

Unstealing the Sky: Third World Equity in the Orbital Commons

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To whom does outer space 'belong'? This question lead to space law's first treaty provision and its most fundamental disputes, but remains unanswered. This ambiguity empowers the loudest interpreters to conquer the cosmos in plain sight – a conquest that continues today in how we read its law, how we remember its past, and how we imagine its future. Space can only be as common as its history. This counterhistory of the decade from Sputnik to the Outer Space Treaty expands our discipline's origin story. Through reviving these histories, we can see the space commons which might have been, and reimagine the scope of our law's potential.

Keyword: outer space law, history, global commons, TWAIL, environmental law

'To pretend that the status quo must endure forever, knowing that it is palpably wrong and unjust, is to fly in the face of history and ask the impossible'.¹

Ahmed Yusuf Dualeh, Somalia (1964)

Without turning away from the colonial forms of humanity and nature, we cannot envision a future that is more than the past and present repackaged.²

Natalie B. Treviño (2020)

1 INTRODUCTION

To whom does the outer space around Earth 'belong'? This question brought about space law's first treaty provision and its worst disputes,³ but it remains without definitive answer. Whoever asks must implicitly decide who 'we' excludes and what 'belonging' means. They choose whether to ask a tool or weapon; they create borders and entitlements at will. In this Article I will argue that this question has empowered the loudest interpreters to conquer the cosmos in plain sight. This conquest of space continues today in how we read its law, how we remember its past, and how we imagine its future.

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¹ United Nations General Assembly (4 Dec. 1964) UN Doc A/PV.1290, 7 (Somalia).

² Natalie Treviño, *The Cosmos Is Not Finished* 2020.

³ 1 Cologne *Commentary on Space Law* 27 (Stephan Hobe et al. eds, 2009).

The story of space law is told as a duologue between West and East, with the Global South casted as objects or proxies in battles fought literally and conceptually ‘over their heads’. In this binary framing, the South become either tokens or revolutionaries, their involvement a product of solidarity or charity.⁴ Either way, the Global South remains peripheral, discussed only in relation to Power(s). In short, epistemologically space was long ago colonized.⁵

I have tried to orient this argument from Global South practice and perspectives on the space commons. Highlighting these histories opens possibilities and contingencies of modern space governance underrepresented in current scholarship. But even as this approach reveals, it hides. The epistemic locations of ‘Global South’ and ‘Third World’, contrasted to ‘Global North’,⁶ are not metonymous to ‘non-spacefaring states’. Their use artificially conflates Western and Eastern views on the space commons and elides complex tensions between Africa and Latin America and between states and indigenous peoples.⁷ Finally, this Global South–North lens eclipses China and India, which began the Space Age within the Global South but are now among the most important space actors.

2 THE PROBLEM

2.1 THE ISSUE OF SPACE DEBRIS

Low earth orbit (LEO)⁸ is humankind’s most valuable construction site. For the Global South, LEO has immense human development potential,⁹ while the North has increasingly valued its commercial and critical infrastructure benefits.¹⁰ This leaves LEO highly competitive to private industry, with the most active, SpaceX’s Starlink, launching bimonthly throughout 2020.¹¹

⁴ Manfred Lachs, *The Law of Outer Space: An Experience in Contemporary Law-Making* 130 (2 ed., Tanja Masson-Zwaan & Stephan Hobe eds, 2010); Nandasiri Jasentuliyana, *International Space Law and the United Nations* 130–139 (1999); Bin Cheng, *The Contribution of Air and Space Law to the Development of International Law*, 39 *Curr Leg Probl* 181–210, 190 (1986).

⁵ Matt Craven, ‘Other Spaces’: *Constructing the Legal Architecture of a Cold War Commons and the Scientific-Technical Imaginary of Outer Space*, 30 *EJIL* 547, 569 (2019); Treviño, *supra* n. 2, at 78.

⁶ James Thuo Gathii, *Promise of International Law: A Third World View*, 114 *ASIL Proc* 165–187, 17–24 (2020).

⁷ Liliana Obregón, *Latin America During the Bandung Era: Anti-Imperialist Movements v. Anti-Communist States*, in *Bandung, Global History, and International Law: Critical Pasts and Pending Futures* (Luis Eslava, Michael Fakhri & Vasuki Nesiiah eds, CUP 2017).

⁸ The area within 2000 kilometres of sea level.

⁹ Vikram A Sarabhai, *Remarks* (Dedication Ceremony of the Thumba Equatorial Rocket Launching Station, Thumba, Thiruvananthapuram 2 Feb. 1968).

¹⁰ Space Infrastructure Act, HR 3713, 117th Cong (2021) (US); Endless Frontier Act, s. 1260, 117th Cong., §623(a) (2021) (US); Security Legislation Amendment (Critical Infrastructure) Bill 2020 (Cth) Sch. 1 items 18, 21 (Australia).

¹¹ Mike Wall, *SpaceX’s Very Big Year*, Space.com (28 Dec. 2020).

These satellites arrive in an already-busy realm. Four of five tracked objects orbiting Earth are non-maneuvrable debris,¹² and 66% of orbital objects move through LEO at modal average relative velocities twenty times faster than an AK-47 bullet.¹³ At hypervelocity, millimetres can destroy satellites – but in LEO only objects larger than ten cm are trackable, leaving an estimated million objects invisible.¹⁴ This debris could last years at 600 km, or centuries above 800 km,¹⁵ and cannot yet be removed.

There are no binding international rules for space debris; the sustainability of orbit entirely depends on states voluntarily implementing international guidelines.¹⁶ This mainly addresses a few states – the United States, Russia, and China have jurisdiction over 89% of all space objects, 73% of active satellites, and 93% of all orbital debris.¹⁷ The entire Global South controls 5% of active LEO satellites; the US alone regulates 60%.¹⁸ The governance of critical orbits is left to a spaceborne few.

2.2 MAKING SPACE FOR HISTORY IN ORBIT

Was this the space governance reality that the Outer Space Treaty (OST) intended? Does intent matter? History can impact doctrinal law in cases of unclear interpretation or ambiguous custom.¹⁹ But history is not law – the latter considers the parties' intention(s) *through*, not *separate from*, the text.²⁰

Past norms not codified into law were not born from the ether nor returned to it; they exist in the past tense because they were actively repressed.²¹ The law of the space commons is contingent upon its history, and how we interpret it is

¹² T. S. Kelso, *CelesTrak*, CelesTrak (2021), <https://celestrak.com/> (accessed 13 Dec. 2021).

¹³ ESA, *Space Environment Statistics* (9 Nov. 2021), <https://sdup.esoc.esa.int/discosweb/statistics/> (accessed 13 Dec. 2021); modal velocity derived from 'Conjunction Streaming Service Demo' (13 Dec. 2021), <http://astriaccs03.tacc.utexas.edu/ui/min.html> (accessed 13 Dec. 2021).

¹⁴ *Ibid.*

¹⁵ J. C. Dolado-Perez, Carmen Pardini & Luciano Anselmo, *Review of Uncertainty Sources Affecting the Long-Term Predictions of Space Debris Evolutionary Models*, 113 *ACTA Astronautica* 51–65, 53 (2015).

¹⁶ UNCOPUOS, 'Compendium of space debris mitigation standards' (4 June 2021) A/AC.105/C.2/2021/CRP.19.

¹⁷ At current growth rates, the above figures have undoubtedly risen. Kelso, *supra* n. 12; US Air Force, *Space-Track.Org* (Space Track 13 Dec. 2021), <https://www.space-track.org/#boxscore> (accessed 13 Dec. 2020).

¹⁸ *Ibid.*, 'Global South' excluding China.

¹⁹ Y Dinstein, *The Interaction Between Customary International Law and Treaties*, 322 *Recueil des Cours* 247, 361–363 (2007).

²⁰ *Iran v. United States (Case No A/18)* (1984) 5 Iran-USCTR 251, 260. Cf. European Communities: Customs Classification of Certain Computer Equipment – Report of the Appellate Body (5 June 1998) WT/DS62/AB/R, WT/DS67/AB/R, WT/DS68/AB/R, [93].

