

Protecting the Planet's Commons: Global Commons Law¹

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Introduction

The “Global Commons”—the high seas (including the resources on the deep seabed), outer space, the Moon and other celestial bodies, the two polar regions, and the atmosphere (including the ozone layer and the climate system)²—are essential for humankind’s survival. To avoid over-exploitation and extreme deterioration, they require updated and strengthened regulatory frameworks and novel approaches to global diplomacy. Adding to the urgency is greater competition among the major powers that jeopardises peace for future generations.³ Today, sweeping threats to the Global Commons, such as the overuse of the resources that are supposed to be shared by humankind, require global action on how this legal apparatus can be strengthened. The need to update the current legal framework which protects the Global Commons is imperative because of new threats, such as ocean acidification and high concentrations of greenhouse gases, especially given the strategic importance of these areas to the preservation of the planet.

¹ This piece has been adapted and abridged from an article to be published with a large multi-year project where several scholars attempt to explain and theorise why peace and the absence of conflict prevail in the Global Commons. For publication details about the expanded piece and overall authors’ findings, please [contact the author](#).

² Nico Schrijver, ‘Managing the global commons: common good or common sink?’, *Third World Quarterly*, 37(7), 2016, pp. 1255.

³ Ronald O’Rourke, *Renewed Great Power Competition: Implications for Defense—Issues for Congress* (Congressional Research Service, 2020). ‘The Growing Danger of Great-Power Conflict’, *Economist*, 25 January 2018. Alan Dupont, ‘New World Order: Momentum Is Shifting in Favour of Dictators’, *Australian*, 10 February 2018. Gabriel Glickman, ‘Back to the Future: The Potential of Great-Power Conflict’, *National Interest*, 12 February 2018.

The protection of the Global Commons requires urgent attention due to the general state of accelerating global environmental decline that dovetails with new technological advances that enable the over-exploitation of these non-national areas. At the centre is the intensifying climate crisis, especially melting polar ice caps, and ocean acidification.⁴ Record temperatures are being documented consistently in the Arctic,⁵ which points to humanity exceeding the planetary boundaries, i.e., the limits within which humanity can live safely on the planet.⁶ New technologies now allow commercial exploration of the seabed and outer space as never before which opens the paths to abuse and manipulation.⁷ Multilateral processes are now underway to update the outdated Global Commons legal architecture through negotiation of a biodiversity treaty on the high seas and the deep seabed,⁸ and on the protection of the atmosphere.

Global Commons have an atypical status in international law and its legal architecture makes up a branch of international law that I call *global commons law*⁹, which presents very innovative forms of governance informed by principles of humanity. These domains have an inherent value for humankind and the planet, and therefore have assumed a non-national status in which jurisdictional claims are barred. This renders legal ownership irrelevant, privileging common peaceful purposes, and guardianship of the interests of future generations. This gives the Global Commons their unique status.

Global commons law differs from other parts of international law as it fulfils a distinct purpose, namely the protection of certain domains of the Earth for the benefit of all humankind. Rather than being developed to satisfy the interests of states, the purpose of *global commons law* is the intergenerational protection of future generations.¹⁰ Additionally, *global commons law* helps to avoid conflict and to promote cooperation. I argue that this is due, in part, to the norms, principles, and reiterated practices and meetings to implement international treaties, and to states' participation in overlapping global governing arrangements (e.g., NATO, the UN's Law of the Sea Convention).

Combined, this distinctive corpus of international rules, norms and practices constitutes a formidable custodian of the Global Commons and forms a platform for scientists, aboriginal communities, activists and states to play a role through a legal framework that safeguards

⁴ J.T. Mathis, S.R. Cooley, K.K. Yates, P. Williamson, 'Introduction to this special issue on ocean acidification: the pathway from science to policy', *Oceanography*, 28(2), 2015, pp.10–15. Brigham Daniels and James Salzman, 'Our Global Commons,' *Brigham Young University Law Review* (6), 2014, pp.1251–56.

⁵ Carolyn Gramling, Arctic Heat Record, ScienceNEWS, July 2020. Alejandra Borunda, What a 100-degree day in Siberia really means, National Geographic, June 2020. Paul Arthur Berkman and Oran R. Young, 'Governance and Environmental Change in the Arctic Ocean', *Science* 324(5925), 17 April 2009. pp. 339-340.

