. Bartolo de Saxoferrato, for instance, proposed the limit of two days of navigation: because on land two days of travel corresponded to approximately 100 miles, he fixed at that distance the limit of jurisdiction over the adjacent sea[73].

Such fixed limit became more vague in the following centuries.

Grotius in his *Mare Liberum* acknowledged a criterion connected to the reach of the human eye, stating with regard to the freedom of the seas: «The question at issue does not concern the expanse of sea which is visible from the shore»[74].

Later, in his *De Iure Belli ac Pacis* he suggested a limit connected to the 'effective control' of the coastal power: «Jurisdiction or Sovereignty over a Part of the Sea is acquired … when those that sail on the Coasts of a Country may be compelled from the Land, for then it is just the same as if they were actually upon the Land»[75].

In 1702, Cornelis van Bynkershoek in his *De Dominio Maris Dessertatio* translated Grotius' theory in practical terms, proposing a very empiric solution: the range of a cannon shot[76].

All these theories had behind them a defensive *rationale*. They were the result of the necessity to protect the coast from external threats *vis-à-vis* a multitude of maritime actors sailing the seas often in conflict with one another.

Yet, they reflected also another necessity: the protection of the economic activities conducted in the zone of waters next to the seashore.

This is apparent from the quarrel between British and Dutch fishermen over the exploitation of the North Sea at the beginning of

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[73] See *Bartolus de Saxoferrato's Tiberiadis* as reported and translated by Fedele 2021, 250.

[74] Grotius 1609, 30.

[75] Grotius 1625, 470 (the text analyzed and used for this citation is the one edited by R. Tuck in 2005). The idea of connecting the limit of jurisdiction to the (military) control of the sovereign power reflected the Roman maxim '*Terrae potestas finitur ubi finitur armorum vis*'.

[76] Van Bynkershoek 1702, 104 (the text analyzed and used for this citation is the one edited by Van Deman Magoffin in 1923).

XVII century. In 1609, King James I proclaimed the sovereign power of England over the North Sea and prohibited foreigners «to fish upon any of our coasts and seas … until they have orderly demanded and obtained licenses from us»[77]. The underlying consideration of the Netherlands was therefore to find an argument that would allow their seamen to keep on sailing to such fishing grounds as unrestricted as possible. Against this background, the Dutch delegation in London thus claimed: «For that it is by the law of nations, no Prince can challenge further into the sea than he can command with a cannon except gulfs within their land from one point to another»[78].

This short account of the long contentious claims between England and the Netherlands over the use of the North Sea provides a perfect example of the importance of protecting exclusive fishing rights for the development of the idea of territorial waters.

In sum, during the Age of Discovery, the complete abandonment of the principles of *res communes omnium* was advocated and supported strongly (*e.g.* by Spain and Portugal). However, in the end, the theory of free access, free use and non-appropriation of the high seas resisted and was actually exalted as an uncontestable truth. In the words of Fulton: «As maritime commerce extended and the security of the sea became established, it was felt more and more that claims to a hampering sovereignty and jurisdiction were incompatible with the general welfare of nations; and as the states interested in this commerce had the greatest power, the assertion of a wide dominion was gradually abandoned, surviving only in remote regions or in enclosed seas like the Baltic»[79].

At the same time, defensive and economic reasons pushed maritime powers to extend their jurisdiction as far as they could exercise their control from the coast. The idea of excluding a portion of the sea from the part considered *communes omnium* continued to evolve, finding new legal grounds and assuming in this period a more concrete conceptualization. However, it was only in the XX century that it arrived at its final codification.

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[77] See Fulton 2002, 165 ff.
[78] Fulton 2002, 165 ff.
[79] Fulton 2002, 557 ff.

5. *The decline of 'res communes omnium' in the XX century.* – For more than three centuries, States and scholars debated the limit of territorial waters. The criteria proposed in the XVII century were eventually translated in a precise length. It was the Italian jurist Ferdinando Galiani who proposed in 1782 the limit of three nautical miles[80].

By the XX century, the major maritime powers of the time – led *in primis* by Great Britain – recognized such limit as a rule of international law. However, – as Admiral Schachte explains it – by the outbreak of World War I many believed that the breadth of the territorial sea should have expanded in direct correlation to the increasing range of artillery fire. Contentions over the three nautical mile rule continued and at the Hague Convention of 1930 the rule was subjected to increasing criticism, and its significance became diminished by the rapid development of the concept of the contiguous zone: sixteen of the thirty-five states that voted, claimed a contiguous zone adjacent and seaward of the territorial sea to satisfy the interests of security, neutrality, sanitation, customs, overfishing[81].

