

Launching a Legal Regime: Applying Constitutional Law to Space Law

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This Article analyzes the applicability of constitutional law to rules governing outer-space behavior. By analyzing the uses of text, history, and practice in the interpretation of the United States Constitution and space agreements, I conclude that living constitutionalism provides the best template for interpreting space law. Its method of reading texts to fit modern society aligns with the New Haven School of International Law's realist focus on values such as equity and human dignity. Beyond interpretation, constitutional law may be particularly informative for rule promulgation. It provides examples of how leveraging John Rawls's veil of ignorance can enable the creation of rules less tainted by self-interest. This principle can apply to space-law issues such as property rights, debris, and militarization. However, there exist strict limits on applying constitutional law to space law. Constitutional law and international law operate with fundamentally different governance structures. Thus, suggestions that the Outer Space Treaty of 1967 (O.S.T.) is tantamount to a "Space Constitution" reflect an insufficient understanding of the fields' differences. Still, the O.S.T. is akin to a constitutional preamble that outlines guiding principles and invites us to continue shaping new rules for the global space order we desire.

Keywords: Outer Space Treaty of 1967, U.S. Constitution, Living Constitutionalism, Veil of Ignorance, Property Rights, Space Debris, Space Militarization, Preamble.

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Introduction

In accepting the Democratic nomination for President of the United States, then-Senator John F. Kennedy declared in July 1960 that the nation was "on the edge of a New Frontier...a frontier of unknown opportunities and perils – a frontier of unfulfilled hopes and threats" (Kennedy, 1960). Two years later, now-President Kennedy announced the nation's intent to land on the Moon by the end of the decade, proclaiming that outer space exploration would

be “one of the great adventures of all time” (Kennedy, 1962). Kennedy’s aspirations still resonate today in the possibilities that new technological developments have opened for space. We already rely on satellites for navigation, communication, financial operations, weather tracking, and national security (Rose, 2019; Hobe, 2019: 17-27); companies are exploring space resource extraction (von der Dunk, 2017: 83-84; Hasin, 2020: 79); and the Artemis missions of the U.S. National Aeronautics and Space Administration aim to “land the first woman and first person of color on the Moon” and first humans on Mars, as well as “establish the first long-term presence on the Moon” (NASA, n.d.).

While technological possibilities capture the public’s imagination, the legal framework undergirding space exploration is just as critical. Given the dearth of regulations applying to current and future space activities, many scholars have consulted existing legal regimes – most notably, the Law of the Sea (Hasin, 2020: 135-48; Leepeungham, 2017: 32-55). This Article offers an additional field for comparison: constitutional law. While constitutional law and space law have areas of overlap – especially as to crafting rules – the evolving and international nature of space law requires cautiously applying constitutional law.

Part II focuses on different methodologies of legal interpretation. An analysis of text, history, and practice as interpretive tools demonstrates how living constitutionalism is the most analogous constitutional-interpretation method for space law. Indeed, living constitutionalism strongly resembles the New Haven School of International Law, the ideas of which Gershon Hasin applies to issues in space law. Part III discusses how constitutional scholars’ invocation of John Rawls’s “veil of ignorance” can also apply to the promulgation of rules for space in areas such as resources, debris, and militarization (Rawls, 1999).

The next two Parts focus on the limits of applying constitutional law to space law. Part IV highlights how the fundamentally different governing structures in domestic law and international law – especially relating to the enforcement of legal instruments – compel extreme caution when using constitutional law in space law. Thus, Part V concludes that those who consider the Outer Space Treaty of 1967 (O.S.T.) to be a “Space Constitution” fundamentally misunderstand both what a constitution is and the rules needed for the constantly evolving realm of space.

Interpretation

American constitutional scholar Philip Bobbitt has famously categorized and described six types of constitutional arguments (Bobbitt, 1984: 3-119). Given that both constitutional law and space law involve understanding legal instruments, interpretation is a fitting focus to begin comparing the two fields. This Part focuses on three methodologies – text, history, and practice – before concluding that living constitutionalism presents the best constitutional philosophy for space-law interpretation.

a. TEXT

Bobbitt opens his discussion of textual arguments by quoting the brilliant nineteenth-century justice Joseph Story’s remarks: “It is obvious, that there can be no security to the people in any constitution of government if they are not to judge of it by the fair meaning of the words of the text” (25). In oft-cited 2015 comments, Justice Elena Kagan noted that “we’re all textualists now” (Harvard Law School, 2015). Despite the ostensibly simple proposition of just following the text, there is frequent disagreement over the right level of literalism, the usage of

historical dictionaries, and tools such as corpus linguistics. Nevertheless, overlap exists between constitutional interpretation and that for treaties governing space behavior like the O.S.T.