⁶ William Steffen et al., 'Planetary Boundaries: Guiding Human Development on a Changing Planet', *Science* 347(6223), 13 February 2015.

⁷ Cassandra Steer, Why Outer Space Matters for National and International Security, A Report by the Center for Ethics and the Rule of Law, January 2020.

⁸ United Nations General Assembly Resolution 69/292, Development of an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. July 6, 2015.

⁹ In company with Christopher C. Joyner and Elizabeth A. Martell, 'Looking back to see ahead: UNCLOS III and lessons for global commons law', *Ocean Development & International Law*, 27(1-2), 1996, pp. 73-95. In this article, the only mentions of global commons law is in the title and: "This article examines precedents for making future international global commons law that can be derived from the experience of the UNCLOS IHI negotiations".

¹⁰ D. Shelton, 'Intergenerational Equity', in: Wolfrum R., Kojima C. (eds.), *Solidarity: A Structural Principle of International Law*, 213. (Berlin, Heidelberg: Springer, 2010).

the non-national domains on the planet, now and for future generations.¹¹ In *global commons law*, safeguarding the planet's Global Commons and related matters of concern (biodiversity loss, deforestation and water scarcity, for instance) takes precedence over state sovereignty.¹²

This piece is organised as follows. I explain my analytical framework: the combined legal protections ascribed to the Global Commons form a distinct branch of international law¹³ that I call *global commons law*, an uncommon realm within international law because it serves a distinctive purpose and is characterised by a commonality of interests that transcend the state, along with the view that the necessity of protection—forged by developing and developed countries alike—should outweigh the national interests.¹⁴ Hence, to clarify what *global commons law* means, I explain its three main purposes:

1. Guardianship of future generations;
2. Setting norms as the foundation for peaceful relations;
3. Creation of a comity for peace and settling disputes peacefully.

I account for the way in which rules and norms under international law are a vital tool of cooperation and offer a platform for global cooperation to protect the Global Commons. States tend to obey international norms for reputational concerns¹⁵ and comply with international law, especially if other countries in the region do so as well (a case in point is Russia in the Arctic Council).¹⁶ This sheds light on the dearth of conflict in these areas and an absence of widespread weaponisation—notwithstanding growing military activity in the Arctic—despite the increasing interest of the great powers in the commons.¹⁷ What explains the enduring collaboration are the principles and the norm-creating treaties, and how these constrain behaviour, and the observed tendency to comply and honour expectations.¹⁸ International law is assumed to be an ordering and convening mechanism for peace.

¹¹ Julia Puaschunder, *Governance & Climate Justice* (London: Palgrave Macmillan, 2020).

¹² Antônio Augusto Cançado Trindade, 'International Law for Humankind', *Hague Academy of International Law Monographs*, Martinus Nijhoff, 2nd ed. Edition, 2013, pp. 750.

¹³ "International Law is the legal order which is meant to structure the interaction between entities participating in and shaping international relations". Samantha Besson, "Theorizing the Sources of International Law," in *The Philosophy of International Law*, eds. Samantha Besson and John Tasioulas (Oxford: Oxford University Press, 2019), 163. I use this broad definition of international law because it is the one that most accurately reflect its nature today. It does not include the state, but refers to international organisations, individuals and other influencers that constitute international law in the 21st century. More recently, these groups have not necessarily been acting on behalf of any single state, but are tied to a cause or a global problem.

¹⁴ In a previous article I termed this the "law of the commons". Denise Garcia, 'Future Arms, Technologies, and International Law: Preventive Security Governance', *European Journal of International Security*, 1 (1), 2016.

¹⁵ Abbott, Kenneth, and Duncan Snidal. 2000. "Hard and Soft Law in International Governance." *International Organization* 54 (Summer): 421-56.

¹⁶ Beth A. Simmons, *International Law and State Behavior: Commitment and Compliance in International Monetary Affairs*, *American Political Science Review*, Vol. 94 (4), 2000. Chayes, Abram, and Antonia Handler Chayes. 1993. "On Compliance." *International Organization* 47 (Spring): 175-205.