²¹ Albert O Hirschman, *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph* 131 (1977).

political. We draw borders between *lex lata* and *ferenda* based on which histories we conserve and canonize into international law's origin story. By acknowledging that, we empower the question 'what if?' to substantially reframe what is and what could be.²² Doing so prevents today's beliefs from becoming tomorrow's ideology, exposes where past ideology has become orthodoxy, and enables significant change to the possible.²³ In short, I am asking which historical actors used law how and why, and how law could have been 'within and against its context'.²⁴

Space law is focused on the future and vehemently 'dynamic' in the present, but too often forgets its past. By critically assessing the orbital commons, I hope to expose three dominant myths approaching orthodoxy: that space is without history, without victims, and without rules.²⁵ These assumptions erase the Global South's consistent contributions to 'global' commons governance.²⁶ The following section will examine this history with an eye to current developments that might reframe space commons discourse. The final section will move from history to what could have been, had Global South space practice been considered.

3 THE PROMISE

3.1 ARTICLE I OST

The first two paragraphs of Article I of the OST play a key role in creating space as a global commons.²⁷ They read:

"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.

Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies."²⁸

²² Ingo Venzke, *Situating Contingency in the Path of International Law*, in *Contingency in International Law 7* (Ingo Venzke & Kevin Jon Heller eds, OUP 2021).

²³ Ingo Venzke, *Possibilities of the Past: Histories of the NIEO and the Travails of Critique*, 20 JHIL 263, 28 (2018).

²⁴ *Ibid.*, at 25.

²⁵ Or, put differently, without precedent, people disenfranchised, and applicable law.

²⁶ Karin Mickelson, *Common Heritage of Mankind as a Limit to Exploitation of the Global Commons*, 30 EJIL 635, 661 (2019).

²⁷ Alongside the principle of non-appropriation (Art. II), the applicability of international law (Art. III), and the duties of international cooperation and due regard (Art. IX).

²⁸ The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (signed 27 Jan. 1967, entered into force 10 Oct. 1967) 610 UNTS 205, Art. I.

This provision should be read as a battlefield, a site of hegemonic contestation fought with normative weaponry.²⁹ Buried within OST article I are artefactual remnants of two opposing values: that states should freely use space, and that they should do so equitably. But law ‘cannot be “legal” if it is open to all meanings’, or to ambivalent ones.³⁰ Modern interpretations read freedom as a rule and equity as a principle, the former emphasized over the latter.³¹ Is this interpretation ‘right’? Whose law gets to be binding?³²

3.2 A (COUNTER)-HISTORY OF THE COMMONS

‘If we are to have a chance of grasping what is at stake in the present contestation, we need to better understand the battles that went before’.³³ But historical description is worldmaking, and here my choice of frame necessarily influences the picture: ‘no context speaks for itself, nor are its boundaries given’.³⁴ In the interest of space, I have chosen not to reiterate the well-told. The orthodox story of the space commons is a trilogy that begins in 1967 with the common heritage of mankind, then the Bogota Declaration, and ends with the Moon Agreement and its failure. This framing packages Global South contributions into a story we know to be a tragedy. By looking before 1967 and focusing on Global South practice, I hope to add to the space law canon and contest those narratives we take for granted.

Before the mid-1950s, space commons discourse lived largely within Northern academia.³⁵ The space debates moved to international fora in the later 1950s: the International Civil Aviation Organization in 1956,³⁶ followed by the International Law Association in September 1958.³⁷ The space debates came to the

²⁹ Martti Koskenniemi, *International Law and Hegemony: A Reconfiguration*, 17 Cambridge Rev. Int’l Affairs 197–218, 199 (2004).

³⁰ Oscar Schachter, *Metaphor and Realism in International Law*, in *STUDI DI DIRITTO INTERNAZIONALE IN ONORE DI GAETANO ARANGIO-RUIZ*, 213 (2004).

³¹ 1 Cologne, *supra* n. 3.

³² Koskenniemi, *supra* n. 29 at 206.

³³ Nehal Bhuta, *Preface*, in *The Battle for International Law: South-North Perspectives on the Decolonization Era* (Jochen von Bernstorff & Philipp Dann eds, OUP 2019).

³⁴ Venzke, *supra* n. 22 at 20.

³⁵ Ralph Andrew Smith, *Man and His Mark*, 8 J. Brit. Interplanetary Soc’y 131–132 (1949); Lionel Laming, *L’Astronautique* 94 (1950); Oscar Schachter, *Who Owns the Universe?*, in *Across the Space Frontier* (1952); Joseph Kroell, *Éléments Créateurs d’un Droit Astronautique*, 16 Revue Générale de l’Air 233 (1953).

³⁶ ICAO (LC) (1956) ICAO Doc A10-WP/30, LE.1, para. 157; proposed by Secretary Roy (India).

³⁷ ILA, *Report on Sovereignty and the Legal Status of Outer Space*, in *ILA Report of Its 48th Conference* 12, 246–247, 330 (New York 1958) (ILA London 1958).

United Nations General Assembly (UNGA) that November, following requests by both Powers,³⁸ and to a specialized committee in May 1959.³⁹

This discourse entered a rapidly changing world. Between Sputnik and the OST's signature, UN membership increased by half with formerly colonized states. By 1960, the Global South outnumbered the North for the first time in history – and this trend only continued.⁴⁰ But four specific shifts within the Global South set the stage for the space debates. First, solidarity with and within the Global South crystallized at conferences in Bandung (1955), Accra (1958), Belgrade (1961), and Cairo (1964),⁴¹ providing fora to discuss space governance as colonial or nuclear disarmament issues. Second, the International Geophysical Year (1957–8) and launch of Sputnik (1957) enabled unprecedented North–South scientific cooperation.⁴² Third, subsequent Earth imaging post-1957 gave the world ‘a glimpse of ourselves in relation to the universe’⁴³ – but where some in the South saw one world,⁴⁴ the North saw three.⁴⁵ And fourth, by 1960 the Global South was home to extensive commons expertise. Latin American ‘*ius gentium*’ had been honed by the Antarctic debates (1958–1959),⁴⁶ and Africa had centuries of expertise in communal land and resource management.⁴⁷ From the North, space seemed beyond Global South reach, but they had stakes in its law nonetheless.

Of course, the Global South had myriad approaches to space and the Space Age. For some, space was a springboard to independence⁴⁸; for others it distracted

³⁸ USSR (15 Mar. 1958) A/3818; USA (2 Sept. 1958) A/3902.

³⁹ Ad Hoc COPUOS (6 May 1959) A/AC.98/SR.1, pursuant to UNGA Res 1348 (XII) (13 Dec. 1958) A/Res/1348(XII).

⁴⁰ Ram S. Jakhu, *Developing Countries and the Fundamental Principles of International Space Law* 354 (1982).

⁴¹ Second Conference of Non-Aligned Countries (10 Oct. 1964) NAC-II/HEADS/5, 22–23 (addressing space benefit-sharing).

⁴² UNGA (1st Comm), (14 Nov. 1958) A/C.1/PV.985, 23–25 (Peru): ‘The [IGY] was a very clear-cut example of the possibilities of co-operation in matters of this – co-operation even between countries that are separated by the most profound ideological differences’.

⁴³ Malvina Lindsay, *Man's Role in Space – Question of 1957*, *The Washington Post* 8 (31 Dec. 1956).

⁴⁴ Kenya H Rep 23 Sept. 1965 vol 6 cols 470–471 (Upon the visit of two astronauts: ‘We understand that on many occasions during their star-like flight they viewed our country from outer space; and we hope that they will now enjoy this closer acquaintance with us’).

⁴⁵ Tariq Jazeel, *Spatializing Difference Beyond Cosmopolitanism: Rethinking Planetary Futures*, 28 *Theory, Culture & Society* 75–97, 79–85, 93–95 (2011).

⁴⁶ Including Chilean delegate Óscar Pinochet de la Barra, an expert on Antarctic sovereignty.

