TO BOLDLY GO:
INTERNATIONAL SPACE LAW AND THE EXPANSION OF RES COMMUNIS DOCTRINE

*John S. Ehrett**

ABSTRACT: *International space law, while a relatively recent development in legal history, has far-reaching implications for the traditional conception of national sovereignty. Specifically, the doctrine of res communis – if imprudently incorporated into the broader body of international law – poses a new set of sovereignty challenges on both international and domestic levels. This article explores the history and sources of international space law before proceeding to analysis of the sovereignty questions currently facing world policymakers. The author finds that multilateral agreements conducted on an ad hoc basis are likely to offer a better approach to natural resource management than the broad global strategy currently advanced by res communis theorists.*

---

* John Ehrett is a senior at Patrick Henry College, majoring in Government with an emphasis in International Politics and Policy. John has interned at the Becket Fund for Religious Liberty, as well as competed with the College's parliamentary debate and Model United Nations teams on an international level. He plans to attend law school this coming fall and hopes to subsequently pursue a career in civil liberties litigation.

Introduction

The classic 1970s film *Star Wars* sets forth a vision of galactic ideological conflict between two forces: one committed to liberty, the other a literal "Evil Empire" bent on establishing totalitarian control. Indeed, given the Cold War context in which the franchise emerged, perhaps its political undertones are less than surprising. For indeed, the world had just undergone a series of profound changes: with the launch of *Sputnik 1* into orbit in 1957, humanity had for the first time ventured beyond the boundaries of Earth. When Neil Armstrong set foot on the Moon in 1969, it truly was "one giant leap for mankind" into a new, unexplored, and potentially limitless universe. Naturally, these human efforts to explore space were, at the time, bitterly divisive. Old rivalries between nations, when coupled with the vast technological potential of space exploration, threatened to revolutionize the geopolitical order. And accordingly, at the height of the American-Soviet "space race," many would likely have agreed that the global community needed a unified framework for approaching this new sphere of interaction.

The United Nations stepped up to offer such a framework, in the shape of five governing treaties. These treaties form the backbone of modern international space law. The United Nations treaties intend to govern a wide variety of international actions in outer space – from the proper treatment of crashed astronauts to fair economic practices on resource-rich extraterrestrial bodies.

For international law to exist as a viable instrument, it must successfully arbitrate disputes between nations – and in

doing so, rely on supranational considerations. As the actions of one actor – state or non-state – in outer space may have dramatic consequences for other states, a system for international decision-making is justified. However, any circumstance in which international adjudication is needed necessarily engenders questions of domestic political sovereignty. The following article will endeavor to address these questions of domestic sovereignty.

The following article will explore several concepts governing international space law. First, it will explain international space law, highlighting the key developments in this unique sphere of policymaking. Second, it will analyze the five major treaties presently governing United Nations actions in the realm of international space law.[2] Third, it will cover current international space law utilized by the United Nations in its broader policy-making practices, and explore precedent interpreting the United Nations policy cited above.[3] Finally, it will provide a brief consid-

2 These five treaties are the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967); the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968); the Convention on International Liability for Damage Caused by Space Objects (1972); the Convention on Registration of Objects Launched into Outer Space (1976); and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1984)

3 This corpus of law includes the Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963); the Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982); the Principles Relating to Remote Sensing of the Earth from Outer Space (1986); the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992); and the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (1996).

eration of emerging trends in the field of outer space law. It will demonstrate that under emerging standards of what constitutes the international law of outer space, the United Nations enjoys a degree of authority over space that may eventually conflict with domestic political sovereignty.

I. History of International Space Law

The law of outer space is one of the newest, and least-defined, areas of international law. Given the uniquely supranational context in which space-related activities occur – since outer space transcends traditionally-understood national boundaries – the UN has stepped in to fill the administrative void. In attempting to properly understand the current difficulties policymakers face, a short discussion of the underlying history may prove instructive.