In international law, the Vienna Convention on the Law of Treaties (VCLT) informs textual interpretation. Specifically, Article 31 provides that “[a] treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose” (Vienna Convention, 1969). This language resembles the most popular originalist approach to constitutional interpretation today, as Lawrence B. Solum summarizes:

The Public Meaning Thesis is the claim that the original meaning of the constitutional text is best understood as its *public meaning*: roughly, the meaning that the text had for competent speakers of American English at the time each provision of the text was framed and ratified (Solum, 2021: 1957).

Just as the VCLT discusses the “ordinary meaning” of language, Solum focuses on how “competent speakers of American English” would interpret language. Emphasizing “ordinary meaning” for the U.S. Constitution is especially appropriate because it derives legitimacy from “We the People” who ratified it, not legal wordsmiths (U.S. Constitution: pmb.). Note also that the focus on a treaty’s “context” parallels Solum’s emphasis on the meaning of the text “at the time each provision of the text was framed and ratified.”

True, some originalists focus on the Framers’ intent (Solum, 2021: 1965). This methodology is inconsistent with Article 32 of the VCLT, which only permits consultation of the “preparatory work of the treaty and the circumstances of its conclusion” when a textual interpretation yields an “ambiguous or obscure meaning” or a “manifestly absurd or unreasonable” conclusion (Vienna Convention, 1969). Yet Solum’s “Public Meaning Thesis” is the “prevailing form” of originalism today, and it is consistent with the VCLT (Mazzone and Tecimer, 2022: 332 n.9).

Both constitutional and treaty interpretation also involve the consultation of external documents. Yet such citations must be done cautiously to ensure that the external text really glosses the one in question. Article 31 of the VCLT provides specific criteria for when an external text may be relevant:

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:

- (a) Any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty;
- (b) Any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty (Vienna Convention, 1969).

In U.S. constitutional law, it is common to consult external documents. Consider, for example, the Civil Rights Act of 1866, which scholars regularly cite to understand the Fourteenth Amendment (Amar, 1998: 169). Such a reference seems consistent with the principles of subsection (a) above, given that the same party that drafted the Act – the 39th U.S. Congress – also drafted the Amendment.

However, both constitutional and international lawyers can become overzealous in consulting external sources. Steven Gow Calabresi, Bradley G. Silverman, and Joshua Braver, for example, criticized Justice Stephen Breyer’s citation of Germany’s, Switzerland’s, and the

European Union's federal systems in *Printz v. U.S.*, 521 U.S. 898, 976-78 (1997) (Breyer, J., dissenting). Pointing to differences between those federal systems and that of the U.S., Calabresi et al. argued that Breyer was "guilty here of a textbook example of the faulty use of comparative constitutionalism" because he was trying "to draw lessons...from the constitutional structures of three fundamentally different regimes" (Calabresi et al., 2016: 70).

Space-law scholars are not immune from making such mistakes. As Hasin explains, "a misguided fixation on the Law of the Sea as a framework leads scholars to propose comprehensive regimes" (Hasin, 2020: 82). One example of this "misguided fixation" comes from Frans G. von der Dunk, who notes that the phrase "common heritage of mankind" is featured in both the 1984 Moon Treaty and the 1982 Convention on the Law of the Sea. Thus, he argues based on the 1982 Convention's definition of "common heritage of mankind" that the Moon Agreement "may suggest some mandatory sharing of benefits and technology" when it comes to space mining (von der Dunk, 2017: 89-91).

Beyond the fact that the Moon Agreement has only one space-capable state as a signatory (Australia), the invocation of the 1982 Convention has little legal support. There is no suggestion that the Convention "relat[es] to" the Treaty or was made "in connection with the conclusion of the" Treaty – factors that under Article 31 of the VCLT would suggest referencing the Convention (Vienna Convention, 1969). Moreover, the sea and outer space are so different that absent legal text explicitly connecting the rules governing them, the Convention is a dubious source for interpreting space-law agreements. As just one example of the two fields' distinctions, areas designated as the "common heritage of mankind" in the sea do not reflect parties' high-minded ideals. Rather, the term obscures the fact that the "common heritage of mankind" is an area without known exploitable resources such as oil and natural gas (Hasin, 2023: 16). Thus, von der Dunk's comparison almost defies logic. He asserts that a requirement for "some mandatory sharing of benefits and technology" may exist, but areas that constitute the "common heritage of mankind" almost definitionally yield no benefits. The Law of the Sea's application to space mining is more like Breyer's citation of disanalogous foreign law than constitutional scholars' appropriate references to the Civil Rights Act of 1866.