⁴⁷ Taslim Olawale Elias, *The Nature of African Customary Law* 163 (Manchester University Press 1956); Edwin Egede, *The Common Heritage of Mankind and the Sub-Saharan African Native Land Tenure System: A ‘Clash of Cultures’ in the Interpretation of Concepts in International Law?*, 58 *J Afr L* 71 (2014).

⁴⁸ Kenya Legislative Council (Comm Ways & Means) 30 May 1961, vol 87 col 600 (‘Sir, we are living in the space age, the era of the astronaut and I should like to think in terms of space rather than time as applied to independence’); Kenya National Assembly 5 July 1970, vol 20 cols 2252–2253.

from it.⁴⁹ Space evidenced global inequality,⁵⁰ but also enabled progress.⁵¹ But above all, space was ‘an area in which the small and medium-size[d] Powers [were] properly concerned and want[ed] their voices heard’.⁵² The South, well-acquainted with colonial resource-grabs, hoped that space would be different.

But while orthodox histories laud the Global South’s impacts on the ‘common effort’ of space law,⁵³ their real impact was limited. Until 1974, the Space Debates were an extremely exclusive affair. The US and USSR negotiated the states invited to the (*ad hoc*) UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) in 1958 to counter each other, and again in autumn 1959 based on who supported which China.⁵⁴ Between Sputnik and UNCOPUOS’ first full meeting in 1962, African UN membership doubled to comprise one third of the total. Still, Western states, especially Australia, questioned ‘why the basic composition of the Committee, which had been accepted in advance by the Soviet Union and the United States, should be changed’, as adding two African states would surely account for the increase.⁵⁵ From 1958 to 1974, only four of twenty-eight members were African states. Of them, Morocco and Sierra Leone each spoke once; Chad never spoke, and was so often absent it was repeatedly omitted from the credential list in final reports.⁵⁶ Among the Global South’s most intricate views on space are in the General Assembly record,⁵⁷ despite UNCOPUOS’ later claims to ‘geographic equity’,⁵⁸ because they were considered scientifically incapable of direct contribution to space law.

Second, not everyone’s voice was welcome. The Global North saw a ‘danger resulting for the unity and universality of international law from the sudden

⁴⁹ Kenya National Assembly, 11 Dec. 1970, vol 21 cols 3022–3033 (concerned a US launch from Kenya would distract from its sixth Independence Day).

⁵⁰ Namwali Serpell, *The Zambian ‘Afronaut’ Who Wanted to Join the Space Race*, *The New Yorker* (11 Mar. 2017).

⁵¹ Sarabhai, *supra* n. 9.

⁵² UNGA (1st Comm), (17 Nov. 1958) A/C.1/PV.986, 62 (Brazil).

⁵³ UNGA (1st Comm), (17 Dec. 1966) A/C.1/PV.1492, 21 (USA); Lachs, *supra* n. 4 at 130; Jasentuliyana, *supra* n. 4 at 130–139.

⁵⁴ See Telegrams (9 Sept–12 Dec. 1958) FRUS 1958–1960 vol 2, docs 443–454.

⁵⁵ UNGA (5 Dec. 1961) A/C.1/SR.1211, 252 (Australia).

⁵⁶ In 1962, Chad had just one Representative to the S&TC: Telegram from Tubby to Secretary of State (8 June 1962), and none to the LSC. Chad was omitted from the credential list in 1964(1) and 1968: UNCOPUOS (LSC), (20 June 1962) UN Doc A/AC.105/6, Annex, 1; UNCOPUOS (LSC), (26 Mar. 1964) UN Doc A/AC.105/19, Annex III, 2; UNCOPUOS (LSC), (11 July 1968) UN Doc A/AC.105/45, Annex IV, 3. ‘Of the six Middle Eastern and African countries which are members of the Subcommittee, only Iran and the United Arab Republic were represented at this Session. Representatives of Sweden and Brazil were present only during the last few days of the Session and took no part in the work of the Subcommittee’. Report of the US Del to the 2nd Session of [S&TSC of UNCOPUOS] (24 June 1963) FRUS 1961–1963 Vol XXV, Doc 426.

⁵⁷ Including El Salvador, Liberia, Peru, and Haiti.

⁵⁸ UNGA (1st Comm), (5 Dec. 1961) A/C.1/SR.1214, 269 (France) (justifying COPUOS selection based on ‘geographical distribution and capacity to contribute to the common task’, emphasis added).

appearance of new States, whose representatives are often without any legal knowledge at all'.⁵⁹ Having spent centuries preventing African legal education, the same Powers now excluded them from international legal fora, finding their experts 'could not be recommended for election [as International Law Institute members] on the basis of their scientific production'.⁶⁰ This silencing was most evident in the OST's negotiation. The US and USSR negotiated nearly all of the OST bilaterally and in secret during the second half of 1966, derived from a Declaration made the same way.⁶¹ The US then consulted the UK, Canada, Australia, and France; then Legal Sub Committee (LSC) Chair Kurt Waldheim, and then a select group which excluded Egypt, Morocco, Sierra Leone, Chad, and India.⁶² This effectively prevented the Global South from meaningful contribution to the OST – changes to the pre-negotiated draft required both Powers' approval.⁶³

Third, though UNCOPUOS decided by consensus after 1962, this did not equalize latent power asymmetries. American and Soviet approval was an open prerequisite,⁶⁴ allowing them to draft most of the OST in secret.⁶⁵ The North continued to violently intervene in Global South states,⁶⁶ target the South with nuclear bombs, torture, and killings,⁶⁷ and deploy regional organizations to undermine African-Latin American solidarity.⁶⁸ Whereas law proposed by the North has become 'universal' and 'instant custom',⁶⁹ the South's has become forgotten. The Global South's role in the space debates *was* unprecedented – but nevertheless, Northern hegemony persisted.

⁵⁹ As International Law Institute President Henri Rolin told the ILA shortly before debating the space commons: *Inaugural Meeting Part II: Report*, 50 ILA Rep 1, 12–13 (1962); See generally: George Galindo & César Yip, *Customary International Law and the Third World: Do Not Step on the Grass*, 16 Chinese J. Int'l L. 251 (2017).

⁶⁰ *Ibid.*; Clinical Legal Education in Africa, in *The Global Evolution of Clinical Legal Education: More than a Method* 205–232, 208–210 (Richard J. Wilson ed., 2017).

⁶¹ The 1963 Declaration was also drafted bilaterally in secret, though the US consulted its 'Western Twelve', which sometimes, but not always, included Brazil and Argentina. Tubby to Sec Rusk (1 June 1962) JFK Lib 308 Box 4, 43–46.

⁶² The so-called 'Friendly Fifteen' often excluded Sweden, Lebanon and Iran: Telegram from the State Department to US Delegation to the UN, 'Celestial Bodies Treaty' (10 May 1966) FRUS 1964–1968 vol 11, doc 128.

⁶³ The sum total of successful Global South contribution to the final OST is nine words, added to Art. I by Brazil ('irrespective of their degree of economic or scientific development'): Memo from Roger Tubby to Secretary Dean Rusk, 'Outer Space Legal' 2 (19 July 1966).

⁶⁴ UNCOPUOS (13 Sept. 1962) A/AC.105/PV.13, 7 (India) ('no solution which is not acceptable to the two space powers can be implemented. At the same time, we, the other countries, are also equally interested ...').

⁶⁵ Cheng, *supra* n. 4.

⁶⁶ Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (CUP 2005).

⁶⁷ Jochen von Bernstorff & Philipp Dann, *The Battle for International Law: An Introduction*, Battle for Int'l L. 17–19 (OUP 2019).

⁶⁸ Obregón, *supra* n.7.

⁶⁹ Outer Space Law, in *Customary International Law in Times of Fundamental Change: Recognizing Grotian Moments* 123–138, 133–137 (Michael P. Scharf ed., 2013).