Following the launch of *Sputnik 1,* it quickly became clear that the international community needed to reach a consensus of sorts regarding space exploration. The potential for both use and abuse was certainly great; a peaceful coexistence would be necessary in order to avert global conflict. Accordingly, in 1958, the General Assembly of the United Nations established an *ad hoc* Committee on the Peaceful Uses of Outer Space. The UN requested the committee to report on "[t]he area of international co-operation and programmes in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices to the benefit of States irrespective of the state of their

economic or scientific development."[4] As Indian legal scholar Kailash Thakur describes, the Committee emphasized the equality of UN member states and additionally proposed that the UN's binding documents – the UN Charter and the Statute of the International Court of Justice – should be understood as applying to activities occurring within outer space.[5] Since no one nation could claim sovereignty, an international authority was seen as the best means of establishing order. A variety of treaties and governing documents would later emerge from this shared understanding, each of which would outline some specific obligations of state actors in the international space community.

In December 1959, the United Nations formally codified the Committee on the Peaceful Uses of Outer Space. This Committee would be charged with promoting international cooperation and securing "the common interest of mankind as a whole." Currently, the Committee, which continues to operate on an *ad hoc* membership basis, is authorized "to review the scope of international cooperation in peaceful uses of outer space, to devise programmes in this field to be undertaken under United Nations auspices, to encourage continued research and the dissemination of information on outer space matters, and to study legal problems arising from the exploration of outer space."[6] Under the auspices

4 United Nations, General Assembly Resolution 1348 (XIII) (1958), *available at* http://www.unoosa.org/oosa/SpaceLaw/gares/html/gares_13_1348.html.

5 Kailash Thakur, *Outer Space and Military Supremacy: Jurisdiction in International Law* 27 (1985).

6 United Nations, *United Nations Committee on the Peaceful Uses of Outer Space* (2012), *available at* http://www.unoosa.org/oosa/COPUOS/copuos.html.

of this Committee, subsidiary bodies were formed to implement its recommendations in the broader international sphere. It is out of this framework that the modern international law of outer space has developed.

II. Fundamentals of International Space Law

Setting aside for the moment the key question of what exactly constitutes outer space, it becomes imperative to understand from what sources international space law springs. The United Nations Office for Outer Space Affairs (UNOOSA), based in Vienna, defines "space law" as emerging from not only the five major international treaties, but also from additional documents such as treaties, conventions, and the rules and regulations promulgated by international groups. Two tiers of authority, then, exist at the UNOOSA level: treaties, and the documents developed under their auspices.

Under prevailing standards of international jurisprudence, the status of both tiers may be relevant when considering questions of customary international law. Even seemingly inconsequential agreements – though technically non-binding – may be considered binding precedents. The UNOOSA acknowledges that a pathway based on "generally accepted practice" exists, by which purportedly non-governing documents may take on legal weight. Thakur concurs with this mentality: "…customary international law, along with resolutions or declarations of United Nations and other International organization and writings of highly qualified Publicists provide authoritative or auxiliary sources for the deter-

mination of this branch of law."[7] Effectively, then, the UNOOSA's five treaties and five sets of principles constitute the foundation of modern international space law. Though all states may not be parties to a given treaty or set of principles, both tiers of authority may factor into the decision-making processes of the international legal system. This notion of tiered authority draws support from the scholarship of legal theorists Joanne Irene Gabrynowicz and Jacqueline Etil Serrao, who observe in the *Journal of Space Law* that "[e]ach set of principles has varying weight at international law….International space law also consists of custom and practice."[8]

Having established a proper understanding of the UNOOSA's hierarchy of governing protocols, we return to the definitional question: what exactly constitutes "outer space" for the purposes of international governance? Or, when put in terms of sovereignty, what separates a state's national airspace from the sphere of space subject to UN jurisdiction? Unlike a territorial state proper, no natural delineation appears to exist that would establish where a country's administrative authority over aerospace begins.[9]

Numerous theoretical methodologies for delimiting outer space have been advanced. Particularly notable – though impractical – are the *Usque ad Coelum* theory (extending state jurisdiction *infinitely* upwards in space),[10] the effective control theory (extending the jurisdiction of a state up to limits where the scientific prog-

7 Thakur at 25.
8 Gabrynowicz and Serrao.
9 Thakur at 19.
10 *Id.* at 44.

ress of a state permits the effective control over the space above it),[11] and the interest theory (extending state jurisdiction in outer space as far as is reasonably required by a state's interests).[12] In all three of these cases, state sovereignty is treated as the paramount consideration.

