

Charting a Human Rights Framework for Outer Space Settlements

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Abstract

The advancing commercialization and democratization of access to space requires a reconceptualization of the foundational principles and values offered by international human rights law (IHRL) to the specific technical, physiological, and legal challenges of outer space. The notion of human rights seeks to establish and safeguard the dignity and value of every human being – it is inherent, broad, and aims to promote tolerance, equality and respect in reducing conflict across diverse and isolated human communities. Technological advancements have given rise to novel and unanticipated human rights concerns in an era where the development of the law lags behind technology.

Human rights offer a multitude of benefits conducive to the advancement of prolonged human habitation and activities in outer space. Determining what novel fundamental human rights are required in the context of space requires and understanding premised upon human dignity, respect, and fairness – as underpinned by their relation to human health, safety, wellbeing, and dignity.

Keywords: Rule of Law, Human Rights, Governance, Sustainability, Space Law

1. Introduction

The extension and application of international human rights law (IHRL) into the domain of international space law (ISL) represents an indispensable element in realizing the possibility of future human settlements in outer space and on other celestial bodies. This is premised upon the need to instil good governance principles and uphold the Rule of Law (ROL) through a human rights-based approach. The consideration, transference, and preservation of terrestrial human rights values and principles provides a stable economic,

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social and cultural foundation upon which isolated human communities across the final frontier may advance a new social contract, maintain law and order, promote community cohesion, and preserve peace and social stability. Acknowledging the growing reality of a prolonged and permanent human presence in space and on other celestial bodies,¹ the possibility of humanity as a multiplanetary species will present numerous challenges for terrestrial governments seeking to exert their authority and jurisdiction extraterritorially. While the colonization of outer space presents an opportunity for humanity to discard age-old problems and begin afresh, many facets of the human persona will not change easily. In the face of rapid commercialization and geopolitical tensions, space has been viewed as an increasingly congested, competitive, and contested environment.² Consequently, providing the means of drawing upon existing and past human experiences and legal systems will enable isolated human communities to minimise their mistakes, and provide the greatest chance of maximising their liberty.³

The establishment of human settlements in space presents challenges concerning the legal nature of settlements, and the regulation of various relationships between stakeholders involved in this collective endeavour. The evolution of IHRL into the ISL domain provides a rational solution. The inherent, inalienable, and universal character of IHRL values provide a collection of strong moral principles, legal norms, and formative processes conducive to advancing the security, prosperity and survival of isolated human communities across the expanse of space.

2. Context

Human rights represent rights possessed by all persons as human beings, are which are not granted by any state. These rights are universal, inherent and inalienable – possessed by all human beings regardless of nationality, gender, ethnic origin, or any other status.⁴ Human rights reflect the minimum standards required for people to live with dignity, protect vulnerable groups and individuals from abuse by those in positions of authority, and guarantee people the means necessary to satisfy their basic needs – so they can take full advantage of all opportunities. Respect for human rights represents the

1 NASA, 'Moon to Mars Overview' on NASA (2020) www.nasa.gov/topics/moon-to-mars/overview.

2 R.G. Harrison, 'Unpacking the Three C's: Congested, Competitive, and Contested Space' (2013) *The International Journal of Space Politics & Policy* 123.

3 C.S. Cockell eds., *Human Governance Beyond Earth: Implications for Freedom* (Springer, 2015) 7.

4 OHCHR, 'What are human rights?' on UN (2020) www.ohchr.org/en/issues/pages/whatarehumanrights.aspx.

cornerstone of strong communities, within which everyone can contribute and feel included.⁵

2.1. Human Rights and Space

Consequently, the core instruments which comprise the IHRL framework require consideration and amendments in addressing novel technical developments over the past 70-years, to meet the physiological effects associated with prolonged human habitation in space, socio-economic challenges in communicating and maintaining order across the expanse of space, and the legal challenges associated with human spaceflight.