¹⁷ Kristi Govella, "Technology and Tensions in the Global Commons." *Fletcher Security Review*, 6(1), 2019. Byers (2020).

¹⁸ Chayes, Abram, and Antonia Handler Chayes. 1995. *The New Sovereignty: Compliance with International Regulatory Agreements*. Cambridge, MA: Harvard University Press. Scott J. Shackelford, 'The Tragedy of the Common Heritage of Mankind', *Stanford Environmental Law Journal*, 27, 2008, pp.101-120.

Global Commons Law

I propose that this is the only part of international law that ascribes protections to the planet's domains over which no state can claim jurisdiction or exploit at will, in order to safeguard humanity as a whole. This is distinctive because other parts of international law serve the objectives of clarifying the scope and nature of state relationships, rights and duties. *Global commons law* adds to the role and the protection of the individual in the international system.¹⁹ In other words, the state is not the prime subject, and its rights and duties are not the main object of protection; *global commons law* favours the human dimension instead where individuals have become recognised as participants and subjects.²⁰ Except for human rights law, criminal and international humanitarian law, the other branches of international law directly attribute protections, rights and corresponding duties to safeguard the sovereignty of the state. Attributing protection to humanity and distinct areas of the planet (and not the state) aligns with a recent alteration in the normative foundations of the international legal order from being purely state-centric to also being human-security aligned and humanity privileging.²¹ This shift is manifest in the increased legal personality of the individual under international law who has rights and duties and can be liable to wrongdoing. This is especially the case with the development of human rights law, international humanitarian law, and criminal law that place a high priority on the search for justice and remedies to benefit the individual, and also the consciousness of humankind, and not exclusively the state. This is a paradigmatic transformation of international law and has been framed as a humanity-centred global legal turn.²²

How is this humanity-centred turn applicable to the Global Commons? These resource domains bestow global collective goods that affect every human being, regardless of nationality. The international instruments found in this part of the law are based upon ideas of common custodianship in a communality of interests, and regard developed and developing nations, as well as peoples, as the guardians for future generations. The role of states as custodians instead of merely users and beneficiaries is what is singular, along with the vesting of rights to humanity as a whole.²³

I propose that four foundational principles underpin the legal scope of *global commons law*: common heritage of humankind, common concern of humankind, intergenerational equity, and precautionary action. The values and meanings of each of these principles have found expression in different international treaties, which I will discuss one by one.

The controversial intellectual history of 'common heritage of humankind' (CHH) indicates that for some it has the status of an essential established custom, while for others it is a

¹⁹ Andrew Clapham, *The Role of the Individual in International Law*, *The European Journal of International Law* Vol. 21 (1), 2010.

²⁰ Antonio Cassese, *The Human Dimension of International Law. Selected Papers* (2008).

²¹ Ruth Teitel, *Humanity's Law*, (Oxford: Oxford University Press, 2011).

²² Teitel and Trindade.

²³ John E. Noyes, 'The Common Heritage of Mankind: Past, Present, and Future', *40 Denver Journal of International Law and Policy*, 2012, 447-471.

mere ideal, and some question its contribution as uncertain.²⁴ Therefore, I suggest that the connections between these principles in conjunction with their applicability should provide a more robust platform to strengthen existing treaties and actions to protect the Commons.²⁵ International Court of Justice Judge, A.A.C. Trindade, propounds that CHH originated a new paradigm in international law in which 'humankind' acquires a legal personality and is therefore entitled to protections resulting from international distributive justice.²⁶ Such a new paradigm considers the rights of those countries that are not rich nor technologically endowed. The intellectual history of these principles started to emerge in the late 1960s, despite great distrust among nations and could guide them again in the current moment of growing geopolitical tensions.