The concept of territorial waters flourished in the next years with the most common claim being twelve nautical miles. Behind this larger concept of adjacent sea, there were different motives. The USSR wanted to keep foreign powers distant from its shores. At the same time, the extension to a maximum of twelve miles was favored by smaller coastal States and those which depended a great deal upon fishing. On the other hand, the United States of America was still supporting the old three-mile limit. The reason can be found in America's 'National Security Strategy' (NSS), which had for long emphasized deterrence, forward defense, and allied solidarity. From the perspective of the United States, therefore, it was of critical importance that the sea lines of communication remained open[82].

Only in the 1980s, during the cold war, the United States changed its stance over the maximum breadth of territorial waters. On December 27, 1988, President Reagan proclaimed that the American territorial sea extended to twelve nautical miles. Of key importance

[80] Galiani 1782.
[81] See Schachte 1990, 150 ff.
[82] Schachte 1990, 155 ff.

to the United States was that the new limit would force all vessels not engaged in innocent passage, particularly those collecting intelligence, to maintain a distance nine nautical miles further seaward. While the limit of the US territorial sea remained at three nautical miles, foreign intelligence vessels could (and did) park 3.1 nautical miles off many of American major naval ports[83].

Eventually, the twelve nautical mile rule was codified in article 3 of the United Nations Convention on the Law of the Sea of 1982 (hereinafter UNCLOS)[84] becoming a generally accepted rule of international law.

As it can be seen from this historical account of the territorial sea's codification process, the factors that determined the extension of territorial jurisdiction over adjacent waters were a combination of economic interests and security needs.

However, coastal States deemed it necessary to exercise different powers also over the waters beyond the adjacent sea. This necessity found fertile ground during the negotiations of UNCLOS, which resulted in the recognition of extensive powers over large portions of the open sea. The Convention created various areas where coastal states could control the activities conducted therein: the contiguous zone, the continental platform, the exclusive economic zone and the high seas. In the end, only in the latter area the United Nations recognized the applicability of the principles of *res communes omnium*.

This process of reducing the Roman category to a residual concept in the system of the international law of the sea, found a similar development in the regulation of the airspace.

Until humans invented the airplane, the skies belonged to the Roman category of *res communes omnium*. In 1906, the Institute of International Law on the subject of the '*regime juridique des aerostats*' affirmed this idea with three simple words: '*L'air est libre!*'.

However, the following events of the XX century rendered necessary to rethink that stance. When airplanes started to be used inten-

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[83] Schachte 1990, 164 ff.

[84] *United Nations Convention on the Law of the Sea*, U.N. Doc. A/CONF.62/122, 1982.

[85] See Sand 1960, 24 ff.

sively for military and commercial purposes the principles of *res communes omnium* could not be used anymore as the pillars determining the utilization of the sky around the world. This happened mainly between 1915 and 1920. Great Britain, for example, possessed only twelve military aircraft in 1914. By the end of the War, it possessed twenty-two thousand[85].

The principles of *res communes omnium* left their place to a new general dogma: sovereignty. Thus, when the first international convention of air law entered into force in 1922, the freedom of the air became residual: it applied only where States did not have complete and exclusive sovereignty. In other words, everywhere but in the airspace over their territory, including territorial waters[86]. Notably, the report of the drafting committee at the 1919 Paris Conference said: «It is only when the column of air rests on a *res nullius* or *communis*, the sea, that freedom becomes the rule of the air»[87].

The same approach was restated in what is considered today the *Magna Charta* of international aviation: the United Nations Convention on International Civil Aviation of 1944 (hereinafter Chicago Convention)[88]. Its articles 1, 2 and 12 limit the freedom of flight to the international airspace.

However, that freedom is not absolute. The Chicago Convention envisages the attribution to coastal States of air traffic management (ATM) prerogatives over the international airspace. These States perform their duties by extending the relevant regulations applicable to their sovereign airspace to that part of the sky where they have to provide the air traffic service[89]. Accordingly, foreign aircraft have to fly in this assigned portion of the international sky in a manner consistent with the rules adopted for the State's own airspace. This represents a form of extension of one State's control over a portion of a common domain.

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[86] See the Convention Relating to the Regulation of Aerial Navigation, adopted in Paris by the International Commission of Air Navigation on 13 October 1919 and entered into force in 1922, Article 1: «The High contracting Parties recognize that every Power has complete and exclusive sovereignty over the air space above its territory».

[87] See Soloveva 2022, 112.

[88] *United Nations Convention on International Civil Aviation*, adopted on 7 December 1944 and entered into force on 4 April 1947, Chicago, Articles 1, 2 and 12.

[89] See Grief 1994, 63.

Moreover, two practices connected to security purposes can be mentioned: the creation of Air Defense Identification Zones (hereinafter: ADIZ) and the establishment of 'restricted airspaces' over the high seas[90].

National security considerations may lead a coastal State to ensure that approaching aircraft are identified long before they penetrate its sovereign airspace[91]. Thus, although aircraft above the high seas are subject to the exclusive jurisdiction of their State of registry, some coastal States claim the right to exercise control over foreign aircraft flying in ADIZ beyond the limits of their sovereign airspace[92]. In practice, this means that aircraft on a course to penetrate a coastal State's airspace may be requested to identify themselves and failing voluntary identification may be intercepted[93].