The intersection of IHRL and ISL is interpretable from two perspectives. Firstly, the monitoring and enforcement of terrestrial human rights using outer space applications. This is demonstrated in the use of earth observation technologies to provide the evidentiary basis for human rights enforcement and international action.⁶ Secondly, the extension of terrestrial IHRL values and principles into the domain of outer space. This perspective centres upon the growing prevalence of human spaceflight activities, questions surrounding the applicability of certain rights, addressing what rights should be considered absolute and derogable in promoting human dignity, liberty, and supporting the existence and survival of individuals in the outer space environment.

Reference to the five foundational space law instruments.⁷ offer little guidance on the role of human rights in the space environment, where a prima-facie reading and interpretation of these ISL instruments does not reveal any explicit reference to human rights. These instruments appear deficient in their consideration of IHRL values and principles, and the circumstances of human activities in space in the context of the 21st century – as they were drafted in an era when space travel was solely the domain of nation states.

Likewise, the intersection of IHRL and ISL has not been the subject of greater considered scholarship in the past.⁸ During a 1968 American Institute of Aeronautics and Astronautics, Carl Christol remarked that there was no fundamental reason for the international community not to recognize the

5 Australian Human Rights Commission, ‘What are human rights?’ on Australian Human Rights Commission (8 March 2013) humanrights.gov.au/about/what-are-human-rights.

6 UNOOSA, ‘Space Supporting the Sustainable Development Goals’ on UNOOSA (2020) <https://www.unoosa.org/oosa/en/ourwork/space4sdgs/index.html>.

7 1976 Outer Space Treaty, 1968 The Rescue Agreement, 1972 Liability Convention, 1975 Registration Convention, 1979 Moon Agreement.

8 S. Freeland and R. Jakhu, ‘What’s human rights got to do with outer space?: everything!’ in R. Moro-Aguilar, P. J. Blount, & T. Masson-Zwaan (Eds.), *Proceedings of the International Institute of Space Law 2014* 366.

applicability of human rights to the space environment.⁹ In 2014 Professor Charles Cockell organized the International Exterritorial Liberty Conference to discuss the notion of a bill of rights for a future human colony on Mars, and the need for a dedicated bill of rights accounting for the specific conditions under which such a colony would live and function.¹⁰

2.2. Rule of Law and Good Governance

Promoting ROL and good governance principles provides the basis for maintaining law and order across human settlements in space, from an IHRL-based approach. The advancement of these two principles will play a vital role in the security, survival, and prosperity of future human space settlements by countering the challenges of extra-terrestrial tyranny – involving things which will invade upon the social freedoms of individuals in outer space. Where the character of this tyranny will be dominated by the effects of the lethal environment, and the social and political doctrines that derive from extreme confinement of outer space,¹¹ a human rights-based approach provides the best means to address these issues from an inclusive and cooperative angle.

The notion of good governance is founded in the recognition that the institutions of authority are operated for the benefit of others, with the obligation of accountability to their benefactors. Good governance represents a cornerstone of the modern Westphalian nation state – comprising the structure of the state and its institutions, the position of governmental institutions and citizens, and the norms for the relationship between governments and their citizens. Aspects of good governance are properness, transparency, participation, effectiveness, accountability, and economic, social and cultural human rights.¹²

Within this framework, leaders are entrusted with authority to manage and deliver benefits to their citizens and benefactors – but must have the courage, humility and self-control to institute legal checks on their authority. Extra-terrestrial communities and governments must be “epitomized by predictable, open and enlightened policy making; a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its

9 Anel Ferreira-Snyman and Gerrit Ferreira, ‘The Application of International Human Rights Instruments in Outer Space Settlements: Today’s Science Fiction, Tomorrow’s Reality’ (2019) (22) *PER/PERLJ* 6.

10 R. Hollingham, ‘How to create a bill of rights for Mars colonies’ on BBC Future (9 July 2014) <https://www.bbc.com/future/article/20140709-why-mars-needs-a-bill-of-rights>.

11 C. Cockell, ‘Essay on the Causes and Consequences of Extraterrestrial Tyranny’ (63)1 *Journal of the British Interplanetary Society* 17.