Combined, the four principles represent a valid signpost to shape global governance because they have been enshrined in the treaties and ground-breaking conceptual ideals that benefit all humanity on a more equitable basis.²⁷ Even in the most contentious area of the Global Commons—the high seas and deep-sea mining—peace still prevails. These are areas where the technologically advanced countries vie for the riches that only they can explore. The United Nations Convention on the Law of the Sea (UNCLOS), now nearly universal, despite its amendment that for many meant a dilution of the CHH because of the pressure from the United States, has reinforced the elements of CHH by the prohibition on sovereign claims, equitable sharing of benefits, the peaceful purposes provision, and the requirement to protect the marine environment. Moreover, the work of the International Seabed Authority reinforces CHH and continues to elevate the needs and rights of developing countries, and continues to work towards the peaceful settlement of disputes.²⁸

Kemal Baslar's seminal book posits that CHH is one of the most remarkable developments in international law and a radical concept that is inherently about justice and taking precautions.²⁹ It was first proposed by Argentina in 1966, then codified in the 1979 Moon Agreement, and preceded with a broader expression of "common province of mankind" in the 1967 Outer Space Treaty.³⁰ In its purest form, CHH is composed of the following precepts:

1. No one can claim jurisdiction;
2. All states are expected to support efforts towards common governance that include developing states' interests;

²⁴ For a complete overview, see Noyes, Naman Khatwani, 'Common Heritage of Mankind for Outer Space', *Astropolitics*, 17(2), 2019, 89-103.

²⁵ Susan Buck, *The Global Commons: An Introduction* (Washington, DC: Island Press, 1998).

²⁶ Antonio Augusto Cancado Trindade, 'International Law for Humankind towards a New Jus Gentium,' *Recueil Des Cours* 316, 2005, pp. 365-96.

²⁷ Christopher C. Joyner, 'Legal Implications of the Concept of the Common Heritage of Mankind,' *International and Comparative Law Quarterly* 190(35) (1986).

²⁸ Noyes, 464. White M. Equity – a general principle of law recognised by civilised nations? Queensland U. Tech. L. and Just. J. 2004-2005.

²⁹ Kemal Baslar, *The Concept of the Common Heritage of Mankind in International Law*, (Dordrecht, The Netherlands: Martinus Nijhoff, 1998).

³⁰ UN Doc. A/AC.105/C.2/L.71 21 October 1966. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 1979, 1363 UNTS 3/18 ILM 1434.

3. The resource domains are ascribed to humanity in the form of benefit sharing to benefit all under a common authority which is tasked with equitable distribution and acting as a forum for peaceful settlement of disputes;
4. Uses are exclusively for peaceful purposes that confer human rights. These areas are not to be weaponised and, as a result, weapons cannot be placed or tested in these domains;
5. Cooperative scientific research should be conducted in a transparent manner that does not harm the environment and the findings are to be shared to benefit all humanity.³¹

Current technological advancements, the widening gap between the rich and poor countries, and the former's attempt to exploit the riches for themselves exclusively with advanced capacity to explore the seabed and outer space without respecting a commonality of interests and purposes, can harm future generations.³² It is pertinent therefore, to examine the functions that *global commons law* performs in maintaining peace in the Global Commons in order to develop these ideas further.

Guardians of Future Generations

Is the current generation to act as the custodians of the Commons for future generations? The prevention of environmental degradation is a central component of the common custodianship for the achievement of a sustainable future.³³ Intergenerational equity is a principle that has evolved within international environmental law from the beginning of modern environmental diplomacy. Member states of the United Nations met in Stockholm in 1972 to discuss the evolving global question of environmental degradation in the first ever global summit for the environment.³⁴ This represented the birth of modern environmental diplomacy and gave rise to the initial principles of 'sustainable development' and 'intergenerational equity'.

According to Dinah Shelton, intergenerational equity vis-à-vis the Commons' resources would need to acknowledge (1) that human life emerged from, and is dependent upon, the Earth's natural resource base, including its ecological processes, and is thus inseparable from environmental conditions; (2) that human beings have a unique capacity to alter the environment upon which life depends; and (3) that no generation has a superior claim to the Earth's resources because humans did not create them but inherited them.³⁵ The enshrinement of ideas of intergenerational equity, in turn, found firmer expression in the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and marks the birth of global diplomacy to tackle climate change.³⁶ The UNFCCC reaffirms

³¹ Baslar and Trindade.

³² B. Larschan and C.B. Brennan, 'The Common Heritage of Mankind Principle in International Law,' *Columbia Journal of Transnational Law*, 21, 1983, pp. 305-37. M. Bedjaoui, *Towards a New International Economic Order*, (Paris: UNESCO, 1979).

³³ Edith Brown Weiss, 'In Fairness To Future Generations and Sustainable Development,' *American University International Law Review*, 8(1), 1992, pp. 19-26.