Thus, there is some overlap in the textual interpretation methods employed in space law and constitutional law. Scholars in both fields emphasize the original meaning of legal texts, compare the language of different legal instruments, and sometimes err by analogizing distinct governance structures. However, the use of history highlights how the two fields are far from alike.

b. HISTORY

In constitutional law, jurists and scholars often consult history to understand the meaning of clauses – especially when a textual analysis does not yield a definitive answer. As the U.S. Supreme Court noted in *Washington v. Glucksberg*, "the Court has regularly observed that the [Due Process Clause of the Fourteenth Amendment] specially protects those fundamental rights and liberties which are, objectively, deeply rooted in this Nation's history and tradition." 521 U.S. 702, 703 (1997). In 2022, the Court engaged in a "long journey through the Anglo-American history of public carry" to conclude that New York had not "met their burden to identify an American tradition justifying the State's proper-cause requirement." Thus, the Court struck down the state's gun-licensing regime. *New York State Rifle & Pistol Association, Inc. v. Bruen*, 142 S. Ct. 2111, 2156 (2022).

Scholars have also focused on George Washington's presidency and the first few Congresses to discern the meaning of potentially ambiguous constitutional provisions. Indeed,

“the constitutional understandings that crystallized during the Washington administration have enjoyed special authority on a wide range of issues.” For example, the First Congress passed several statutes recognizing the president’s authority to fire the heads of executive departments at will – a precedent known as the “Decision of 1789” that is still followed today (Amar, 2012: 320-21). Beyond the actions of Washington and his subordinates, historical precedents in the years following the Constitution’s ratification have particular significance. For example, Saikrishna Bangalore Prakash cites Congress’s dictation of minute details in a late-1700s naval war against France to establish that Congress has “sweeping powers” to “micromanage” and regulate the President’s conduct of a war (Prakash, 2020: 157-58).

In the context of space law, history has a different function. Rather than providing greater clarity on specific provisions’ meanings, it can highlight gaps in legal instruments that render them inapplicable to modern space concerns. Emphasizing the O.S.T.’s Cold War context, Hasin remarks, “Cold War-era science fiction is becoming science fact, and the international rules must adapt to the changing realities or be abandoned as obsolete” (Hasin, 2020: 99). Not only did the O.S.T. not anticipate new technologies, but it also operated in a fundamentally distinct geopolitical environment. The U.S. and the Soviet Union were the only two actors in the space arena, and no private entities were involved in space, unlike today. Furthermore, the O.S.T. was driven by a “fear of extraterrestrial sovereignty claims” (99), rendering its language about “national appropriation by claim of sovereignty” impertinent to space resource extraction (Treaty, 1967: art. II).

In short, historical analyses play a much greater role in constitutional interpretation – especially for originalists – than in the constantly evolving legal regime that governs outer space. The opposite, however, is true when it comes to the legal weight of practice.

c. PRACTICE

Although text and history are widely accepted as tools for constitutional interpretation, the weight of practice is more contentious. In *Noel Canning v. N.L.R.B.*, 573 U.S. 513, 524 (2014), the Supreme Court held that “[l]ong settled and established practice is a consideration of great weight in a proper interpretation of constitutional provisions’ regulating the relationship between Congress and the President.” Such practice is especially suggestive when text and history do not provide definitive answers, as Akhil Reed Amar explains: “Particular attention must be paid to how Congresses and presidents over the years have worked things out between themselves, thereby glossing ambiguous patches of constitutional text with institutional settlements” (Amar, 2015: 74). For example, he relies on practices to determine that officials leading single-headed executive agencies may be removed at will by a president, but he or she may not unilaterally remove officers of multi-headed independent agencies (Amar, 2012: 381-86).

Not all originalists are so willing to rely on practice, however. Concurring in *Noel Canning*, Justice Antonin Scalia castigated the Court’s reliance on practice as “deferring to the Executive’s untenably broad interpretation of the power.” 573 U.S. 513, 570 (2014) (Scalia, J., concurring). Prakash has also rejected presidents’ continued reliance on past military engagements to justify expanding executive war-making authority absent congressional approval. For example, he notes that the State Department’s memorandum supporting President Harry Truman’s unilateral engagement in the Korean War without congressional assent relied on dubious historical precedents – including one example in which Congress had actually declared war and another in which President James Monroe explicitly viewed the seizure of

Spanish forts as unconstitutional. Thus, Prakash admonishes that “the practice of looking at practice and drawing lessons is extremely artificial and subjective” (Prakash, 2020: 163, 168).