3.3 THE PROMISE OF ARTICLE I OST

This was the landscape upon which the battle for the space commons was fought. On one side was unrestricted free use of outer space, on the other the equitable use of space to benefit all of humanity. To balance these ideals, a promise was made – Article I OST. In the (summarized) words of UNCOPUOS Chair Manfred Lachs:

States' freedom of activity in outer space was further limited by the requirement that its exploration and use must be for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development. Not only must States not abuse their rights, but they must respect those of others. Science should be used for all mankind and those unable to explore or use outer space should not be deprived of its benefits.⁷⁰

The Global South *thought* they had concluded a provision in which equity limited freedom. That impression rested upon fifteen years of Global North assurances. These included Oscar Schachter's 1952 promise that '[a] legal order would be developed on the principle of free *and* equal use',⁷¹ an American General Assembly (GA) speech calling for 'an equitable sharing of benefits ... [and burdens] from all operations in space', which 'cannot be anyone's private reserve',⁷² President Johnson's 'invitation to all nations to join together to make this adventure a joint adventure ... for all mankind – and what they find belongs to all mankind',⁷³ and a US Senate Report concluding that 'international control and limitation to permit equitable and coordinated use and avoiding abuse and conflict is necessary'.⁷⁴

But for the Global South, 'it was not enough for the world community to obtain assurances from the space Powers'.⁷⁵ The OST's very purpose was to transform recommendations and rhetoric into binding principles.⁷⁶ The Global South argued throughout the space debates for an equitable balance of rights and obligations among North and South.⁷⁷ These interventions appeared successful; just before the OST's conclusion, the American delegate described the Promise of Article I as 'the intent of the treaty' and a 'strong safeguard' for non-spacefaring states to ensure space remained 'open not just to the big

⁷⁰ UNGA (1st Comm), (16 Dec. 1966) A/C.1/SR.1491, 418 (Poland).

⁷¹ Schachter, *supra* n. 35, at 17 (emphasis added).

⁷² UNGA (1st Comm), (11 Dec. 1959) A/C.1/PV.1079, 3 (USA).

⁷³ Lyndon B. Johnson, *Remarks on the Successful Flight of Gemini V* (Johnson City, Texas 29 Aug. 1965).

⁷⁴ Eilene Galloway, *Legislative Reference Service, Legal Problems of Space Exploration: A Symposium* (22 Mar. 1961) Sen Doc 87–26, 906.

⁷⁵ UNCOPUOS (LSC), (12 July 1966) A/AC.105/C.2/SR.57, 20 (India).

⁷⁶ UNGA (1st Comm), (17 Dec. 1966) A/C.1/PV.1492, 48–50 (Austria).

⁷⁷ *Ibid.*, at 66 (Brazil).

Powers or to the first arrivals, but ... available to all, both now and in the future'.⁷⁸

3.4 'RES COMMUNIS' FROM BELOW

'*Res communis*' is not an international legal rule, but a container for rules – without contents, it is as binding as a Harry Potter spell. But the language of the commons lacks common language, and *res communis* especially obfuscates more than it clarifies. Before 1900, terms like the 'property of mankind' referred to intangibles – arts or sciences, not areas.⁷⁹ This language became territorial in the early 1900s,⁸⁰ and became prolific through UN debates over Antarctica, air, and sea.⁸¹ The resulting terminological and normative surplus surrounding the commons caused significant confusion throughout the space debates.⁸² Unfortunately, *res communis* became the catch-all for the wide normative landscape of the commons.

Originally, space as *res communis* was a Northern proposal, but the South readily embraced it. This was a quiet but powerful change. The North had for centuries wielded cosmopolitan ideas like humanity as a dispossessory weapon of Empire;⁸³ to quote the famously inhumane, 'whoever invokes humanity wants to cheat'.⁸⁴ In the space debates, the usual tools of Northern imperialism – humanity,⁸⁵ civilization,⁸⁶ and jurisdiction⁸⁷ – were briefly in Southern hands. The Global South's *res communis* cited Roman law, but also included what they considered 'existent rights or at the least essential rules' to counter the danger of free (ab)use.⁸⁸ The South, worried *res communis* would become a buzzword, insisted on clarifying its meaning so it was 'not used ad-lib but rather within a system imposed by the international community'.⁸⁹ Four elements

⁷⁸ *Ibid.*, 16 (USA).

⁷⁹ *The Marquis de Somerueles*, Vice-Admiralty Court of Halifax (1813) Stewart 482.

⁸⁰ Thomas Willing Balch, *The Arctic and Antarctic Regions and the Law of Nations* 4 AJIL 265, 275 (1910); Paul Fauchille, *Traité de Droit International Public*, vol 1 658–659 (8th edn 1925).

⁸¹ Nicolas Mateesco, *A qui appartient le milieu aérien?*, 12 *Revue du Barreau de la Province de Québec* 240–242 (1952); UN Conf. on the Law of the Sea (24 Feb. 1958) A/CONF.13/SR.1, 3 (Thailand).

⁸² Terms included references to 'property', 'heritage', 'patrimony', and 'interests' of 'mankind', 'states', and 'humans'. Henry R. Hertzfeld, Brian Weeden & Christopher D. Johnson, *How Simple Terms Mislead Us: The Pitfalls of Thinking About Outer Space as a Commons*, 15 in *Int'l Astronautical Congress* (2015).

⁸³ I. Porras, *Appropriating Nature: Commerce, Property, and the Commodification of Nature in the Law of Nations*, 27 LJIL 641 (2014).

⁸⁴ Carl Schmitt, *The Concept of the Political: Expanded Edition* 54 (2008).

⁸⁵ *Ibid.*, at 54.

⁸⁶ Ntina Tzouvala, *Capitalism As Civilisation: A History of International Law* Ch 1, 4 (CUP 2020).

⁸⁷ Nurfadzilah Yahaya, *The European Concept of Jurisdiction in the Colonies* in *The Oxford Handbook of Jurisdiction in International Law* (Stephen Allen et al. eds, OUP 2019).

⁸⁸ Philip Jessup & Howard Taubenfeld, *Controls for Outer Space and the Antarctic Analogy* 258 (ColUP 1959).

⁸⁹ UNGA (1st Comm), (19 Nov. 1958) A/C.1/PV.990, 52 (Peru).

of the Southern definition – equitable benefit-sharing, environmental protection, international jurisdiction, and collective rights – are especially interesting in hindsight. They form the elements of the Common Heritage of (Hu)mankind,⁹⁰ a norm space lawyers generally consider anachronistic to the OST.

3.4[a] *Equity*

The equitable distribution of space benefits initially seemed to find unanimous support,⁹¹ until the South asked what that entailed. For them, equity turned on colonialism – space was inaccessible because they lacked material resources,⁹² not scientific capacity.⁹³ If space engaged global interests, they argued, all states should regulate and benefit from it.⁹⁴ For states like Egypt, equitable benefit-sharing meant scientific collaboration in scientific progress that was not neutral or Northern, but something they began and later suffered under as justification for colonial oppression.⁹⁵ Other states understood benefits as space resources, including minerals.⁹⁶ States with recent first-hand experience of colonial exploitation worried a space free for all meant a space free-for-all, to Southern disadvantage. This was not lost on Northern states – a British Parliamentarian asked pointedly if the United States presumed ‘the right to treat the Universe as if it belonged to them – like some Latin-American State?’⁹⁷ As Peruvian Representative Belaúnde said:

If a Power were, by some means, to dominate outer space, that same power would also control the earth. I do not think that I need dwell on this point, but I believe that all are aware of the danger inherent in the domination by one power of the whole earth ... an imminent danger under which, unfortunately and tragically we have lived, and are still struggling.⁹⁸

Crucially, the Global North worried benefit-sharing was a euphemised ‘free ride’,⁹⁹ but for the Global South, ‘equity’ entailed distributing the prizes *and* prices of space exploration. Future Argentinian Representative Cocca argued

⁹⁰ Wolfrum, *Common Heritage of Mankind*, Max Planck Encyclopedia Pub. Int’l L. 1 (2009).

⁹¹ UNGA (1st Comm), (11 Dec. 1959) A/C.1/PV.1079, 3 (USA).

⁹² UNGA (1st Comm), (14 Nov. 1958) A/C.1/PV.985, 26 (Peru).

⁹³ As some regularly argued: Ad hoc UNCOPUOS (LSC), (23 June 1959) A/AC.98/PV.5, 4 (Australia).