Though no universally accepted delimitation exists, the theory of the Kármán line (named for Hungarian-American physicist Theodore von Kármán) is popularly accepted by the international community, The Kármán line approach serves as the baseline for the European Space Agency (ESA) and the Fédération Aéronautique Internationale (FAI), among others. The Kármán line, located about 52 miles from the Earth's surface, is an aeronautical standard of measurement – in the words of the ESA, "any vehicle at this altitude would have to travel faster than orbital velocity in order to derive sufficient aerodynamic lift from the atmosphere to support itself."

The most crucial international concept governing space law, however, is the principle of *res communis*, or "things common to all; things that cannot be owned or appropriated, such as light, air, and the sea."[13] In authoring treaties, the United Nations has fleshed out this principle somewhat: instead of merely accepting the existence of resources from which all benefit, the United Nations has held that the international community shares a common interest in these common goods (thus making the UN the appropriate governing/regulatory authority where the distribution

11 *Id.* at 49.
12 *Id.* at 49.
13 *Black's Law Dictionary.*

of common goods is concerned). The idea of *res communis*, then, must be considered in two ways: it is both a property possessed by outer space and a justification for regulation by supranational authorities.

In the introductory clauses of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (a document later nicknamed the "Space Treaty" of 1967), the United Nations highlights "the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes."[14] A similar phrase appears in Article I of the document: "The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind."[15] This notion of "common interest" has broad implications for the field of space law: nations are not to *acquire* aspects of outer space, but rather the resources of outer space are to be understood as belonging to the international community at large.[16] Such an evolution of the concept of *res communis* represents a departure from previous international legal standards: before the Moon Treaty was signed, the moon and related bodies were considered *res nullius,* meaning that their resources could be subject

14 United Nations, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (1967), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

15 *Id.*

16 Gabrynowicz and Serrao.

to claims by nation-states. This was changed by the Moon Treaty, which stipulated that such resources were "incapable of appropriation under the Treaty Provisions."[17] Put more simply, no private or public actor – no matter how technologically innovative or entrepreneurial – is authorized to engage in extractive activity on celestial bodies; an international administration is instead required.

This general mindset permeates all aspects of the Space Treaty. In brief, the Treaty bars claims of national sovereignty upon extraterrestrial bodies (e.g. annexing the Moon), proscribes the introduction of weapons of mass destruction into outer space, calls for the respectful treatment of astronauts as "envoys of mankind,"[18] authorizes liability suits for claims of damage from space-based objects, mandates registration and control of space-based objects, and promotes the sharing of information derived from space exploration. Perhaps the fullest flowering of this *res communis* attitude, however, is found in Article XII, which reads: "All stations, installations, equipment and space vehicles on the Moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity."[19] Questions of the relationship between celestial resources and national sovereignty take on particular significance in light of subsequent United Nations treaties.

The second major space law treaty, the Agreement on the

17 Thakur at 31.

18 *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.*

19 *Id.*

Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, is substantially narrower in scope. The Agreement provides that astronauts who have suffered harm, and/or fallen into the jurisdiction of another state, be offered assistance in their return to the state that launched them. Given the evident overlap with the broader Space Treaty, the preambulatory clauses indicate that the Agreement serves simply as a "further concrete expression"[20] of the Space Treaty's principles. Again, emphasis is placed on the ideals of *res communis* – reference is made to "international cooperation in the peaceful exploration and use of outer space"[21] and "sentiments of humanity."[22]

The third major space law treaty, the Convention on International Liability for Damage Caused by Space Objects, provides a systematic framework for determining liability and calculating damages for harms caused by space activities. Bilateral negotiations and settlements are the preferable forum for claims resolution, but United Nations authorities may be invoked if this arbitration proves unfruitful. Yet again, the aforementioned *res communis* clause (emphasizing "the common interest of all mankind in furthering the exploration and use of outer space for peaceful purposes"[23]) is advanced in the opening clauses.