In contrast to its highly disputed role in constitutional law, practice is significant in space law. The VCLT specifically says the following concerning treaty interpretation:

3. There shall be taken into account, together with the context:

- (a) Any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;
- (b) Any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation (Vienna Convention, 1969: art. 31).

Indeed, practice itself may create international law. After all, one source of international law is “international custom, as evidence of a general practice accepted as law” (Statute, 1945: art. 38(1)(b)). Customary law requires “a consistent and virtually uniform practice among States, including those States specially affected by the rule or having the greatest interest in the matter.” Further, there must be evidence that States are following a putative custom because they believe that they are under a legal obligation to do so, as opposed to other self-interested motivations (Beckman & Butte, 2009).

Practice is also especially important to the New Haven School, which focuses on the interactions between actors and how the law may shape them. For example, Hasin analyzes the U.S.’s 2015 declaration of property rights over extracted space resources with a particular emphasis on the response of other nations. He thus notes that Russia was the only space-capable nation to oppose the U.S.’s claim and did so largely as a result of geopolitical issues as opposed to the merits of the issue.¹ Most notable, however, was China’s silence on the issue – which Hasin attributes to the nation’s potential interest in space resources as part of its Moon program (Hasin, 2020: 149). Given that China has clashed with the U.S. on numerous space issues, including militarization (Pekkanen, 2021), the two powerful nations’ seeming agreement on property rights suggests that it might be developing into an international norm.

Living constitutionalism and space law

The preceding sections yield three general conclusions. First, there exists general overlap in the textual methodologies employed in space law and constitutional law. Second, the historical evidence used by originalists has little use in space law, except to understand the deficiencies of legal instruments. Third, while the weight of practice is disputed in constitutional law – and when employed, usually applies only to separation-of-powers disputes – it is central to international law like space law. These conclusions suggest that the best analog to space law is not originalism, which generally stresses a fixed meaning or principle at the time of enactment, but rather the more flexible approach of living constitutionalism espoused by scholars like David Strauss.

Indeed, striking parallels exist between living constitutionalism and the development of space law, especially following the New Haven School. To start, some of the same principles are at the heart of both legal theories. For Strauss, “it is legitimate [for judges] to make judgments about fairness and policy,” based on tools and notions such as “commonsense

¹ This interpretation of Russia’s opposition was confirmed by its subsequently declared interest in mining space resources (Soldatkin, 2019).

empiricism,” “common sense, based in experience,” and “good policy” (Strauss, 2010: 39, 41, 47). Strauss’s ideas strongly resemble Hasin’s vision for “a global order for space resources.” Just as Strauss emphasizes fairness and good policy, Hasin envisions an international order built around values such as access to wealth, equity, health and safety, and human dignity (Hasin, 2020: 125-31). Meanwhile, the New Haven School’s reliance on a “full and realistic description of...power processes,” policy-oriented approach, and willingness to employ social science tools aligns well with Strauss’s focus on common sense and empiricism (Reisman et al., 2007: 575-76, 580).

The similarities between living constitutionalism and space law are also evident in the treatment of practice. As discussed in Section II.c, originalists and international lawyers view practice very differently. While Prakash strongly rejects the Executive Branch’s historical use of practice to justify expanding military powers, the Court has emphasized practice to answer separation-of-powers questions. In contrast, customary international law is itself created by practice, and scholars look to nations’ interactions and responses to identify, for example, the viability and development of international norms. Strauss’s view aligns much more closely with Hasin’s than Prakash’s: “If a practice or an institution has revived and seems to work well, those are good reasons to preserve it; that practice probably embodies a kind of rough common sense.” Thus, Strauss cites the widespread implementation of affirmative action policies as the legal basis for its practice, despite conceding a lack of “consensus on its abstract justification” (Strauss, 2010: 41-42).

A third parallel between living constitutionalism and space law is the recognition that different times require different legal rules. Central to Strauss’s argument against originalism is that one generation cannot bind a future generation, and in any event, we cannot reasonably discern how the Framers would view contemporary constitutional controversies (21-25). Hence, he advocates for a common-law approach that flexibly acknowledges and adapts to “a large, complex, diverse, changing society” (34-35). Hasin’s work in space law reflects similar principles. His citation of the O.S.T.’s Cold War context to highlight its distinct geopolitical and technological contexts parallels Strauss’s rejection of the Framers’ ideas (Hasin, 2020: 99). Meanwhile, his proposal of “a novel regime evolution approach to the regulation of space resources” revolving around four different developmental stages mirrors Strauss’s commentary on the evolutionary nature of the law (148-58).