12 H. Addink, *Good Governance – Concept and Context* (Oxford University Press, 2019) 5.

actions; and a strong civil society participating in public affairs; and all behaving under the rule of law.”¹³

ROL is understood as an integral element of good governance.¹⁴ ROL represents an overarching principle which ensures that all groups and individuals within society are governed equally, justly and fairly by the law – that the people should be ruled by the law and obey it, and that the law should be such that people will be able and willing to be guided by it.¹⁵ A non-exhaustive list of ROL elements include:¹⁶

- 1) Access to justice and judicial review;
- 2) Legal certainty;
- 3) Proportionality;
- 4) Equality and non-discrimination; and
- 5) Transparency.

Firstly, access to justice has been associated with concerns over the independence of the judiciary, the independence and impartiality of judicial authorities, and the effective implementation of judicial decisions. Second, legal certainty requires that citizens know in advance what the legal consequences of the law will be before committing to any course of action, as featured within economic law where legal certainty may bring about a reduction of transaction costs and efficient business. Third, proportionality requires the balancing of risks vis-à-vis benefits to ensure that any action taken is proportional to its objectives, and has been associated with the assessment of restrictions of fundamental human rights.¹⁷ Fourth, equality and non-discrimination concern the prevention of discriminative actions which result in inequality, and that differences in treatment must strike a fair balance between protecting community versus individual interests. Finally, transparency concerns the right of access to information, being conducive to promoting responsibility and accountability.

The relationship between human rights, good governance and ROL is tied within the belief that the social stability and order facilitated by the law is premised upon the adequate protection of fundamental human rights without discrimination. ROL has served to anchor economic, social and cultural rights in national constitutions, laws and regulations. Where such rights are

13 USCIB, ‘Good Governance & the Rule of Law’ on USCIB (January 2015) uscib.org/docs/Governance%20and%20the%20Rule%20of%20Law.pdf.

14 Council of Europe, ‘12 Principles of Good Governance’ on Council of Europe (2020) [https://www.coe.int/en/web/good-governance/12-principles#\[%2225565951%22:\[4\]\]](https://www.coe.int/en/web/good-governance/12-principles#[%2225565951%22:[4]]).

15 Australia’s Magna Carta Institute, ‘Principles’ on Australia’s Magna Carta Institute (2020) <https://www.ruleoflaw.org.au/principles/>.

16 R. Leal-Arcas, ‘Essential Elements of the Rule of Law Concept in the EU’ on SSRN (20 August 2014) papers.ssrn.com/sol3/papers.cfm?abstract_id=2483749.

17 Ibid, 3-5.

justiciable or their legal protection is otherwise ensured, the rule of law provides the means of redress when those rights are not upheld, or public resources are misused.¹⁸

Accordingly, ROL is referenced in the Preamble of the UDHR, wherein the protection of human rights under the ROL is articulated as an essential means of precluding rebellion against tyranny and oppression.¹⁹ This connection highlights that equality before the law now forms a critical part of international legal and political discourse. Human rights cannot be protected in societies without a strong ROL. A state which represses or persecutes sections of its people fails to meet its human rights obligations to respect, protect and fulfil, and cannot be viewed as observing ROL.²⁰

3. A Human Rights Framework in Outer Space

From a macro perspective, the intersection of IHRL and ISL addresses the managing of future human settlements through soft law (international customary principles) or hard law avenues (treaties, agreements). This requires addressing, analysing what transparency and confidence building measures could be assumed in bridging growing divisions between the major space powers. This would also include considering the role of IGOs and NGOs in creating international customary law – derived from the decisions of courts, national legislation, opinions of national legal advisors, diplomatic correspondence and the practice of international organisations. From a micro perspective, this issue should be managed in reference to the foundational process underlying human rights, which involve identifying and addressing direct threats to human health and dignity.

3.1. Extraterritorial Application of Human Rights Law

The basis for advancing the economic, social and cultural aspects of IHRL into ISL may be found within the 1945 UN Charter. The Charter represents the foundational treaty of the UN, and an authoritative document which defines the existing multilateral international order. The document articulates members' commitment to upholding the human rights of citizens, outlining a broad set of principles covering the achieving of higher standards of living, addressing economic, social, health and related problems through advancing universal respect and observance of human rights and fundamental freedoms without discrimination.