The fourth major space law treaty, the Convention on Registration of Objects Launched into Outer Space, provides that "a

---

20 United Nations, *Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space* (1968), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

21 *Id.*

22 *Id.*

23 *Id.*

central register of objects launched into outer space be established and maintained, on a mandatory basis, by the Secretary-General of the United Nations."[24] Again invoking the *res communis* standard, the Convention proceeds to establish a mandatory international registration system, administered by the Secretary-General, containing detailed information on all objects launched into outer space. This information includes the name of the launching state, designator or registration number, date and location of launch, basic orbital parameters, and general function.

The fifth major space law treaty, the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (popularly known as the "Moon Treaty" of 1984), is by far the most controversial of all space law protocols advanced by the United Nations. At first glance, it appears to merely reinforce principles outlined in the foundational Space Treaty – but upon more thorough examination, the Moon Treaty contains several important implications for the states which choose to ratify it.

Controversy appears first in Article 2, which opens with the following bold declaration: "All activities on the Moon, including its exploration and use, shall be carried out in accordance with international law…"[25] Similarly, Article 4 states that exploration and use of Moon resources "shall be the province of all mankind and shall be carried out for the benefit and in the interests of all

24 United Nations, *Convention on Registration of Objects Launched into Outer Space* (1976), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

25 United Nations, *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* (1984), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

countries."[26]

The most drastic statements of the Moon Treaty are found in Article 11, paragraph 3: "Neither the surface nor the subsurface of the Moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or non-governmental organization, national organization or non-governmental entity or of any natural person."[27] Paragraph 5 elaborates: "States Parties to this Agreement hereby undertake to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the Moon as such exploitation is about to become feasible."[28]

Attorney and Moon Treaty critic Michael Listner explains the pragmatic implications for the international community, highlighting the requirement that the UN be tasked with administering any extractive economic activity that might occur on the Moon. Listner argues that under the Moon Treaty, "the harvesting of those [celestial] resources is forbidden except through an international regime established to govern the exploitation of such resources when it becomes feasible to do so.[29] Listner goes on to weigh the mandates of the Moon Treaty against those of the earlier Space Treaty: "The *res communis* doctrine resounds most prominently when dealing with property ownership rights in outer space. The Outer Space Treaty not only forbids claiming of terri-

26 *Id.*

27 *Id.*

28 *Id.*

29 Michael Listner, *The Moon Treaty: failed international law or waiting in the shadows?* (2011), http://www.thespacereview.com/article/1954/1.

tory by nations, but its child, the Moon Treaty, attempts to extend that prohibition to private legal entities also."[30] In practice, this means that no independent nongovernmental group or corporation may invoke "property rights" in the context of celestial exploration.

Naturally, such an approach has not found broad favor within the international community – particularly among the states who have invested most heavily in space exploration. A document calling for an "equitable sharing by all States Parties in the benefits derived from those [Moon] resources"[31] (Article 11, paragraph 7, clause (d)) is inherently unlikely to attract support from public or private actors. In short, treating the Moon and other bodies under the *res communis* standard potentially incurs significant scientific and economic costs, which will be further discussed in Part III. While scant attention has been paid to the significance of the Moon Treaty in recent years, due to more pressing international concerns, future technological developments will inevitably raise these questions of international jurisdiction and national prerogatives.

The five aforementioned treaties alone, while certainly vital, constitute only a part of established international space law. The UN Office for Outer Space Affairs also relies upon several documents, or "sets of principles" in adjudicating issues. One of these documents, the Declaration of Legal Principles Govern-

30 Michael Listner, *It's time to rethink outer space law* (2005), http://www.thespacereview.com/article/381/1.

31 *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.*

ing the Activities of States in the Exploration and Use of Outer Space, mirrors the Space Treaty in several respects. Predating the Treaty by four years, it embraces many of the same concepts – "the common interest of all mankind,"[32] the impermissibility of national appropriation of extraterrestrial territory, the responsibility of states to retain liability for damages caused by space objects, and the protection of astronauts, among other doctrines. Another important document, the *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries,* epitomizes most strongly the "common interest" ethos of the United Nations. The Declaration offers an expansive view of this principle: mankind does not merely share an interest in space, but space itself is "the province of all mankind."[33] Such a view is consistent with the Moon Treaty's call for the division of natural resources by an international regime.