As for restricted zones over the international airspace, they are generally established by States that want to use a portion of the sky for the training of military pilots, for firing exercises or for combined air-naval operations[94]. This entails the occasional exclusive use by States of parts of the international airspace. But the temporary nature of such zones can be stretched for long periods, challenging the principles of common use and free access.

In view of the rules and practices described here, it is possible to identify a specific *rationale* inspiring the whole system of international air law: the concept of 'safety'.

This is evident if we look at the Preamble and at article 44 of the Chicago Convention. The former indicates that the Chicago Convention was drafted in order to ensure that international civil aviation may be developed in a safe and orderly manner. The latter establishes as the first objective of the International Civil Aviation Authority the

[90] The Chicago Convention is silent on both practices.

[91] The United States' ADIZ, for example, stretches for about 400 miles off the US West Coast. See Grief 1994, 146.

[92] More than 20 States have now established ADIZ over the high seas. Among them: USA, China, Russia, Japan, and Turkey. Grief 1994, 147.

[93] This is based on the so-called 'protective principle'. However, there is no legal basis in international law for prosecuting the operator of a foreign aircraft which operates in a coastal ADIZ without the intention of entering the airspace of the respective State. Grief 1994, 151.

[94] Grief 1994, 58.

safe and orderly growth of international civil aviation throughout the world. All the other provisions of the Convention are meant to realize that aim.

In conclusion, it can be said that the treaties and practices of contemporary international law have demised the purpose of *res communes omnium*. The principles of free and common use of the sea and the air have been sacrificed on the altar of security, economic interests, environmental protection and safety. Each of these needs have prevailed over the idea of a common domain, allowing the progressive expansion of sovereign powers, in a long and steady process which from the fall of the Roman Empire has never stopped.

6. *Conclusory remarks.* – The historical analysis conducted in the present paper unveils a legal evolution of the Roman category of *res communes omnium* characterized by a continuous attempt to find exceptions and exclusions to its applicability.

With time, the domains that were originally meant to be used in common under natural law saw the expansion of sovereign entities, which progressively extended their presence beyond their territories with exclusive rights and absolute prerogatives. This slow and steady process was the result of precise factors: 1) the lack of a central authority controlling and settling disputes over the use of *res communes omnium*; 2) the presence of a multitude of independent actors; 3) the need to prevent the use of common domains for the purpose of accessing one's own territory – or interfering with it; 4) the technological advancements in the exploitation of the resources contained in *res communes omnium*; 5) the necessity to protect such economic activities by excluding foreign competitors; 6) the urgency to ensure a secure and sustainable use of common areas adjacent to one's own borders.

For all these reasons, through the centuries, jurists have elaborated legal theories that justified the disapplication of *res communes omnium*'s principles in areas once part of common domains. The sovereign entities that were accessing and using such *res* disfavored the system of commonality envisaged by Romans and preferred to see bestowed upon themselves the control and management of the activities conducted therein.

In other words, the history of *res communes omnium* can be seen – from a legal point of view – as a history of slow decline and regression, indirectly connected to the rise of sovereignty.

The class of *res* imagined by Ulpian and Marcian has been progressively reduced to a residual concept of international law. Few areas on Earth are still regulated by the principles of free access, free use and non-appropriation (*e.g.* international waters) and, yet, they continue today to see new limitations to their scope of application.

Nonetheless, the *communis omnium* regime survives almost intact in one last large domain: beyond the atmosphere, on the Moon, the principles of Roman law continue to live codified in the Outer Space Treaty of 1967. The question is: for how long?

It is already possible to see in the 'New Moon Race' some of the factors that marked the historical de-evolution of *res communes omnium*: technological advancements, opposing economic interests, security and safety needs. They will all be inevitable elements of the colonization of the Moon. Thus, it is not absurd to predict that also on our satellite the arrival of lunar-faring Nations will trigger a process that will result in the affirmation of exclusive powers and in the creation of areas under the control of one State.

In conclusion, the present paper calls the attention to the history of a legal category that has returned at the center of the international legal debate with regard to space exploration. The relationship between sovereignty and common domains has always followed a unidirectional trend, where the former expanded while the latter were scaled down. Such trend has not stopped and continues to erode areas of Earth from their common legal nature. In view of the circumstances behind this process – as described in the previous pages – and considering their reappearance in similar terms with regard to Moon missions, it seems only probable to conclude that sovereignty and borders will follow humans also in their exploration and expansion on the Moon and the other celestial bodies. If that is true, then it is the responsibility of the present international community to focus not on the preservation of a common regime, but on the establishment of clear rules that will allow the exercise of sovereign powers by spacefaring Nations in the spirit of transparency, cooperation and collaboration.

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