18 United Nations, 'Rule of Law and Human Rights' on United Nations (2020) www.un.org/ruleoflaw/rule-of-law-and-human-rights/.

19 *Universal Declaration of Human Rights* (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR)).

20 T. Bingham, *The Rule of Law* (Penguin, 2011) Chapter 7.

Firstly, the UN Charter is a constituent treaty, and all State parties are bound by its articles. Under Article 103 of the Charter, obligations to the UN prevail over all other treaty obligations. The Charter makes reference to human rights in its preamble “to reaffirm faith in fundamental human rights, in the dignity and worth of the human person” and in Article 1(3) in proclaiming “respect for human rights and for fundamental freedoms” as the purpose of the UN.²¹ Accordingly, each member state carries the positive duty to comply with the terms of the Charter in the course of their activities in outer space.

Secondly, the articles of the 1967 Outer Space Treaty (OST) contain several articles relevant to supporting an IHRL framework in outer space.²² Article I’s provision on outer space as the “province of all mankind” alludes to the use of outer space as an international commons, to be used for the purposes exploration, the maintenance of international peace and stability, and to promote international cooperation and understanding.²³ This alludes to the IHRL principles of inclusivity and non-discrimination under Article 7 of the UDHR, and the right to peace.²⁴

Article III of the OST specifies that activities conducted by State parties must be carried out “in accordance with international law, including the [UN Charter].” The means by which the OST may be interpreted can be determined by reference to Article 31(1) of the 1969 Vienna Convention, which outlines that “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” The intent of Article III of the OST may thus be read as stating that, in whatever space activity a State undertakes, such an activity must be in accordance with the international law which is relevant and applicable – challenging states with driving the application of IHRL into the domain of ISL.

Article V of the OST requires states parties to provide astronauts with all possible assistance in the event of “accident, distress, or emergency landing.” This implied duty to assist alludes to the general right to life detailed under Article 3 of the UDHR, protecting the right to life, liberty and security of the person. Herein, the government is required to consider an individual’s right

21 A. Froehlich and C. Mihai Taiatu, *Space in Support of Human Rights* (Springer, 2020) 2.

22 Treaty on principles governing the activities of States in the exploration and use of outer space, including the moon and other celestial bodies, opened for signature 27 January 1967, 610 UNTS 205 (entered into force 10 October 1967).

23 O.O. Ogunbanwo, *International Law and Outer Space Activities* (Springer Netherlands, 1975) 63.

24 D.J. Perry et al., ‘The Right to Peace: From Ratification to Realization’ on Health and Human Rights Journal (19 January 2017) <https://www.hhrjournal.org/2017/01/the-right-to-peace-from-ratification-to-realization/>.

to life when making decisions which places the individual in danger, and to take appropriate measures to safeguard life.²⁵

Article VI of the OST provides that states parties “shall bear international responsibility for the national activities in outer space,” outlining that the activities of non-governmental entities in space fall under the authority and continuing supervision of governments. The imposition of this duty draw alludes to the obligation of states to protect human rights from private interference, to advance corporate responsibility to respect human rights via the imposition of legal norms and standards, and to prevent the occurrence of gross human rights abuses by private entities.²⁶

Third, the extraterritorial extension of IHRL has been advanced within international customary law. While some guidance may be found in the opinions and decisions of international judicial organs, it must be noted that the opinions and decisions issued are concerned solely with the application of human rights agreements in earth, and have yet to be tested in the domain of outer space. Reference may be directed to the 1971 ICJ Namibia Advisory Opinion, a case concerning the illegal presence of South Africa in Namibia, and the continuing existence of a state of Apartheid in South Africa.²⁷ The ICJ held that the title of a state over a territory is not a prerequisite to the extra-territorial application of IHRL, but that the state’s physical control over the territory is sufficient.