As seen here, a persistent theme in the literature of UN space law is the validity of the "common interest of all mankind" as a moral guiding-light for policymakers. At all levels of the space exploration process, the Office for Outer Space Affairs seeks to bring the actions of sovereign state actors into conformity with international norms. And indeed, one might argue that there

32 United Nations, *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space* (1963), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

33 United Nations, *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries* (1996), *available at* http://www.oosa.unvienna.org/pdf/publications/STSPACE11E.pdf.

is a strong conceptual justification for international uniformity regarding many of these issues.

Unqualified incorporation of the *res communis* doctrine into international space law, however, leads to several consequences with important implications for both the sovereignty of states and the flourishing of scientific and economic activity.

III. Implications for National Sovereignty

Any actions taken by the United Nations or another supranational body must necessarily strive towards a difficult calculus: balancing state sovereignty with the broader interests of the international community. This paradox of governance has persisted since the earliest days of the organization, and it is, unsurprisingly, manifested in the field of international space law.

In grasping precisely which international standards are binding upon a sovereign state, several factors warrant analysis. First, and perhaps most important, is the consideration of any treaties to which the state may be a part. Second, the standards imposed by customary international law should be examined. This "customary international law," as the seminal theorist Ian Brownlie explains, emerges from sources as diverse as national press releases, state legislation, a "pattern of treaties in the same form," and even decisions made by domestic executives.[34] Third, the weight of inflexible common-law norms – e.g. prohibitions against torture, unwarranted aggression, etc. – must be evaluated. In the field of international space law, all three of these legal fac-

34 Ian Brownlie, *Principles of Public International Law* (2008).

tors are currently operative.

Few individuals would dispute that a party to a treaty is bound by its standards. Legal writer Ram Jakhu concurs: "The intention of the authors of the [Space] Treaty was clearly to create binding obligations. The Treaty's principles must be interpreted as legally authoritative norms that govern international relations in all matters relating to outer space."[35] However, the question of customary international law is by its very nature ill-defined. This creates an inherent condition of legal murkiness, given that that the ongoing evolution of governing documents has created a moving target for nations seeking to conform to their international legal obligations.[36]

Given this state of perpetual flux, seemingly insignificant past precedents may abruptly reemerge, to substantial effect. This article holds that under current standards of international law, UN requirements regarding outer space may conflict with the legitimate assertion of national sovereignty by United States actors or those of other nation-states.

A discussion of the sovereignty question proper must first turn to the legal implications of the *res communis* principle. Pervasive in the United Nations literature regarding outer space law is the doctrine of "common interest" stemming from the belief that the resources of outer space are the property of humanity at large. Drawing from both this bedrock UN principle and his rec-

35 Ram Jakhu, *Legal Issues Relating to the Global Public Interest in Outer Space*, 32 Journal of Space Law 31 (2006).

36 Ruwantissa Abeyratne, *ICAO's Involvement in Outer Space Affairs – A Need for Closer Scrutiny?* 30 Journal of Space Law 185 (2004).

ognition of the uniqueness of the regulatory challenge posed by outer space, Jakhu endorses a sweeping vision of international space law. Three core tenets characterize this vision: a belief that contemporary principles of international regulation and accountability, not common-law understandings of property and sovereignty, should govern outer space; a belief that these modern principles are absolutely binding upon all states; and a conviction that the "global public interest in outer space" is the source of such binding force.[37] This philosophy goes far beyond the Space Treaty of 1967: not only does it suggest that international actors are bound by the formal treaties to which they have acceded, but it also expands these principles to the sphere of customary international law. In other words, nations are to be held responsible to the international community based on the standards of a treaty they have never joined. Moreover, such a philosophy suggests that these collectivizing principles are morally obligatory upon all nations – treating the *res communis* standard of outer space as beyond question, and placing it on a level with prohibitions against piracy, genocide, and torture.

The far-reaching ramifications of this mindset – particularly the assertion that the "global public interest in outer space" must guide all policymaking in the field of space law – cannot be overemphasized. Such a stance rejects the view that *any* particularized national concerns can legitimately play a role in the domain of international law: "interdependence and international cooperation" must, in all cases, trump "State sovereignty and

37 *Id.*

independence."[38] This exemplifies the *monistic* theory of international law, as described by I.D.P. O'Connell – the view "that international law has primacy over municipal law in both international and municipal decisions."[39] This mindset emerges naturally from a broad endorsement of *res communis* as a foundation for decision-making; such an endorsement infers that the interest of the global community in outer space in promoting equal access to celestial resources is so great as to rise to the level of a moral obligation. Under this standard, if ethnic cleansing is considered a crime against humanity, so too should unauthorized exploitation of space resources be considered an attack upon all.