Indeed, we are already seeing examples of space law changing with the times. The Artemis Accords of 2020 assert “that the extraction of space resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty” – a reference to the O.S.T.’s declaration that “[o]uter space, including the moon and other celestial bodies, is not subject to national appropriation” (Artemis Accords, 2020: § 10; Treaty, 1967: art. II). While scholars disagree about whether the Artemis Accords’s interpretation of the O.S.T. is correct, it is fair to say that the O.S.T. did not anticipate space mining by private companies (Hasin, 2020: 93-97). Thus, the U.S. and its allies have engaged in amendment via interpretation. Given the low likelihood of major international agreements replacing the O.S.T. soon, such amendments are likely to continue: “the Outer Space Treaty will either evolve through interpretation or be rendered obsolete in the process” (99). While living constitutionalists would celebrate this flexible approach, originalists would be appalled by the notion that the Constitution’s text could ever be obsolete and require amendment via interpretation.

This Part has highlighted similarities and differences between constitutional law and space law, shedding light on key aspects of and tools in the two fields. For constitutional

scholars aiming to wade into space law, they should explore this field with the lens of living constitutionalism's flexibility, as opposed to originalism's rigidity. However, it is unclear whether living constitutionalism includes analyses that space lawyers should add to their repertoire. To the extent that space scholars should study constitutional interpretation, it would primarily be to understand how constitutional scholars approach issues that exist in both fields – such as assessing governmental involvement or interpreting aspirational language, as discussed in Part VI. We now turn to an area in which constitutional law may be more useful: rule promulgation.

Rule promulgation: leveraging the veil of ignorance

In his 1971 book *A Theory of Justice*, philosopher John Rawls “aimed to identify fair governing principles by imagining people choosing their principles from behind a ‘veil of ignorance,’ without knowing their places in the social order” (Rawls, 1999; Huang et al., 2019: 23989). Rawls’s suggestion was simple: if an individual does not know his or her own characteristics, then he or she will not be influenced by personal biases and can focus more objectively on fairness. Rawls’s powerful idea has implications for crafting legal rules. Amar has invoked this framework to argue for constitutional amendments that “sunrise,” taking effect decades after enactment (Amar, 2012: 474-77). At the same time, Hasin highlights how “the current veil of ignorance concerning space resources” may induce “more risk averse space-capable states...to make compromises to secure other interests” (Hasin, 2020: 131). Thus, the promulgation of new space-governance regimes could draw from ideas about constitutional creation and amendment.

Before addressing the potential applications of the veil of ignorance in space law, it is worth seeing how constitutional drafters and scholars have utilized the idea. One notable and infamous example is the U.S. Constitution’s Slave Trade Clause, which declared that “[t]he Migration or Importation of [slaves]...shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight” – twenty years after the Constitution’s ratification (U.S. Constitution: art. I, § 9, cl. 1). While a short-term concession to southern states that wanted to continue importing slaves, both pro- and anti-slavery factions were amenable to this compromise, without which James Madison and Oliver Ellsworth warned the Constitution might not survive (Amar, 2006: 120). Southerners believed that the slave population would grow so large by 1808 that there would be a congressional majority against banning the slave trade, while northerners such as James Wilson predicted the opposite: that Congress would end the slave trade and establish a “foundation for banishing slavery out of this country” through “gradual change” (164). (Wilson and the northerners were correct in the end.)

Constitutional scholars have routinely used the veil-of-ignorance idea to propose corrections to various aspects of the Constitution they disagree with. For example, Amar has applied the principle to changing the U.S. Senate from a body in which every state has two senators to one that has proportional representation. He reasons that if such a change occurred with a decades-long time delay, senators from small states might be willing to consider the interests of grandchildren and great-grandchildren who may live in a large state. Given this uncertainty, senators would ideally “consider what is truly fair and just,” devoid of “biased considerations of personal self-interest” (Amar, 2012: 475). A similar principle could also be used to remove the Speaker of the House from the presidential line of succession due to constitutional concerns (Calabresi, 1995), or change the presidential election system from the

Electoral College to a popular-vote-based system. In both cases, a delayed implementation would enable politicians from both parties to set aside the short-term political implications of constitutional changes and focus on broader principles of fairness.

The above examples from U.S. constitutional law illustrate that applying the veil of ignorance to rule promulgation requires a delicate balance between certainty and uncertainty. Parties must know enough about the subject to prescribe specific rules about them – concentrating specifically on slave importation or the Senate’s composition, for example, as opposed to spouting vague principles – but have sufficient uncertainty about the outcome to prevent short-term implications from scuttling negotiations. One space-related example of the certainty/uncertainty balance leading to international agreement is the O.S.T. At the time of its agreement, the U.S. and Soviet Union knew that they were competing to land on the Moon first. Yet neither country had done so. Thus, they formed an agreement based on their mutual “fear of extraterrestrial sovereignty claims” (Hasin, 2020: 99).