Consequently, several authoritative international judicial bodies hold the view that that extraterritorial jurisdiction requires the ability of the statute to exercise its physical control over a territory, combined with the existence of a factual relationship between the individual and the state – regardless of the questionable lawfulness of the situation.²⁸ Reconciling this with ISL, where Article VII of the OST outlines that a State Party to the treaty remains responsible over the launching of an object into outer space, and is internationally liable for damage cause by such object, this extension of responsibility and liability over the actions of non-governmental or private entities complements the potential reach of IHRL – should the assumed responsibility and liability of a state over a space object be considered synonymous with its ability to exercise effective control over the object. Likewise, Article II of the 1972 Liability Convention outlines that launching

25 Australian Human Rights Commission, ‘Right to life’ on Australian Human Rights Commission (1 May 2013) <https://humanrights.gov.au/our-work/rights-and-freedoms/right-life>.

26 OHCHR, ‘The Corporate Responsibility to Respect Human Rights’ on OHCHR (2020) http://www.ohchr.org/Documents/publications/hr.puB.12.2_en.pdf 3.

27 Legal Consequences of the Continued Presence of South Africa in Namibia (South-West Africa) notwithstanding Security Council Resolution 276, Advisory Opinion, 21 June 1971, 1971 ICJ Reports 16.

28 E. Kannis, ‘Pulling (Apart) The Triggers of Extraterritorial Jurisdiction’ (40)1 *University of Western Australia Law Review* (2015), 237.

State remains absolutely liable to compensate for damage cause by its space object, thereby complementing the view that the effective control of a State over a space object is supported by the notion of its absolute liability.²⁹ Consequently, the application of IHRL may extend equally to the actions of non-governmental or private entities, premised upon the responsibility of States to monitor and supervise the outer space activities under their jurisdiction.

Further, while the interpretation of international judicial bodies may place limits on the extraterritorial application of human rights beyond the earth, the philosophical basis of human rights as a set of universal values and principles presents may rebut this within international customary law. Such was highlighted during the 1993 World Conference on Human Rights. Under Article 1(5) of the 1993 Vienna Declaration and Programme of Action, human rights were reaffirmed as universal, indivisible, interdependent, and inter-related in nature.³⁰ Delegates appealed to the international community to collectively “treat human rights globally in a fair and equal manner” – affirming the universality of human rights in its application to women, children and indigenous peoples.³¹

Most significant is the notion of universality, comprised of the vertical acceptance of human rights (national/regional/international) and the horizontal dimension, implying a tendency towards acceptance in all geographical parts of the world. The substantive aspect of universality is complimented by the belief that human rights are inherent to all people, by virtue of their existence as human beings.³² Adopting this view on the universal applicability of human rights to all human beings, spatial limitations do not constrain the continuing applicability of such rights, with the mere presence of humans in space drawing the application of human rights.

Additionally, the 2011 Maastricht Principles on Extra-Territorial Obligations of States outline the obligation for States to extend the observance and realization of IHRL values and principles extraterritorially. The document promoted the concept of extraterritorial obligations (ETOs) as a means of addressing a missing link in the universal human rights protection system, one which allows human rights to assume their proper role as the legal basis

29 *Convention on International Liability for Damage Caused by Space Objects*, opened for signature 29 March 1972, 961 UNTS 187 (entered into force 1 September 1972).

30 *Vienna Declaration and Programme of Action*, adopted by the World Conference on Human Rights, UN Doc. A/CONF. 157/23 (1993), endorsed GA Res. 48/121, UN Doc. A/RES/48/121 (1993).

31 OHCHR, ‘World Conference on Human Rights, Vienna, 1993’ on OHCHR (2020) [ohchr.org/en/aboutus/pages/viennawc.aspx](https://www.ohchr.org/en/aboutus/pages/viennawc.aspx).

32 R. Arnold eds., *The Universalism of Human Rights* (Springer, 2012) 1.

for regulating globalization and ensuring universal protection.³³ Principle II “Scope of extraterritorial obligations of States” outlines that a State carries obligations to respect, protect, and fulfil its human rights obligations in situations where: 1) it exercises authority or effective control; 2) where State actors or omissions brings about foreseeable effects on enjoyment of human rights; and 3) where the State is in a position to exercise decisive influence or take measures to realize human rights extraterritorially.