The impact for sovereign states, then, is that international standards must always*, without exception*, enjoy precedence over national considerations in the area of outer space law. Not only are these international standards viewed as morally superior to any assertions of national sovereignty, but Jakhu even contends that the very existence of independent interests in outer space threatens the global social order: "The advancement of exclusive national interests could not only mar progress toward global betterment but also threaten human civilization in ways that might lead to its destruction."[40] This belief – that permitting the operation of sovereign entities in outer space for their own purposes will spawn global catastrophe – undergirds much United Nations literature on the subject. The clear objective here is to ward off a possible "tragedy of the commons" effect, in which mass celestial

38 *Id.*

39 I.D.P. O'Connell, *International Law* (1970).

40 Jakhu.

exploitation occurs at the hands of the technological élite. What is never once meaningfully considered, however, is whether an international administrative regime will serve as a better steward of cosmic resources than individual nations operating within a free-market context.

Analysis of the sovereignty question must now turn from the theoretical to the practical. The definition of outer space as a jurisdiction governed via *res communis* principles seems to automatically supersede any national sovereignty questions. The subjective nature of "customary international law," however, poses a greater challenge to the United States, and this is best illustrated through consideration of the controversial Moon Treaty. Notably, due to several of the provisions, which have incurred international disfavor, few nations have actually acceded to the Moon Treaty. However, an important threshold has already been crossed: six nations have signed onto the Treaty. Article 19, paragraph 3 of the Moon Treaty stipulates that, "This Agreement shall enter into force on the thirtieth day following the date of deposit of the fifth instrument of ratification."[41] Thus, the Moon Treaty has in fact "entered into force" as a doctrine of the United Nations.

Some United States jurists may dismiss the Moon Treaty as non-binding, given the American framework for the establishment of treaties: under the Constitution of the United States, a treaty only becomes binding if it is approved by the President and subsequently ratified by the Senate. This procedure, however, is not

41 *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.*

part of the United Nations methodology. When weighed against the "common interest of all mankind," such rigorous processes become merely the "strict observation of State sovereignty and independence," which advocates of greater international control have indicted. The Moon Treaty, by virtue of its entry into force through the ratification of five states, has become "the practice of international organs" – and by extension, a part of the *corpus* of customary international law. Listner explains: "Even with only six nations ratifying the Moon Treaty, the fact that eleven other nations…have acceded to or become signatories to the Moon Treaty creates a shadow of customary law that could grow…especially if those non-parties take no action to refute its legitimacy.[42] In a dispute over the proper management of natural resources on the Moon, then, the United States could find itself charged with violating the *res communis* principles of international law. The repercussions of an unfavorable judgment – both in terms of diplomatic standing and economic hardship – could be substantial indeed, with the potential to impact scientific inquiry and space exploration for decades to come.

A similar economic question was considered during deliberations regarding the proposed "Law of the Sea" treaty (also known as the UNCLOS), which affirmed the *res communis* doctrine at the expense of discrete public and private interests. The risk of lost incentives was advanced as a major concern

42 Listner, *The Moon Treaty: failed international law or waiting in the shadows?*

of private businesses.[43] Their argument stressed that those with the capabilities best suited to engage in innovative endeavors are generally not motivated by a compelling concern for the global public interest, but rather by private gain; all, however, are ultimately enriched by the technology and skills developed during this quest. Furthermore, given the lack of international consensus on a number of important policy issues, retaining the capacity to accumulate resources – albeit in a non-destructive manner – may be understood as a matter of national security. In many ways, these concerns simply foreshadow those raised regarding the Moon Treaty. Full-scale implementation of the Treaty – resulting in the establishment of an inflexible international regime for extraterrestrial resource extraction – could conceivably risk stifling innovation and limiting productivity. This, in turn, could jeopardize the "interest of all mankind" if a broad dependence on lunar resources becomes commonplace: after all, who will fill the scientific void if the requisite technology is unavailable and no compelling incentives exist for its development? While large-scale economic exploitation by private entities is not without its social and environmental costs – and a full discussion of these issues is beyond the scope of this article – the broad liberty to engage in commercial activity has generated investment in technologies that have benefited millions.