Today, there are three areas in which an appropriate certainty/uncertainty balance could induce international agreement using a veil of ignorance: resources, debris, and militarization.

Starting with resources: in the first stage of international space-resource extraction, there exist sufficient quantities of resources but few parties capable of extracting them. This combination diminishes conflict such that “a claim for equal access to the resources on the market might be acceptable to the space-capable states due to the current veil of ignorance.” Because states do not know what resources they will and will not be able to extract, they have incentives to promote a free-market environment that would enable them to purchase resources that they cannot procure on their own (152). Nations not currently close to having resource-extraction capabilities might also avoid denouncing property rights to avoid hamstringing their future extraction endeavors – even if they may seem far off now. One example of this phenomenon is China’s silence on the U.S.’s 2015 assertion of property rights, given that their Moon program might eventually include resource extraction (as noted in Section II.c) (148-49).

A veil of ignorance could also lead to new rules regarding space debris. As of January 2022, there were 500,000 to 900,000 untracked items in space. A member of the International Academy of Astronautics’ Space Debris Committee quipped that “we just cross our fingers and hope we will not be hit by” them (Erwin, 2022). Yet because there have not been major space-debris disasters and all satellites in space are in theory equally likely to be hit (proportional to their size), there might be room for international cooperation to mitigate and remove space debris. All states with objects in space could be affected by debris, and without a specific accident yet, states cannot focus solely on retribution.²

Another fruitful area for a veil of ignorance to induce critical regulations is the militarization of space. As Saadia Pekkanen has highlighted, there are many unresolved legal issues in this domain, such as the definition of a space “weapon” and differentiating between civilian and military assets in space. These problems have been exacerbated by the dual-use nature of space

² One issue might be that the U.S. has a disproportionately significant number of space satellites and thus would be under pressure to commit more resources to address debris. However, it should not be afraid to make this greater commitment given that it has more at stake. More importantly, the space-debris situation is far from a climate-change scenario in which poorer, developing nations can specifically blame the carbon emissions of developed nations for causing natural disasters and requiring climate adaptation. Because there have not been any major accidents yet, Russia and China cannot plausibly blame the U.S. for all space-debris-related issues. Rather, all space-capable states are affected by a potential Kessler syndrome.

technologies accelerating military innovation and the competing blocs of U.S.-led allies on one side and Russia and China on the other (Pekkanen, 2021). While Russia raised the possibility of targeting U.S. commercial satellites used to support Ukraine in 2022, direct military conflict between powerful space-capable nations has yet to arise (Simmons & Maidenberger, 2022). The U.S., Russia, China, and other major actors should leverage this veil of ignorance – when they do not know the exact players and circumstances of a space conflict – to promulgate rules that will protect civilians.

The International Committee of the Red Cross has highlighted how “[c]ritical civilian infrastructure needed for health care, transportation, communications, energy and trade is increasingly dependent on space systems,” while “weather, communication, navigation, and earth observation/imaging satellites...contribute to every phase of humanitarian work” (International Committee of the Red Cross, 2021). Thus, clear distinctions between civilian and military objects in space are imperative, lest a nation unintentionally cripple civilian systems while seeking military advantage. To avoid such accidents, nations could agree to use some satellites solely for civilian purposes and others solely for military purposes, without any overlap. This is just one area where rules about war can be adapted to the realities of space, so that *ad hoc* regulations are not created when a military conflict occurs.

Structural differences between a constitution and international legal instruments

While constitutional law may be particularly relevant to space law in terms of rule promulgation, there are strict limits on its broader relevance—as disparities in the treatment of history and practice show. Domestic law and international law are fundamentally different. Constitutions are generally enforced by courts via judicial review and create governmental institutions with policymaking authority. Meanwhile, international law contains relatively weak enforcement mechanisms, including the potential for action by a United Nations Security Council in which the U.S., United Kingdom, France, Russia, and China all have vetoes (United Nations, 1945: arts. XXIII (1), XXV, XXVII (3)). These differences, among others, compel a space-governance regime that goes beyond just interpreting and applying legal texts. Thus, Hasin takes a “regime evolution approach” that is “feasible, effective, and manageable,” using the New Haven School’s focus on “the interactions between the various participants” (Hasin, 2020: 82, 116).