3.2. Benefits of Human Rights in Space

Human rights represent justified, high-priority claims to a certain form of treatment, that being to a minimal level of decent and respectful treatment believed owed to a human being, and which is necessary to enable them to pursue a life of dignity and respect.³⁴ Consequently, ROL and good governance play an integral part in within the development and application of human rights values and principles in the domain of space – achieving a balance between the priorities of isolated human communities vis-à-vis the rights of individuals. The application of human rights into space can therefore serve as the basis for a new social contract between states and individuals through several means.³⁵

Firstly, the advancement of basic property rights.³⁶ The right to private property and its alienation has been considered as a fundamental component of a liberal or libertarian society.³⁷ Indeed, the right to own property is recognized under Article 17 of the UDHR. Regional human rights bodies also recognize this right, with Article 1 of Protocol 1 to the ECHR outlining that it is the right of natural and legal persons to “peaceful enjoyment of his possessions” – of course subject to the “general interest or to secure the payment of taxes”. The application of ROL and good governance, through a human rights-based approach, will seek to address the need for private property as a basic human right, versus the collective needs of the community.

Secondly, the enforcement of ROL. As referenced, ROL encompasses various principles pertinent to the maintenance of social harmony, and the realization

33 ETO Consortium, Maastricht Principles on Extraterritorial Obligation of States in the area of Economic, Social and Cultural Rights’ on ETO Consortium (ETO Consortium, 2012) www.etoconsortium.org/nc/en/main-navigation/library/maastricht-principles/?tx_drblob_pi1%5BdownloadUid%5D=23.

34 B. Orend, *Human Rights – Concept and Context* (Broadview Press, 2002) 29.

35 Jonathan Lim, ‘Extending human rights across the final frontier’ (2020) 25 *Room-Space Journal of Asgardia* 94.

36 W. Faires, ‘The role of the Universal Declaration of Human Rights in supporting space property rights’ on *The Space Review* (5 August 2019) <https://www.thespacereview.com/article/3771/1>.

37 C. Cockell, ‘An Essay on Extraterrestrial Liberty’ (2008) 61(7) *Journal of the British Interplanetary Society* 268.

of human dignity. Access to justice and judicial review represents a core responsibility of government which enables people to have their voices heard, exercise their rights, challenge discrimination, holds decision-makers accountable, and promotes issues of equality and non-discrimination.³⁸ Further, the creation of a criminal justice system, and the extension of extraterritorial criminal jurisdiction, will prove relevant to ensuring peace and order across isolated colonies established, operated, and populated by humans.³⁹

Third, the transference of universal values and ethical practices. This is reference by Article 27 of the UDHR, which outlines that “everyone has the right to freely participate in the cultural life of the community.” This includes the rights of individuals and communities, to know, understand, visit, make use of, maintain, exchange, and develop cultural heritage and cultural expressions.⁴⁰ Within the context of isolated communities across outer space, where it is acknowledged that the effects of distance and time will give rise to unique cultural practices which are central to the identity of various groups, the inclusion of human rights protections for cultural heritage will prove conducive to ROL and good governance. This will support the transference of values and ethical practices relates to the preservation of cultural identity – including aspects of nationality, religion, and language.⁴¹

Fourth, safeguarding human dignity and respect. The notion of human dignity is referenced within the Preamble and Article 1 of the UDHR, wherein all human beings are “born free and equal in dignity and rights.” Dignity represents the very concept of personhood derived from autonomy, and magnified within the law as equality, liberty and personal integrity – providing a clear criterion by which to judge compliance or non-compliance.⁴² Within the context of outer space, the preservation of dignity is central to ensuring the provision of the resources and services considered essential to individual personhood and existence – including food, housing, clothing, education, medical care, and social welfare.

Fifth, maintaining a common human identity. This concerns the philosophical basis of human rights as a phenomenon representative of the

38 United Nations, ‘Access to Justice’ on United Nations (2020) <https://www.un.org/ruleoflaw/thematic-areas/access-to-justice-and-rule-of-law-institutions/access-to-justice/>.

39 D. Ireland-Piper, ‘Space Laws: Criminal Jurisdiction in Outer Space – Danielle Ireland-Piper’ on ILA Reporter (October 2019) www.ilareporter.org.au/2019/10/space-laws-criminal-jurisdiction-in-outer-space-danielle-ireland-piper/.