³⁴ Louis B. Sohn, 'The Stockholm Declaration on the Human Environment,' *Harvard International Law Journal*, 14(3), 1973, pp.423-515.

³⁵ Shelton, 2010, p. 153.

³⁶ William C.G. Burns, 'Climate Geoengineering: Solar Radiation Management and its Implications for Intergenerational Equity,' *Stanford Journal of Law, Science & Policy*, 4, 10 May 2011, pp. 39-55.

intergenerational equity where present and future generations shall benefit from the protection of the climate. Nowhere is this clearer: greenhouses released into the atmosphere today will be there for a century.³⁷

Taken together, the international treaties and institutions that govern the Commons form a mosaic of norms and practices that may function as guardians for future generations, because these areas are essential for the survival of all humanity, not only now but in the future.³⁸ For each of the Commons, the driving force to create new international treaties was technological advancements that not only imperilled the Commons' existence, but also jeopardised the future prospects for life on Earth.³⁹ Therefore, the leadership of the technologically advanced countries remains essential, and they must not abdicate their responsibility to act as custodians. This duty is reinforced by combined pressure from the developing world, which—even though lacking the scientific capacity—can indeed offer the moral and equity elements that are needed for the treaties and their guardianship function to subsist. Next, I examine these norms as the foundation for peaceful relations, aiming to appraise their implications and significance to preserve the future of the Commons.

Norms as the Foundation for Peaceful Relations

I contend that the *global commons law* norms have three key purposes:

1. Providing common ground for peace and cooperation;
2. Bridging the gap between the rich and poor countries; and
3. Preventing future harm.

Providing common ground for peace and cooperation

The launch of Sputnik, the first man-made satellite, by the Soviets in 1957, and a few months later the introduction of a second satellite, the Explorer, into orbit by the Americans necessitated new international law to regulate these new activities in outer space.⁴⁰ The main governance mechanism was the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space (The Outer Space Treaty), which highlights in its preamble 'the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes'.⁴¹ This was a notable achievement for international cooperation at a time of multiple Cold War crises. The Treaty is based upon the historic Declaration of Legal Principles Governing the Activities of States in the

³⁷ United Nations, *United Nations Framework Convention on Climate Change*, (New York: United Nations, 9 May 1992). UNDP, Human Development Report 2007/2008: Fighting Climate Change, Human Solidarity in a Divided World.

³⁸ P.C. Stern, 'Design principles for global commons: Natural resources and emerging technologies', *International Journal of the Commons*, 5(2), 2011, pp. 213–232.

³⁹ Christopher C. Joyner, The Concept of the Common Heritage of Mankind in International Law, *Emory International Law Review*, Fall 1999, pp. 615–28.

⁴⁰ Mai'a Cross, 'The Social Construction of the Space Race: Then & Now', *International Affairs* 95(6), 2019, pp. 1403–21.

⁴¹ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, adopted by the General Assembly in its resolution 2222 (XXI), opened for signature on 27 January 1967, entered into force on 10 October 1967.

Exploration and Use of Outer Space, adopted unanimously by the General Assembly in 1963. Its importance lies in the fact that it explicitly affirms, for the first time, guiding principles of conduct based upon the idea of CHH, which were then reaffirmed with legally binding force in the Outer Space Treaty.⁴² This treaty created the first framework for international space law and sets out a number of global norms arising from its first eight operational paragraphs, which I interpret as providing the basis for peaceful relations prevalent today.

Norms as equalisers: Bridging the gap between the rich and the poor

On 1 November 1967⁴³, Arvid Pardo proposed to the United Nations General Assembly that the same intellectual basis of common heritage as already applied to outer space should be extended to the high seas. This was the start of many years of debate that led to UNCLOS and created a global governance structure that tests traditional notions of sovereignty. To date, this legal framework has promoted cooperation and peace in international relations, and is considered to be as important as the United Nations Charter.⁴⁴