On a judicial level, the acceptance of the Moon Treaty as binding international law establishes a troublesome precedent

43 Ray W. King, *Deep Seabed Resources: Who Has The Right To Exploit Them*, 11 Colonial Lawyer 8 (1981).

for the United States and other independent nation-states. The Moon Treaty exists independently of the prescribed constitutional framework for treaty ratification, and has only been ratified by six sovereign states – none of which have played a substantive role in the evolution of space exploration. If this is in fact the standard set forth, a minority of sovereign states may establish a treaty (derived from a supposedly universal moral obligation) which may be legally invoked against states not party to said treaty. By extension, if the Moon Treaty is accepted as a valid and binding source of customary international law, the exercise of national sovereignty in the international sphere becomes effectively meaningless.

A philosophy of international law rooted in an obligatory affirmation of the *res communis* principle necessarily deemphasizes the role of individual state actors; indeed, *any* pursuit of unilateral interest becomes contrary to the broad "global public interest" which is held to be paramount.[44] If this philosophy becomes normative, the need of supranational organizations to balance the interests of sovereign states against the interests of the global community no longer exists; instead, a unitary international legal system may credibly emerge – one lacking the constraints provided by national sovereignty claims within the current model. It remains to be seen whether international judicial bodies will subsequently gain broad powers to compel compliance in the supranational domain, particularly when their attempted exercise of such authority conflicts with prerogatives previously held by

44 Jakhu.

nation-states and their court systems.

This concern regarding the influence of international standards on domestic matters is not without support in the literature of international law. The repercussions of a codified *res communis* doctrine may extend even to the municipal level, as legal scholar Kernal Baslar observes. Whereas Jakhu stops short of proscribing any and all resource extraction activities in *res communis* spaces, Baslar rejects outright the notion of property rights in the "global commons." In responding to a proposed framework for resource extraction by sovereign state actors, Baslar writes, "[this] model is not a fair one, since it does not take into account environmental problems, sustainable development, and the rights of future generations."[45] This theory, a logical implication of transforming the idea of "global common interest" into a matter of universal moral duty, expands the scope of supranational authority far beyond the traditional domain of *res communis* jurisdiction. In such a theory, the doctrine of *res communis* – and the "common heritage of mankind" – transcends national boundaries, with marked implications for national sovereignty. Specifically, if *res communis* is understood to be broadly binding – which, given the doctrine's proposed status as a "moral obligation," is a natural outcome – it behooves supranational bodies to proactively secure resource equality. Per Baslar: "[T]he inherent unfairness of morally arbitrary 'geological lottery' should be avoided in order to attain global justice and justify the right to control the national

45 Kernal Baslar, *The concept of the common heritage of mankind in international law* 55 (1997).

resources. To achieve these goals, the freedom of others to pursue absolute liberty and crude forms of libertarian property ownership should be abandoned."[46]

Few would dispute that some areas are more resource-rich than others; in a legal philosophy grounded in an expansive embrace of the *res communis* theory, this disparity warrants international intervention. This condemnation of "property ownership" writ large is not limited to the concept of one nation seizing resources formerly held in the global commons (e.g. the U.S. hypothetically beginning mineral extraction operations on the Moon). Rather, this theory stems from an expansive interpretation of the "common heritage of mankind," with unexpectedly broad ramifications: specifically, "the essence of the word 'common' should not only be interpreted so as to cover international spaces but also be modified to include scarce national resources within the national boundaries."[47] Such a stance mandates not only the regulation of traditional *res communis* spaces by an international regime, but also holds that *all* natural resources – entirely irrespective of state sovereignty – are to be treated as part of the "global commons." It is notable that in both of the above statements, the phrase "national resources" is used in lieu of the more-familiar "natural resources," a linguistic choice which indicates the wide-scale implications of such a philosophy.