40 UNESCO, ‘The Right to Culture’ on UNESCO (2020) www.unesco.org/culture/culture-sector-knowledge-management-tools/10_Info%20Sheet_Right%20to%20Culture.pdf.

41 K. Bennoune, ‘Cultural heritage is a human rights issue’ on UNESCO (25 October 2016) <https://en.unesco.org/news/karima-bennoune-cultural-heritage-human-rights-issue>.

42 G.P. Smith, *Dignity as a Human Right?* (Lexington Books, 2018) 1.

collective cultural experiences of all divisions of humanity – to which human rights represents the cumulation of generations of moral codes, religious beliefs, and legal frameworks.⁴³ Reinforcing a common and enduring human-to-human connection with governments and cultural roots on earth, while integrating the evolution of human rights across the final frontier, achieves a balance in promoting the similarity of values and principles between earth and isolated human communities. This is conducive to promoting the endurance of good governance principles and the maintenance of human links.

Sixth, promoting sustainable development. This concerns the notion of development that meets the needs of the present without compromising the ability of future generations to meet their own needs, as encompassed under the UN 2030 Agenda for Sustainable Development.⁴⁴ It is recognized that human rights are essential to achieving sustainable development- particularly where the SDGs have come to serve as a proxy for certain economic, social and cultural rights which have traditionally faced difficulty being integrated under the IHRL system. This view has been acknowledged within ISL, noting the outcomes of the UN 2018 UNISPACE+50 Symposium, where the international community expressed a collective commitment to cooperate in space and use space for sustainable development. Concerning outer space settlements, promoting sustainable practices and environmental responsibility is necessary in precluding the possibility of conflict over resources, managing space debris, and avoiding a tragedy of the commons.

Finally, promoting accountability within the actions of leaders. This ties to the rights of individuals with arguable claims of human rights violations to have sufficient access to accountability mechanism (access to justice), with the goal of reinstating public trust in justice and security institutions to rebuild the ROL, promote good governance, and achieve sustainable peace.⁴⁵ Within outer space, the holding of local governments and officials as accountable across isolated human settlements helps prevent abuses, counter discriminative practices, and provides recourse for countering injustices.

43 Australian Human Rights Commission, 'Human Rights Origins' on Australian Human Rights Commission (2020) humanrights.gov.au/sites/default/files/content/education/hr_explained/download/HRE_origins.doc.

44 *Transforming our world: the 2030 Agenda for Sustainable Development* 2015, A/RES/70/1, opened for signature 25 September 2015, entered into force 21 October 2015.

45 S. Johansen, *The Human Rights Accountability Mechanisms of International Organizations* (Cambridge University Press, 2020) 12.

4. Conclusion

The adoption of the principles of ROL and good governance, in supporting the development of a spacefaring civilization, elicits the application of human rights-based approach. Conversely, the extension of human rights into the domain of outer space also draws upon the implementation of ROL and good governance principles in ensuring the stability, survival, and prosperity of isolated human settlements.

Existing IHRL and ISL frameworks provide the opportunity for the extension of IHRL extraterritorially into the domain of outer space, and for ISL to draw upon IHRL principles to manage and govern human activities across the final frontier. States must come to recognize their obligations to respect, protect and fulfil within the outer space, and upon human spaceflight participants to advocate for their inherent, inalienable, and universal rights.

The grounding influence of ROL and good governance through a human right-based approach counteracts the tendency to tyrannise in outer space. This follows the argument that the hostile conditions of outer space facilitate an increased self-awareness of mortality, driving certain people to build their legacy and achieve recognition by accumulating power over other humans.⁴⁶ Accordingly, human rights may manage aberrant human behaviour through the provision of clear and concise rights and responsibilities.

In extending the notion of human rights into the domain of space, the presence and enforcement of existing and emergent human rights principles will provide a multitude of benefits conducive to the maintenance of human health and dignity within isolated human communities across the final frontier, and in fulfilment of life, liberty, and the pursuit of happiness.

46 Cockell, above n11, 269-270.