When UNCLOS was finalised, global environmental diplomacy was only ten years old. The negotiations that led to UNCLOS were marked profoundly by considerations of sovereignty and the divisive politics of the time. Nonetheless, in a pioneering new way of codifying law, UNCLOS designated the seabed, ocean floor and their subsoil (the 'Area') as CHH.⁴⁵ It is important to note how the ideals present in CHH were codified into UNCLOS, because it is such an extraordinary development that paved the way for *global commons law*. At that moment in international relations, the ranks of the United Nations were filled with recently decolonised countries that aspired to and yearned for recognition and equality, along with the protection of their interests. Many of them had just emerged from, or were going through, liberation struggles. The Non-Aligned Movement, formed by developing countries that did not want to align with the Cold War superpowers, was definitely a commanding force in world politics and influenced the negotiations.⁴⁶ It is notable how CHH was woven into the law of the sea, strengthening a regime that is respected even by the non-High Contracting parties of UNCLOS, and benefited the developing countries with a firm substantiation of intergenerational equity as well. However, the rapid deterioration of fisheries, ocean acidification and loss of biodiversity call for strengthening of the aforementioned mechanisms.⁴⁷

⁴² A/RES/18/1962 (XVIII) Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space.

⁴³ UNGA First Committee, 1515th meeting, Wednesday 1 November 1967 (Official Records, A 22nd session, UN Doc A/C.1/PV 1515), 1967.

⁴⁴ Tanaka, Yoshifumi. *The international law of the sea*. Cambridge University Press, 2015.

⁴⁵ Edward Guntrip, 'The Common Heritage of Mankind: An Adequate Regime for Managing the Deep Seabed', *Melbourne Journal of International Law* 4, 2003, pp. 376.

⁴⁶ Howard W. Pollock, 'The Law of the Sea Conference: Drafting a Constitutions for the Oceans of the World', *Geophysics* 42, 1977, pp. 890-896.

⁴⁷ The amendments to UNCLOS have hurt part of the spirit of the CHH but also allowed the Convention to become customary law. See: Erin A. Clancy, 'The Tragedy of the Global Commons', *Indiana Journal of Global Legal Studies*, Spring 1998, Vol. 5, No. 2 (Spring 1998), pp. 601-619.

Preventing future harm

Preventing harm to all by using the international law precautionary principle found concrete legal expression in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), deemed by most to be the most successful environmental treaty to date.⁴⁸ This international treaty has a universal bearing with 197 High-Contracting Parties. The Protocol's preamble makes the point that states are determined to take precautionary measures to protect the ozone layer. It is worth highlighting five reasons that make this an unprecedentedly efficacious instance of Commons management.⁴⁹

First, at the point when negotiations were successful and led to the Protocol, there was no conclusive scientific evidence on the causal link between human-made emissions of harmful substances and the deterioration of the ozone layer. States acted under the precautionary principle: they took action to establish a legal and political framework back in 1987 and the ozone layer is predicted to heal in 2067. Second, the United States was the champion state in the coalition, along with a few members of the European Union who acted in consonance. Third, the legal framework created a fund in conjunction with a flexible mechanism that allowed states to phase out the production of the harmful gases and gave an appropriate time frame in which to do so. Fourth, the treaty text is future-proof, and has stood the test of time. It incorporated new technological breakthroughs as time went by, which also allowed for more countries to join.⁵⁰ Finally, the treaty served as the model for dealing with other Global Commons domains, because it founded a cooperative compliance system whereby scientists and their input constantly add to and assist in the implementation of the treaty and its progress, which is essential for developing countries.⁵¹

The determination to apply the principle of precaution to environmental problems was reiterated in the 1992 UNFCCC. Article 3 of the Convention states the principles guiding it and prescribes that states must take precautionary measures. Three components can be identified as a result of the codification of the principle in the Montreal Protocol and in the UNFCCC. The first is the threshold of harm that is required to invoke it, which can vary from negligible to irreversible harm. The second component is scientific uncertainty and here the knowledge-generating capacity that can be put in place by those wishing to invoke the principle could stimulate more scientific investigation. The third component is shifting the burden of proof onto the advocates against the supposedly harmful activity.

⁴⁸ Greg Whitesides, 'Learning from Success: Lessons in Science and Diplomacy from the Montreal Protocol', *Science & Diplomacy*, 9(2), June 2020.