The lack of enforcement internationally is worth emphasizing. Consider the text of the O.S.T. – perhaps the most important document in space law. Article IX, in part, reads as follows:

If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space...would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space...*it shall undertake appropriate international consultations* before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space...would cause potentially harmful interference with activities in the peaceful exploration and use of outer space...*may request consultation* concerning the activity or experiment (Treaty, 1967).

To the extent that the O.S.T. anticipates conflicts between states, Article IX contains its strongest language.³ Yet the Article's requirements have very little practical significance. States could easily declare that they envision no potential harmful interference with other states and thus not proactively consult others. Even if a state requests consultation, nothing in Article IX compels it (and no other legal enforcement mechanism exists for ensuring any consultations). Moreover, there are no substantive or procedural requirements for the consultations aside from their occurrence – and crucially, no obligation to follow through on any commitments made during consultations.

Toothless language is not unique to the O.S.T.; it is common in international space-law instruments. For example, the 1972 Liability Convention requires parties to establish a Claims Commission if one year of diplomatic negotiations fails and a party requests one. However, a Commission's decision is "final and binding *if the parties have so agreed*." If such consent is not given, "the Commission shall render a final and recommendatory award, which the parties shall consider *in good faith*" (Convention, 1972: arts. XIV, XIX (2)). This "good faith" requirement is meaningless: "Where it comes to affecting policy choices of States, non-legally binding dispute settlement produces the same result as 'consultations' with the other State; very little" (Hasin, 2023: 23). With this background on enforcement (or lack thereof) in space law, we now turn to whether the O.S.T. is truly a constitution for space.

The outer space treaty as a constitution?

Numerous scholars have casually suggested that the O.S.T. is tantamount to a space constitution. Without much analysis, S. Neil Hosenball averred that "[i]t is generally accepted that the Outer Space Treaty of 1967 is the basic charter or constitution governing space activities" (Hosenball, 1979: 98). Joanne Irene Gabrynowicz more carefully called the O.S.T. "quasi-constitutional" because "it functions like a constitution for space"; any revisions would open the entire document up to change, just as a constitutional convention would (Gabrynowicz, 2006: 114). Despite this narrow area of overlap, suggestions that the O.S.T. is like a constitution reveal a fundamental misunderstanding of constitutions' roles.

There exist numerous aspects of constitutions that the O.S.T. lacks. First and foremost, the O.S.T. does not create or even discuss any governing institutions or structures – much less establish procedures for selecting officials to run such institutions. It does not include a mechanism for establishing a Claims Commission, as the Liability Convention does. Nor do all international instruments lack provisions concerning governing institutions. The United Nations Charter, for example, established various "principal organs" and provided rules for selecting members of bodies like the Security Council, in addition to highlighting the document's "Purposes and Principles" (United Nations, 1945).

Additionally, one of the central ideas of a constitution is that it is meant to be followed and respected by individuals and institutions who operate under it. The U.S. Constitution declares that it "shall be the supreme Law of the Land" (U.S. Constitution: art. VI). Although parties still claim to follow the O.S.T., few would assert that it is adhered to with the reverence that

³ Note that Article XII also includes language about consultations: "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. Such representatives shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited" (Treaty, 1967).

Americans afford the U.S. Constitution. One reason for this distinction is the O.S.T.'s absence of enforcement, as discussed in Part IV. In contrast, the Constitution provides numerous means to identify and prevent constitutional violations – including, but not limited to, judicial review (Amar, 2006: 60-63).

Furthermore, the U.S. still operates under the same basic governmental structure as it did when the Constitution started operating in 1789. There are still three branches of the federal government, with a bicameral Congress passing laws that the President signs or vetoes subject to potential congressional override (U.S. Constitution: art. I, § 7). Amendments expanding the franchise or changing the balance of federal and state powers have operated under this framework, and developments such as the growth of the administrative state or even the codification of property rights for space resources have been passed through the same lawmaking process that the original Constitution outlined.

Because the O.S.T. does not establish governing structures, its historical context is more significant. While it was driven by Cold War superpowers, today's world is markedly different. The Soviet Union does not exist, and China is arguably a more significant player in space than Russia. The number of space-capable nations has grown, and space exploration has expanded beyond landing on the Moon. Private entities play a large role in space exploration, contrary to the state-driven Cold War era. Thus, as noted in Section II.d, Hasin reasonably suggests that “the Outer Space Treaty will either evolve through interpretation or be rendered obsolete in the process” (Hasin, 2020: 99). In contrast, a claim that the U.S. Constitution could be “rendered obsolete” would be highly dubious.