If this permutation of the *res communis* doctrine is embraced, any traditional conception of national sovereignty nec-

46 *Id.* at 59.
47 *Id.* at 59.

essarily collapses. The international community or its assignee, accordingly, assumes total responsibility for the disposition of natural resources, both in space and on earth. The implications stemming from a seemingly simplistic legal principle – *res communis* – extend well past the international judicial system: naturally "[n]ew alternatives need radical changes in the structure of the present world order."[48] Postmodern academic Richard Rorty, in an address at Colorado College, praised this possibility: "In [the vision common to *Star Wars* and *Star Trek*], human beings finally get their act together, establish a world federal government which abolishes both war and inequality of opportunity, and turn their eyes toward the surrounding galaxy."[49] For Jakhu, Baslar, Rorty, and other scholars like them, this may be the ideal – but for national policymakers tasked with considering matters of security in a world still divided by competing interests, such a model seems unworkable at best, and dangerously idealistic at worst.

IV. Conclusion

International space law is an evolving area of international jurisprudence. Unlike the age-old questions of piracy or aggression, the question of outer space exploration offers an entirely new set of legal quandaries. The United Nations, through its Office for Outer Space Affairs, has sought to resolve several of these quandaries through the formulation of various treaties and sets of principles – documents which form the foundation of international

48 *Id.* at 56.

49 Richard Rorty, *The Communitarian Impulse* (1999), http://www2.coloradocollege.edu/Academics/Anniversary/Transcripts/RortyTXT.htm

outer space law.

Throughout the course of the preceding article, a key trend in these documents – namely, the expansion of the *res communis* principle at the expense of national sovereignty – has emerged. From the very definition of outer space itself – the Kármán line, which makes no conceptual allowance for the jurisdiction of specific powers – to the far-reaching implications of the Moon Treaty, international space law has steadily drifted away from preexisting conceptions of national sovereignty.

Given the challenges outlined with regard to the application of *res communis* principles throughout international space law, policymakers should act decisively. The legal philosophy espoused by some thinkers – that the principles of space law regarding equitable behavior are to be treated as binding moral precepts – should be summarily rejected for the time being; such a philosophy is grounded in an idealized view of global consensus that does not actually exist. Those responsible for crafting domestic space policy should call for a narrower approach in determining what precisely constitutes an international moral norm and also reject the application of *res communis* principles on the domestic level.

Regarding the Moon Treaty specifically, a strong affirmation of national sovereignty, including an assertion of the right of private entities to benefit from extraterrestrial natural resources, may be warranted. Listner explains that the slow encroachment of the Moon Treaty is due primarily to a lack of response by U.S. jurists: "Although the United States is not a signatory to the Moon

Treaty, it has not taken open actions to actually refute its legal viability. The result is that the Moon Treaty and its *res communis* doctrine has slowly crept into the realm of accepted international law."[50] If nations such as the United States wish to retain positions of global leadership, it is imperative that policymakers act to resist the slow erosion of national sovereignty.

It is not unreasonable, however, to recognize the unique challenges posed by national activities in outer space: given past abuses, concerns over gratuitous commercial exploitation are certainly not illegitimate. One potentially viable solution to this difficulty is the generation of a body of international multilateral agreements between nations which could substitute for top-down, supranational dictates by a single regulatory authority.[51] This model, interestingly, would employ customary international law as a tool for retaining national sovereignty: under Brownlie's definition of customary international law, "a pattern of treaties in the same form" may constitute an element thereof. This, when coupled with limitations on the understanding of *res communis* as a binding moral doctrine, may reasonably counterbalance the framework of massive international regulation advanced by some scholars.

The encroachment of the *res communis* doctrine is far from overt. Though its implementation might begin in a seemingly tangential sphere (viz. outer space law), the proponents of such a philosophy have seemingly grander visions in mind. The ultimate

50 Listner, *It's time to rethink outer space law*.
51 *Id.*

goal of such theorists – the eventual emergence of a transnational body tasked with securing resource equality – appears incompatible with traditional conceptions of national sovereignty. Regardless of the particular solution pursued, policymakers should move promptly to reassert the importance of domestic sovereignty. Proposing a constructive alternative, such as a strategic pattern of multilateral treaties directed toward suitable ends, may well be the best means of doing so.