⁴⁹ Stephen O. Andersen, Marcel L. Halberstadt, and Nathan Borgford-Parnell, 'Stratospheric ozone, global warming, and the principle of unintended consequences—An ongoing science and policy success story', *Journal of the Air & Waste Management Association*, 63(6), 2013, pp. 607-647.

⁵⁰ Sophie Godin-Beekmann, Paul A. Newman, and Irina Petropavlovskikh, '30th Anniversary of the Montreal Protocol: From the safeguard of the ozone layer to the protection of the Earth Climate, Special Issue', *Geoscience*, 350(7), November 2018, pp. 331-448.

⁵¹ J.A. Mäder, J. Staehelin, T. Pete, D. Brunner, H.E. Rieder, and W.A. Stahel, 'Evidence for the effectiveness of the Montreal Protocol to protect the ozone layer', *Atmospheric Chemistry and Physics*, 10, pp. 12161-171.

Creation of a Comity for Peace and Peacefully Settling Disputes

There are two noteworthy areas of the Global Commons where a comity for peace was created: the Arctic (only its High Sea is a Common) and Antarctica. The Arctic is not the subject of a governance system that frees it from the forces of globalisation, unlike Antarctica where commercial activity is prohibited along with claims to sovereignty. These regions are not entirely comparable, but both are characterised by an inhospitable climate and for being mostly inaccessible; they are also facing the pressures of climate change and hence the need for strengthened global cooperation. They are both under the remit of UNCLOS, but also of other overlapping organising institutions. They benefit from issue-ordering platforms where states can organise matters of importance and negotiate outstanding concerns, and resolve issues using different platforms and tools.

The first treaty to protect Antarctica is the 1959 Antarctic Treaty. Some important aspects of the treaty are: peaceful purposes only and no militarisation allowed (Article I); freedom of scientific investigation in Antarctica and cooperation (Article II).

The 1959 Antarctic Treaty provides a basis for a non-national commons regime, a densely regulated set of internationally governed treaties called the “Antarctic Treaty System”, which is composed of the 1959 Antarctic Treaty, the 1972 Convention for the Conservation of Antarctic Seals, the 1980 Convention on the Conservation of Antarctic Marine Living Resources, and the 1991 Protocol on Environmental Protection to the Antarctic Treaty. The system codifies elements of CHH, intergenerational equity, and precaution: no country can claim jurisdiction over the area, its uses are only for peaceful purposes, and no militarisation is allowed.⁵² Combined, these treaties create a platform for global cooperation whereby scientists and environmentally minded groups can advance the causes of protecting humanity by preserving the peaceful governance of Antarctica.⁵³

The Antarctic Treaty has achieved peaceful coexistence and is successful for three reasons. First, the treaty codifies a principle of demilitarisation. Second, jurisdictional claims are unlawful and hence cooperative scientific research is the dominant motivation, making it possible for all states to mutually benefit. Third, the Antarctica Treaty system places weight on cooperation rather than conflict. The political and legal framework in the Arctic is not as densely regulated and does not form such a robust set of governing mechanisms as in the case of Antarctica.

The Arctic is a region of peace, despite the promise of untold riches, for three reasons.⁵⁴ The first is that all countries play by rules that are a combination of legally binding and soft norms within a central governance institution, the Arctic Council.⁵⁵ Therefore, governance

⁵² For the story of the treaty negotiations and the role of Greenpeace, watch this short documentary *Antarctic Treaty: The power of impossible ambitions*: https://www.youtube.com/watch?v=YXV4_EbZNno

⁵³ Thomas Lord (2020) The Antarctic Treaty System and the peaceful governance of Antarctica: the role of the ATS in promoting peace at the margins of the world, *The Polar Journal*, 10:1, 3-21.

⁵⁴ Denise Garcia, ‘Generating Successful Global Governance: Creating Comity in the Arctic,’ *On Governance*, edited by Robert Rotberg. McGill-Queen’s University Press, CIGI Press, 2015.

⁵⁵ Byers 2020. M. Jarashow, M.B. Runnels, and T. Svenson, ‘UNCLOS and the arctic: The path of least resistance’, *Fordham International Law Journal*, 30(5), 2007, pp. 1587-1652.

generation by the Arctic Council is critical to the wellbeing of its states and peoples; not only is it principally comprised of the eight countries bordering the Arctic, but most importantly, the indigenous populations have a voice in participatory decision-making.