⁹⁴ *Ibid.*, UNGA (1st Comm), (11 Dec. 1961) A/C.1/SR.1214, para. 23 (Brazil).

⁹⁵ UNGA (1st Comm), (20 Nov. 1958) A/C.1/PV.992, 18–20 (El Salvador) (the North ‘must understand that they owe a debt to humanity and ... find ways to face and solve the various problems arising from scientific progress’); UNGA (1st Comm), (5 Dec. 1961) A/C.1/PV.1211, 59–61 (UAR). See also Kai Horsthemke, *Indigenous (African) Knowledge Systems, Science, and Technology*, in *The Palgrave Handbook of African Philosophy* 585–603, 586–590 (Adeshina Afolayan & Toyin Falola eds, 2017).

⁹⁶ UNCOPUOS (LSC), (6 July 1967) A/AC.105/C.2/SR.82, 5 (Argentina); Saligram Bhatt, *Legal Controls of the Exploration and Use of the Moon and Celestial Bodies*, 8 *IJIL* 33–48, 47 (1968). (‘The exhaustible resources such as strategic minerals, etc., will be a likely bone of contention’).

⁹⁷ HL Deb 16 May 1963, vol 677, col 1540.

⁹⁸ UNGA (1st Comm), (5 Dec. 1961) A/C.1/PV.1211, 41, 47 (Peru).

⁹⁹ Treaty on Outer Space: Hearings Before the Committee on Foreign Relations, 19 Cong. (1967), 10.

‘products obtained must be shared, not only from a scientific or cultural point of view, but also from a commercial or industrial ... and all Nations should take part in ... all the expenses involved’.¹⁰⁰ Sub-Saharan Africa were silenced from the space debates, but may have agreed, citing approaches to humanity like Ubuntu, a Bantu concept which conditions humanity on respect for that of others, in support of more equitable resource management.¹⁰¹

3.4[b] *Environmentalism*

For the South, *res communis* ensured they would not inherit an irreparably polluted space. Contrary to orthodox belief, space was framed as an environment throughout the space debates.¹⁰² This concern solidified as the Space Age and environmental movements co-developed throughout the 1960s.¹⁰³ Following Project West Ford, a classified American experiment that launched tiny copper ‘needles’ into orbit, international lawyers, scientists, and newspapers rejected a ‘United States right unilaterally to make changes in the space environment of this planet’.¹⁰⁴ This fallout caused the State Department to instruct its UN representatives to prevent discussion of space ‘pollution’ in the 1962 UNGA and UNCOPUOS meetings,¹⁰⁵ as ‘these issues are extremely complex and lend themselves particularly to emotional and uninformed reactions’.¹⁰⁶ This involved consciously framing debate in terms of ‘contamination’ and ‘traffic’,¹⁰⁷ rather than space ‘pollution’, which the State Department considered inevitable.¹⁰⁸ When, in secret bilateral negotiations of what would become the Declaration

¹⁰⁰ Aldo Armando Cocca, *General Principles for the Utilization of Outer Space: Determination of the Meaning of the Expression Res Communis Humanitatis in Space Law*, 6 in Proc. on L. Outer Space 1–6, 4 (1964).

¹⁰¹ Edwin Etieyibo, *Ubuntu, Cosmopolitanism, and Distribution of Natural Resources*, 46 *Philosophical Papers* 139–162, 150–151 (2017).

¹⁰² Editorial, *More Lunacy*, *Rand Daily Mail* 8 (5 Sept. 1951).

¹⁰³ Lisa Ruth Rand, *Orbital Decay: Space Junk and the Environmental History of Earth's Planetary Borderlands* (1 Jan. 2016), <https://repository.upenn.edu/edissertations/1963/>; Eilene Galloway, *Perspectives of Space Law*, 9 *J. Spacel.* 21–30, 25 (1981). *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)*, (Sep. Op. Judge Cançado Trindade) [2010] ICJ Rep 135, para. 59.

¹⁰⁴ Institut de Droit International, ‘The Legal Regime of Outer Space’ (1963), para. 12; International Astronomical Union, ‘Resolution No. 1’ (1961) 6 Proc IAU 4; this also included the International Union of Radio Science, the International Council of Scientific Unions, and national scientific and astronomical societies in France, Belgium, America, and Britain.: Rand, *supra* n. 103, at 105; Bernard Lovell, *The Challenge of Space Research*, 195 *Nature* 935–939 (1962); *The New York Times*, *More Needles in Space*, *The New York Times*, 8 May 1963, at 1.

¹⁰⁵ ‘Position Paper: Initial Meeting of the UNCOPUOS, US Military Space Activities’ (14 Mar. 1962) CREST RDP6600638000100150082-7; Memo of Conversation, ‘US Strategy at the 17th GA’ (21 Aug. 1962) FRUS 1961–1963 vol 25, doc 217; Telegram from Charles Noyes to Secretary Rusk (31 Aug. 1962) JFK Library NSF Box 308, Box 5, 36–37.

¹⁰⁶ ‘Position Paper: Initial Meeting of the UNCOPUOS’ (13 Mar. 1962) RDP66R00638R000100150075-5, 6.

¹⁰⁷ ‘US Military Space Activities’ (14 Mar. 1962) CREST RDP6600638000100150082-7.

¹⁰⁸ Memo for DCI John McCone (9 June 1962) CREST RDP80B01676R002900240020-5.

of Legal Principles, the Soviets proposed a clause explicitly calling space an ‘environment’, the US refused outright.¹⁰⁹

States North and South alike read free use in this environmental context – as a meaningless norm if one state could impair the rest’s ‘actual or potential use’ of space.¹¹⁰ But space environmentalism was often advanced by Global South states familiar with colonialism’s environmental cost. India insisted on binding rules to prevent ‘[t]he possibility that the future of mankind might be jeopardised by a single act of negligence’ by a state,¹¹¹ and Indian national press discussed the environmental costs of spaceflight from 1964.¹¹² African environmentalisms formalized quickly after independence,¹¹³ incorporating centuries of communitarian resource management and philosophies like Ubuntu.¹¹⁴ As Liberia reminded the GA, ‘we share the same heavens with the greatest powers. Their catastrophes are usually ours’.¹¹⁵ The weak wording of OST Article IX was specifically drafted in response to these pressures, as both Powers recognized their interests in a less-constraining preservation regime.¹¹⁶ Our freedom-first reading of *res communis* rests upon the exclusion and erasure of these Global South environmentalisms.

3.4[c] *Internationalism*

International jurisdiction over the commons launched from Antarctica to space in the early 1950s.¹¹⁷ By 1951, Johannesburg newspapers discussed UN jurisdiction over satellites and space disputes, worried that space powers would leave near-Earth orbit ‘a congested area as fiercely disputed as Eloff Street on a Saturday morning’.¹¹⁸ Citing Global North scholarship and civil society,¹¹⁹ Chile and Italy

¹⁰⁹ Telegram from Adlai Stevenson to State Dept (4 Nov. 1963) JFK Library NSF Box 312, Folder 4, 107.

¹¹⁰ UNGA (1st Comm), (17 Dec. 1966) A/C.1/PV.1492, 47 (Austria); UNGA (1st Comm), (6 Dec. 1962) A/C.1/PV.1293, 21–22 (Netherlands).

¹¹¹ UNGA (1st Comm), (7 Dec. 1962) A/C.1/PV.1294, 58 (India); UNCOPUOS (LSC), (12 July 1966) A/AC.105/C.2/SR.57, 19 (India).

¹¹² Misuse of Outer Space: India Cautions Russia and US, *THE TIMES OF INDIA*, 30 Mar. 1964, at 6 (on the ozone and atmospheric harms of spaceflight).

¹¹³ For example, African Convention on the Conservation of Nature and Natural Resources (signed 15 Sept. 1968, entered into force 16 June 1969) 1001 UNTS 3, preamble.

¹¹⁴ Edwin Etieyibo, *Ubuntu and the Environment*, in *The Palgrave Handbook of African Philosophy* 633–657, 646–649 (Adeshina Afolayan & Toyin Falola eds, 2017).