If the O.S.T. is not a constitution, then what is it? One suggestion might be a super-statute akin to the U.S.'s Social Security Act of 1935, which established retirement aid and unemployment insurance, among other benefits. Just as subsequent instruments like the Liability Convention and the Artemis Accords have claimed to follow and build on the O.S.T., numerous statutes have amended the Act since its 1935 passage – most significantly the Social Security Amendments of 1965, 79 Stat. 1432 (1965), when Medicare and Medicaid were established. Yet the O.S.T. is still weaker than the Act. The Act's provisions are executed by the executive branch, subject to oversight by the legislative branch, and enforced by the judicial branch. The Act and its progeny also provide specific benefits and outline various procedures, unlike the O.S.T.'s broad declaration of principles and general requirements for consultations.

Perhaps the best comparison then is to constitutional preambles, which set out broad principles that undergird the legal regime set out by the document's body. The U.S. Supreme Court has established that the Constitution's Preamble “has never been regarded as the source of any substantive power conferred on the Government of the United States,” mirroring the O.S.T.'s lack of enforcement mechanisms. *Jacobson v. Massachusetts*, 197 U.S. 11, 22 (1905). Yet preambles are still significant in the messages they convey. The U.S. Constitution's language that “We the People of the United States...do ordain and establish this Constitution” distills the idea of popular sovereignty that undergirds the entire document (U.S. Constitution: Preamble). Meanwhile, the German Basic Law's preamble lists all the *länder* (what the U.S. would consider “states”), emphasizing the importance of federalism in Germany, while phrases in the South African Constitution's preamble such as “[r]ecognise the injustices of our past” and “[h]eal the divisions of the past” reflect the document's rejection of apartheid (Grundgesetz; S. Afr. Constitution).

Similarly, the O.S.T. establishes – in greater detail than some constitutional preambles – principles that have guided space activities since 1967. These ideals include space as “the

province of all mankind”; non-appropriation; “international peace and security...and international cooperation and understanding”; a prohibition on weapons of mass destruction in space; governmental supervision of private entities; and the return of personnel and equipment (Treaty, 1967: arts. I-VI, VIII). Indeed, framing the O.S.T. as a preamble has aesthetic beauty. It implies that humanity has the responsibility to continue developing a legal regime for outer space as new technological capabilities and geopolitical relationships arise, based on these guiding ideas. While instruments such as the Liability Convention and Artemis Accords have sought to meet this duty, we all have a role to play in shaping space activities of the present and future. After all, it is all of our “province” (art. I).

Conclusions

While constitutional law and space law are distinct legal fields, an understanding of the former provides insights into the latter. From an interpretive perspective, some overlap exists in the use of text in the two fields, but originalists stress history more and practice less than space lawyers. Thus, living constitutionalism as espoused by scholars like David Strauss provides the best parallel to space-law interpretation. However, the most useful contribution of constitutional law is in rule promulgation. Just as the Framers used and scholars have proposed leveraging a veil of ignorance to address significant issues while avoiding short-term biases, policymakers can utilize this notion to promote rules about space resources, debris, and militarization before conflicts require *ad hoc* arrangements or prevent international agreement altogether. Nevertheless, significant structural differences admonish against an indiscriminate application of constitutional law to space law, debunking suggestions that the Outer Space Treaty of 1967 (O.S.T.) is like a constitution for space. Still, viewing the O.S.T. as a preamble emphasizes humanity’s collective responsibility to continue establishing and adapting norms for the rapidly evolving realm of space.

Informed by this Article’s discussion of the appropriate consultation of constitutional law for space-law issues, future scholars can analyze issues that affect both fields. Two are worth highlighting. First, like liability shields for social-media companies raise questions about governmental involvement in their operations (Ramaswamy & Rubinfeld, 2021), disagreement exists on the extent to which corporations’ space activities can be considered governmental action (Hasin, 2020: 93-97). Second, space treaties’ aspirational language resembles positive-rights guarantees in various constitutions. Thus, the implementation of broad language like “the right to have access to adequate housing” in the South African Constitution may shed light on the O.S.T.’s language about space use and exploration “be[ing] carried out for the benefit and in the interests of all countries” and for “the province of all mankind” (S. Afr. Constitution: ch.2; Treaty, 1967: art. I).

Undoubtedly, there are more issues with potential overlap, and thorny space-law questions that we cannot imagine today will arise just a decade or two from now. Should scholars and policymakers look to constitutional law to address novel controversies—just as they have invoked the Law of the Sea – this Article can guide the appropriateness of such consultations. Regardless of the sources we turn to, future challenges for space activity require novel and creative thinking, and a willingness to embrace the responsibility of outer space being all of our “province.”

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