Second, member states of the Arctic Council are largely secure nations that, for the most part, score highly according to the rankings of the Global Peace Index, while the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic 2011 is a testament to confidence-building.⁵⁶ That is, the nations are more peacemakers than troublemakers, internationally, except for Russia, which tends to behave honourably at the Arctic Council, even if it misbehaves elsewhere.⁵⁷

Thus, there are many incentives for cooperation and member states have consequently favoured cooperation rather than conflict. The membership of seven of the Arctic nations in NATO, except for Russia, shifts the balance of power towards the West. Russia has less incentive to behave poorly vis-à-vis its counterparts in the Arctic Council. Russia does not have the military power to compete in the Arctic against NATO, nor does Russia have significant economic or political power to match all of these countries combined. Russia also cares more about access to potential Arctic resources that would be jeopardised by tense relations with its Arctic neighbors and colleagues. Third, the other international law framework beyond the peace-generating governance by the Arctic Council, the UNCLOS, provides the foundational framework for peaceful settlement of disputes, e.g., most conflicts were settled using this overarching legal framework.

The two polar regions have a different reality: the Arctic is inhabited by millions of people and forms part of international trade, while Antarctica is exclusively a region for scientific exploration and preservation. However, both are regions of peace and cooperation, as a result of international institutions and the participation in their preservation of not only states but scientific and other communities. Disputes are settled peacefully and these regions serve as examples of a comity for peace.

Conclusions

I explored a tapestry of rules and norms which form an uncharacteristic branch of international law that I call *global commons law*, which is comprised of principles and norms forged by a vast mosaic of actors in shared stewardship and with a commonality of interests that dovetail into treaties to restrain conflicting behaviour among states. *Global commons law* helps to sustain the absence of conflict and promotes cooperation, and partly explains the prevalence of endeavours towards cooperation.

I argued that this branch of international law is unique as it does not ascribe rights and duties to states but to individuals and humanity. The state is not only a user and beneficiary, but it is also a guardian, and therefore has duties and responsibilities to ensure the

⁵⁶ Heather Exner-Pirot (2012) Defence diplomacy in the Arctic: the search and rescue agreement as a confidence builder, *Canadian Foreign Policy Journal*, 18:2, 195-207.

⁵⁷ Danita C. Burke, *Diplomacy and the Arctic Council*, McGill UP, 2019, 208 p.

preservation of these domains in which legal (sovereign) ownership is absent but which are characterised by peace instead of military confrontation.

Global commons law differs from other parts of international law as it fulfils a distinct purpose, namely the protection of certain domains of the Earth for the benefit of all humankind into the future. Rather than being developed to satisfy the interests of individual states, the purpose of *global commons law* is the intergenerational guardianship of the human heritage, in the interest of all living and future generations, with heritage here referring to what belongs to all individuals unrelated to nationality.

To expand upon the examination of the impact and significance of *global commons law*, I explained the three purposes it performs: guardianship of future generations; creation of a comity for peace and peacefully settling disputes; and setting norms as the foundation for peaceful relations. These norms fulfil three key purposes: they *form a common ground for peace and cooperation*, attempt to *bridge the gap between the rich and poor countries*, and *prevent future harm*. The Commons assumed a peaceful non-national status in international relations, in terms of four principles: common heritage of humanity, common concern, intergenerational equity, and the precautionary principle. These were woven into the fabric of the diverse sets of international treaties to shape higher human aspirations and serve distinctive purposes that transcend exclusively national considerations. Humanity becomes the custodian of the Earth by overriding sovereignty considerations to safeguard the planet and defend it against novel threats and challenges.

However, it is an illusion to think that states can act alone, as many do not have the technical and financial capacity to do this. That is why networked multi-pronged partnerships with international institutions and scientists are so essential. The principle is that custodianship—forged with developing and developed countries alike—attempts to elevate national interests to conserve areas that benefit everyone on the planet. This approach considers humanity from the perspective of the technologically advanced and the developing countries alike. Humanity—the partnership between governments, scientists, individuals, aboriginal communities and international institutions—becomes the custodian of the Commons, overriding unqualified considerations of sovereignty to protect the planet and safeguard humanity from novel threats emerging in the 21st century.

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