¹¹⁵ ‘Address by President William V.S. Tubman, President of the Republic of Liberia’, (8 Dec. 1966) A/C.1/941, 5.

¹¹⁶ Telegram from Dean Rusk to Arthur Goldberg and Leonard Meeker (23 July 1966) USDDO.

¹¹⁷ 1 Fauchille, *supra* n. 80, at 658–659.

¹¹⁸ Editorial, *supra* n. 102.

¹¹⁹ Schachter, *supra* n. 35; C Wilfred Jenks, *International Law and Activities in Space*, 5 ICLQ 99, 107–108 (1956); Commission to Study the Organization of Peace, *Strengthening the United Nations* 41 (AN Holcombe ed, American Association for the United Nations 1957).

brought the issue to the UNGA under the banner of ‘free use under international control’.¹²⁰ The proposal garnered traction with prominent space lawyers,¹²¹ global media,¹²² and within the US Congress.¹²³ The Global South, with European support, argued that free use and equitable benefit-sharing implicitly demanded international governance.¹²⁴ These arguments echo in modern discourse, but their deeper history has been forgotten.¹²⁵

3.4[d] *Collective Subjectivity*

And fourth, space invited re-imaginings of solidarity and justice that were foundational for today’s solidarity rights. ‘We belong to the space age’, Filipino Representative Delgado said.¹²⁶ Salvadoran Representative Vega-Gomez observed that in space, ‘the concept of the individuality of man seems to disappear and become something even more reduced, yet, at the same time, greater. Man, therefore, with distance, with infinity, becomes part of the miracle of ... mankind’.¹²⁷ Latin America read the OST to address humanity as beneficiary, if not a rights-bearer.¹²⁸ Some, including Brazil, Mexico, Argentina, and Indonesia, included future peoples as beneficiaries too.¹²⁹ Argentinian Representative Cocca went furthest in defending a ‘transfer of rights, but not yet a transfer of obligations’ to humanity as a full subject of international law.¹³⁰ Ultimately, collective rights remained abstract and unformed within the OST debates, perhaps partially because they excluded African experts on collective rights. Had their contributions been

¹²⁰ UNGA (1st Comm), (12 Nov. 1958) A/C.1/PV.982, 42 (Chile), 56 (Italy).

¹²¹ Report of Working Group III, 4 in *Proceedings on the Law of Outer Space* 386 (Andrew G. Haley & Mortimer D. Schwartz eds, 1963).

¹²² Brasil insistirá na ONU na tese de que o Cosmos deve pertencer a todos, *Jornal do Brasil*, 8 Dec. 1961, at 4; Sam Pope Brewer, *World Agency on Space Urged in U.N.*, *New York Times*, 5 Dec. 1962, at 2; From Space to Earth, *New York Times*, 11 Dec. 1966, at 8.

¹²³ Galloway, *supra* n. 74, at 906; H.Comm. on Science and Astronautics, *The National Space Program: Its Values and Benefits* 90 H.Rpt. 1, Vol. 2 (Washington, DC: US Gov Printing Office 1967).

¹²⁴ UNGA (1st Comm), (11 Dec. 1959) A/C.1/PV.1079, 42 (Iran); UNGA (1st Comm), (19 Nov. 1958) A/C.1/PV.990, 52 (Peru); UNGA (1st Comm), (6 Dec. 1962) A/C.1/PV.1293, 21–22 (the Netherlands).

¹²⁵ Stephan Hobe & Philip de Man, *The National Appropriation of Outer Space and Its Resources* (2017).

¹²⁶ UNGA (1), ‘Verbatim Record of the 991st Meeting’ (19 Nov. 1958) UN Doc A/C.1/PV.991, 26 (Philippines).

¹²⁷ UNGA (1st Comm), (20 Nov. 1958) A/C.1/PV.992, 18–20 (El Salvador). *See also* UNGA (1st Comm), (7 Dec. 1962) A/C.1/PV.1294, 38–40 (Pakistan).

¹²⁸ UNGA (1st Comm), (13 Nov. 1958) A/C.1/PV/982, 37.

¹²⁹ UNGA (1st Comm), (17 Nov. 1958) A/C.1/PV.986, 58–60 (Brazil); UNGA (1st Comm), (18 Nov. 1958) A/C.1/PV.988, 48–49 (Indonesia); UNCOPUOS (LSC), A/AC.105/C.2/SR.2 (29 May 1962), 2 (Mexico); UNGA (1st Comm), (11 Dec. 1959) A/C.1/PV.1079, 57.

¹³⁰ Obligations, he argued, remained statist: Cocca, *supra* n. 100, at 2; Aldo Armando Cocca, *Some Comments on a True Step Toward International Cooperation*, 20 *DePaul L. Rev.* 581–596, 585 (1971).

heard, today's ideas of the commons and collective rights might have been entirely different.

We do not live in the future imagined when the Promise of Article I was made. Now, free use is considered a rule and equity an aspiration.¹³¹ As the space debates continued, the South defined its *res communis* less frequently. Without that clarification, participants were left tossing around a container of rules without examining its actual contents. This allowed definitional slippage towards the 'thinner' *res communis* the North favoured.

Northern hegemony also enabled key concepts to be interpreted according to their legal cultures. Predisposed to positivism, they struggled with Latin American naturalist approaches citing principles and justice as foundations for binding rules.¹³² Later, the US, reading the concluded OST through a domestic lens, determined most of the OST to be 'non-self-executing' – a domestic doctrine.¹³³ Another example concerned 'common property', an originally metaphorical term that now meant a global 'public trust' enabling communal use, rather than joint ownership.¹³⁴ This reflected communal land management practices widespread across Global South jurisdictions,¹³⁵ a practice the US saw as 'a drawback to economic progress', and inferior to Western individualized property regimes.¹³⁶ In that echo chamber the North developed a certain property panic. Following Sputnik, so many Americans sent claims to lunar land, the government had to draft a form rejection letter.¹³⁷ Washington worried that 'common property' might imply global joint ownership or absolute title. The US Senate, unwilling to limit American space power, instead decided it meant nothing.¹³⁸

Upon ratification the United States declared, but did not reserve,¹³⁹ the sole power to 'determine how it shares the benefits and results of its space activities'.¹⁴⁰

¹³¹ 1 *Cologne Commentary on Space Law*, *supra* n. 3, at 203–204.

¹³² Ad Hoc COPUOS (LSC) (27 May 1959) A/AC.98/C.2/SR.2, 5 (Mexico).

¹³³ Treaty on Outer Space: Hearings Before the Committee on Foreign Relations, 19 Cong 10 (1967) (Goldberg).

¹³⁴ League of Nations Comm Prog Cod Int'l Law, *Exploitation of the Products of the Sea*, AJIL Special Supplement 233, 236 (1926); *Case relating to the Territorial Jurisdiction of the International Commission of the River Oder (UK v. Poland)* (Judgment) [1929] PCIL Ser A No 23, para. 74; ILA, *supra* n. 37, at 246–247; 1 FAUCHILLE, *supra* n. 80, at 658–659; Cocca, *supra* n. 100, at 4.

¹³⁵ ELIAS, *supra* n. 47 at 163; Egede, *supra* n. 47 at 82–84.

¹³⁶ 'This lack of individual land ownership was a real drawback to economic progress in Africa South of the Sahara'. Memo of Discussion at the 365th Meeting of the NSC (8 May 1958) FRUS 1958–1960 vol 14, doc 4.

¹³⁷ Which the South African Rand Daily Mail published in full: Moon Plot is Their Lunar Dream, RAND DAILY MAIL, 2 Dec. 1958, at 10.

¹³⁸ Kenneth B Keating and John Cobb Cooper, Questions for Witnesses (National Sovereignty in Outer Space) 1958 1312–1313; Treaty on Outer Space: Hearings Before the Committee on Foreign Relations, 19 Cong. (1967), 10 (Sen Hickenlooper).

¹³⁹ W Bishop, Jr, *Reservations to Treaties*, 103 Recueil des Cours 249, 303–322 (1961).

¹⁴⁰ Senate Exec Rep No 8, 90th Cong, 1st Sess 4 (1967).

The Senate read the Promise of Article I as a ‘stump speech’ without ‘meaning in practical application’.¹⁴¹ Subsequent Global South efforts to impact the law of the space commons have resulted in nonbinding declarations,¹⁴² even as the North’s nonbinding declarations impact law.¹⁴³ In fora where the Global South has a majority, state practice struggles to shift custom or treaty interpretation,¹⁴⁴ but both become uniquely malleable in Northern hands.

In short, American hegemony has already won. We read OST Article I as the United States says and call it standard, we forget its Promise and call it freedom, we forget its history and call ourselves dynamic. The United States has oscillated between champion and lip servicer of the commons, but senior American advisers now claim that:

outer space is not a ‘global commons,’ not the ‘common heritage of mankind,’ not ‘*res communis*’, nor is it a public good. These concepts are not part of the Outer Space Treaty, and the United States has consistently taken the position that these ideas do not describe the legal status of outer space.¹⁴⁵

4 THE PRESENT AND THE POSSIBLE

The following section, like all decolonial work, is an exercise in imagination.¹⁴⁶ What might have been, had the Global South been heard and heeded?¹⁴⁷ How might those possibilities reframe orbital debris? Drawing upon the South’s commons then and international legal developments now, I aim to make three arguments: that low Earth orbits are resources, that space is part of the environment and its law, and that environmental rights in orbit could help create the future Article I promised:

¹⁴¹ Treaty on Outer Space: Hearings Before the Committee on Foreign Relations, 19 Cong. 10 (1967) (Gore).

¹⁴² UNGA Res 51/122, ‘Benefits Declaration’ (13 Dec. 1996) A/RES/51/122.

¹⁴³ The Artemis Accords (signed 10 Oct. 2020), s. 1.

¹⁴⁴ For example, UNGA Res 68/74 (11 Dec. 2013), A/RES/68/74 (preamble cl 4); Outer Space Law, *supra* n. 69.

¹⁴⁵ Scott Pace, *Space Development, Law, and Values* (2017). See Exec Order No 13914, 85 Fed Reg 20,381 (10 Apr. 2020), §1 (‘Outer space is a legally and physically unique domain of human activity, and the United States does not view it as a global commons’).

¹⁴⁶ Mohsen al Attar, *Subverting Eurocentric Epistemology: The Value of Nonsense When Designing Counterfactuals*, in *Contingency in International Law: On the Possibility of Different Legal Histories* 162–163 (Kevin Jon Heller & Ingo Venzke eds, OUP 2021).

¹⁴⁷ I shall skip asking if this was possible within a system purpose-built to silence the South: *Ibid.*, at 159–163.

1. Orbits are limited resources that must be used equitably.¹⁴⁸ This rule has applied to geostationary orbits (GEO) from 1975,¹⁴⁹ and to all orbits from 1998,¹⁵⁰ but the principle predates the OST.¹⁵¹ Despite this, modern discourse on space resources explicitly excludes the intangible in lieu of space mining,¹⁵² an issue often beyond Third World capacity or concern. Orbits, if mentioned, refer to GEO, though the rule initially defined ‘orbits, and *in particular* [GEO]’ as resources.¹⁵³ Moreover, the legal term ‘natural resource’ is not static, but ‘by definition, evolutionary’,¹⁵⁴ and from a sustainable development perspective there is no distinction.¹⁵⁵ LEO is a limited common pool resource, and should be equitably and sustainably governed – as the South argued sixty-five years ago.
2. When humanity launched to space, our environment and law came with us. Since then, space and environmental law have continued to co-develop.¹⁵⁶ The OST makes international law generally applicable,¹⁵⁷ and while it did not envisage international environmental law, the OST does not disallow its co-application.¹⁵⁸ ‘Treaties are not just dry parchments’, especially when the drafters intended their evolution.¹⁵⁹ The OST ‘cannot remain unaffected by the subsequent development of law ... by way of customary law’,¹⁶⁰

¹⁴⁸ Constitution of the ITU as amended by the 1998 Plenipotentiary Conference (signed 22 Dec. 1992, entered into force 1 July 1994), Art. 44(2).

¹⁴⁹ International Telecommunication Convention (Málaga-Torremolinos) (signed 25 Oct. 1973, entered into force 1 Jan. 1975), Art. 33(2).

¹⁵⁰ ITU Constitution, Art. 44(2).

¹⁵¹ Myres Smith McDougal, Harold Dwight Lasswell & Ivan A. Vlasic, *Law and Public Order in Space* 819 (1963).

¹⁵² Hague International Space Resources Governance Working Group, ‘Building Blocks for the Development of an International Framework on Space Resource Activities’ (Nov. 2019), 2. Cf. Maputo Protocol to the African Convention on Conservation of Nature and Natural Resources (adopted 11 July 2003), art V(1) (defining ‘natural resources’ as ‘tangible and non-tangible’).

¹⁵³ International Radio Consultative Committee (CCIR), ‘Report of the Special Joint Meeting’ (29 Apr. 1971) Doc No. 64-E, s. 9.0 (emphasis added).

¹⁵⁴ WTO, *United States-Shrimp, India v United States* – Report of the Appellate Body (12 Oct. 1998) WT/DS58/AB/R, para. 130.

¹⁵⁵ ILA Res 4/2020, ‘The Role of International Law in Sustainable Natural Resources Management for Development’ (Kyoto, 29 Nov.–13 Dec. 2020), Annex I, para. 1.1.

¹⁵⁶ Galloway, *supra* n. 103, at 25; World Commission on Environment and Development, *Brundtland Report* (WCED, 1987), Ch. 10 para. 80 (calling debris regulation ‘clearly overdue’); UNCOPUOS, (1989) A/AC.105/PV.323, 67–68 (Brazil) (on urgent ‘threats posed to ... the preservation of space’s environment itself’); Ernst Fasan, *Technical and Policy Issues Related to the Use of the Space Environment*, 23 *J Space L.* 89, 91 (1995).

¹⁵⁷ OST, Art. III.

¹⁵⁸ *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* (Judgment) 2015 ICJ Rep 665 (‘San Juan River’), para. 108.

¹⁵⁹ ILC, ‘Report of the ILC on the Work of its 60th Session’ (5 May–8 Aug. 2008) A/63/10, Annex A para. 1.

¹⁶⁰ *Legal Consequences for States of the Continued Presence of South Africa in Namibia (Advisory Opinion)* [1971] ICJ Rep 31, para. 53.

and should be read alongside existing rules of international law – ‘even when ... interpreting treaties concluded before the development of that body of law’.¹⁶¹ When acting in areas beyond national jurisdiction like space,¹⁶² states should conduct due diligence via environmental impact assessment (EIA) to prevent transboundary harm, especially to shared resources.¹⁶³ There are wrinkles to iron, like clarifying standing, compensation, and damage valuation,¹⁶⁴ but caselaw is already developing in key jurisdictions.¹⁶⁵ Orbit environmentalism is regaining popularity just in time¹⁶⁶; in both law and nature, no problem stays unconnected for long.¹⁶⁷

3. The Global South has for decades taken collective human rights approaches to the environment, (space) resources, and development.¹⁶⁸ Africa first codified the right to environment,¹⁶⁹ and the Global South continues to extend it further. The right ‘bridges’ a litany of other rights, including to life, health, and development.¹⁷⁰ It entails a substantive right to an environment of a certain quality, and procedural

¹⁶¹ *Indus Waters Kishenganga Arbitration (Pakistan v. India)*, (Partial Award) (PCA 2013), para. 452; *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)* (Judgment) [2010] ICJ Rep 14, para. 66; *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)* (Judgment) [2009] ICJ Rep 242, para. 64; *Iron Rhine Arbitration (Belgium/Netherlands)* (2005) 27 RIAA 35, para. 58; *Oil Platforms (Iran v. United States of America)* (Judgment) [2003] ICJ Rep 161, para. 41; *Case Concerning the Gabikovo-Nagyymaros Project (Hungary v. Slovakia)* (Judgment) [1997] ICJ Rep 7, para. 140.

¹⁶² *Legality of the Threat or Use of Nuclear Weapons* (Advisory Opinion) 1996 ICJ Rep 226, para. 29; ILC, ‘Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with Commentaries’ (2001) UNYBILC 2(2) (‘ILC Commentary’), 151 para. 10 (application to outer space).

¹⁶³ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion of 1 Feb. 2011) ITLOS Reports 2011, 10, para. 117; San Juan River, para. 104, 108; Pulp Mills, paras 101, 197, 204–205. As basis in space law, see OST Art. IX.

¹⁶⁴ J. Brunnée, *Procedure and Substance in International Environmental Law*, 405 Recueil des Cours 71, 181–183 (2019).

¹⁶⁵ Petition for Review, *Viasat v. FCC* (2021), No 21–1125 (DC Cir 2021).

¹⁶⁶ For example, Jean-Frédéric Morin & Benjamin Richard, *Astro-Environmentalism: Towards a Polycentric Governance of Space Debris*, GLOBAL POLICY (2021).

¹⁶⁷ Jonathan O’Callaghan, *What if Space Junk and Climate Change Become the Same Problem?*, The New York Times (12 May 2021); Elena Cirkovic, *The Next Generation of International Law: Space, Ice, and the Cosmolegal Proposal*, 22 German L. J. 147–167, For an approach factoring in space, environment, and indigenous knowledge, see (2021).

¹⁶⁸ Universal Declaration of the Rights of Peoples (signed 4 July 1976), Arts 16–18 (addressing outer space resources); African Charter on Human and Peoples’ Rights (adopted 27 June 1981, entered into force 21 Oct. 1986) 21 ILM 58, Arts 22(1), 24, 27(2); Maputo Protocol, arts I(1), III, XIV(2), XXII(1)(b, h); San Salvador Protocol (signed 17 Nov. 1988, entry into force 16 Nov. 1999) 69 OAS TS A-52, Art. 11; Cairo Declaration on Human Rights in Islam (signed 5 Aug. 1990) A/CONF.157/PC/62/Add.18, Arts 11(b), 17(a), cf. Art. 19(c); Arab Charter on Human Rights (signed 22 May 2004, entered into force 15 Mar. 2008) 15 Int’l Hum Rts Rep 893, Arts 2(1), 37, 38, 39(2)(f); ASEAN Human Right Declaration (adopted 18 Nov. 2012), Arts 28(f), 35, 36.

¹⁶⁹ African Charter, Art. 24.

¹⁷⁰ Nico Schrijver, *A New Convention on the Human Right to Development: Putting the Cart Before the Horse?*, 38 Netherlands Q. Hum. Rhts. 84–93 (2020).

rights like the right to participate in environmental decision-making. But where Northern environmental cases have ignited global environmental rights debate, the Global South's remain underreported. Southern cases have found due diligence and consultative obligations towards (indigenous) peoples,¹⁷¹ obligations to future peoples,¹⁷² and EIAs for private activities with environmental risk.¹⁷³ They more frequently cite innovative legal theories like (constitutional) environmental rights, the public trust doctrine, and principles of justice – but only occasionally impact international norm development.¹⁷⁴

This sounds familiar. Global South states, long relegated to international legal spectators,¹⁷⁵ have also created its most progressive advancements.¹⁷⁶ The space commons and environmental rights may seem unconnected, but they bookend a Southern history of fighting the same battles to similar (non-)effect. 'This repetitiveness of colonial imaginary', Treviño tells us 'can be understood as both violence and a lack of imagination'.¹⁷⁷ Coloniality survives by rendering territories and peoples extractable, and making agents into objects.¹⁷⁸ Environmental rights counter both, by giving subaltern peoples the grounds and the language to contest their exploitation.¹⁷⁹

In LEO, a right to a usable orbit environment could ensure that projects claiming to benefit the Global South addressed those beneficiaries as agents, not objects.¹⁸⁰ Space is pay-to-play, but human rights are not. Reframing the space commons in the global language of human rights invites the side-lined and silenced to join a reopened discussion about how space is used. Dwelling on this right's justiciability ignores its normative potential as a way of opening space governance

¹⁷¹ Advisory Opinion OC-23/17, IACtHR Series A No 23 (15 Nov. 2017), para. 174; IACtHR, *Indigenous Community Members of the Lhaka Honhat (Our Land) Association vs. Argentina* (6 Feb. 2020), para. 208.

¹⁷² *Ibid.*, para. 59; *MP Luis Armando Tolosa Villabona*, Civil Cassation Chamber, Supreme Court of Justice, Colombia (5 Apr. 2018) STC4360-2018, Settlement No 11001-1 Jan. 0001-2018-00319-01, para. 11.

¹⁷³ Advisory Opinion OC-23/17, para. 174.

¹⁷⁴ Jacqueline Peel & Jolene Lin, *Transnational Climate Litigation: The Contribution of the Global South*, 113 *Am. J. Int'l L.* 679–726, 711–715, 725–726 (2019).

¹⁷⁵ Taslim Olawale Elias & Richard Akinjide, *Africa and the Development of International Law 21 (1988)*.

¹⁷⁶ Tiyanjana Maluwa, *Reassessing Aspects of the Contribution of African States to the Development of International Law Through African Regional Multilateral Treaties*, 41 *Mich. J. Int'l L.* 327–415, 411–412 (2020); Antônio Augusto Cançado Trindade, *The Contribution of Latin American Legal Doctrine to the Progressive Development of International Law*, 376 *Recueil des Cours* 19–92 (2015).

¹⁷⁷ Treviño, *supra* n. 2.

¹⁷⁸ Aníbal Quijano, *Coloniality and Modernity/Rationality*, 21 *Cultural Stud.* 168–178, 172–174 (2007); Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* 5 (2017).

¹⁷⁹ John H. Knox, *Constructing the Human Right to a Healthy Environment*, 16 *Annu. Rev. Law. Soc. Sci.* 79–95, 89 (2020).

¹⁸⁰ Craven, *supra* n. 5, at 547–572, 569–571.

to the ‘global’ language of human rights, encouraging orbital citizenship,¹⁸¹ and allowing us to find ourselves in the sky.

5 CONCLUSION

The 1972 Blue Marble is perhaps Earth’s most famous photograph, but few know that it originally depicted the South above the North. Before circulation, it had to be rotated to place the North into its familiar position on top to match the maps on our walls. It’s hardly news to international lawyers that Eurocentric and colonial values still impact our worldview,¹⁸² but rarely is this so literal. Yet still, article I of space law remains surprisingly unchallenged by anticolonial critique.

The law of the space commons was formed by promises broken and silences made – but (re)making worlds does not require revolution. By reading article I OST as a battlefield haunted by could and should haves, just through that description, we reinvent what is and could be.¹⁸³ In this article, I have attempted to recognize a ‘neutral’ norm as hegemonic, to use its contingency as a fulcrum to reshape the present,¹⁸⁴ and to reimagine a future that incorporates both.

Today’s space law was made by silencing and side-lining the Global South. ‘Unstealing the sky’, so to speak, will require us to remember those histories as part of space governance canon, and to return them to relevance in modern discourse. Spacefaring states owe the Global South more than emptied histories and filled orbits – and they owe themselves a future where space’s history, victims, and rules can directly impact its use.

¹⁸¹ At least in a normative sense: Kok-Chor Tan, *Cosmopolitan Citizenship*, in *The Oxford Handbook of Citizenship* 693–714, 695–696 (Ayelet Shachar et al. eds, 2017).

¹⁸² George Hill, *The Map and International Law’s Stifled Visual Discourse*, 13 *EJLS* 15, 21–23 (2021).

¹⁸³ Amia Srinivasan, *VII — Genealogy, Epistemology and Worldmaking*, 119 *Proceed. Aristotelian Soc’y* 127–156, 150 (2019).

¹⁸⁴ Janne E. Nijman, *An Enlarged Sense of Possibility for International Law: Seeking Change by Doing History*, in *Contingency in International Law* (Ingo Venzke & Kevin Jon Heller eds, 2021).