

EQUITY AND TRANSPARENCY IN THE NEW PROVINCE OF HUMANITY

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ABSTRACT

This article will explore why the fundamental principle of the Space Treaty – “*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 and scientific development, and shall be the province of all mankind*”¹ – cannot easily be implemented under the present system of international law. Outer Space Law is a branch of Public International Law, which is based in the Positivist doctrine of the supremacy of sovereign States. Because dominant States view outer space as a means to foster their economic and military goals, the interests of Humanity have no assured means to be implemented. New branches of Public International Law, such as Human Rights and Environmental Law, offer a path to acknowledge the individual and collective (civil society) interests of Humanity. These branches have recognized individuals and non-governmental organizations as actors of International Law, and demand from States accountability and transparency in their actions as well as participation of its citizens. Outer space, like environment, transcends borders and national interests. Thus, to resolve challenges that affect all Earth's peoples, such as national military uses of outer space, it will be essential to introduce more democratic,

transparent and representative principles to outer space law.

I. INTRODUCTION

Common Heritage of Mankind is a principle of international law² holding that designated territories shall be held in trust for future generations and be protected from exploitation by individual nation states or corporations.³ As defined in Article 1 of the Outer Space Treaty, Outer Space is one of the domains— including the high seas, the ocean floor, and Antarctica— belonging in equal measure to all Humanity. This article reviews the extent to which the principle of Common Heritage of Mankind has influenced current outer space activities to date, and actually safeguarded the interests of future generations against unilateral exploitation and domination.

II. BACKGROUND

Space law is a branch of traditional international law based on Positivist doctrines whose origins can be traced to the Treaty of Westphalia in 1648. This Treaty defined Nation States as sovereigns, politically supreme within their respective territories and *de jure* equals to one another.⁴ The 1967 Outer Space Treaty (OST), as an outgrowth of these Positivist foundations of International Law, introduced basic principles to be followed by nation states regarding use of the new frontier. In particular, the OST aimed to reduce risks of the militarization of the space frontier because of the intense rivalries of the Cold War period

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between two national military superpowers, the USA and the USSR.

Although the peace-seeking aims of the Treaty have been widely accepted, and Cold War competition ended with the fall of the Berlin Wall, in October 1989, military uses of outer space have continued to grow.⁵ In practice, leading powers continue to use outer space to advance national military and economic aims, rather than to reflect their agreed principle that outer space uses should benefit all of Humanity. At present the access and transfer of technologies necessary to reach outer space are controlled for national security and economic reasons, posing a barrier to the participation of developing countries in outer space. When the space exploration began the US started to apply two sets of regulations to govern the export of space technology: those of the Department of State's Office of Munitions Control⁶, known as International Traffic in Arms Regulations (ITAR) and those of the Department's of Commerce Export Administration.⁷ In 1999 US placed satellite export licensing on the State Department US Munitions List, bringing satellite export licensing under the International Traffic in Arms Regulations (ITAR) regime and significantly complicating participation by US companies in collaborative satellite launch and manufacturing venture⁸

Over the years, amendments have resulted in some progress regarding administrative delays. The ITAR system as a whole, however, continues to keep global aerospace industries from responding efficiently to global market demands. In this way, national controls on technologies are a profound barrier that keeps outer space from becoming a province of all humanity.

The UN Committee on Disarmament,

moreover, has been deadlocked by the inability of national governments to agree on a plan of work since 1996. No global agreements have emerged from the Committee on space issues in the past 30 years. The withdrawal of the US from the Anti-Ballistic Missile Treaty (ABM) treaty in 2002 increased concerns about weapons in space.⁹

In summary, the most critical issues to be resolved in outer space activities are the increasing militarization of the frontier, the national restrictions that limit global access and transfer of space technologies, and the growing problems with space debris.¹⁰ All of these issues have national origins -- and global consequences. But perhaps the most pressing, and fundamental, challenge to overcome is that of transparency. Although national actions with global consequences take place in a realm defined as the common heritage of Humanity, actions of nation states have been shrouded in secrecy on grounds of security concerns.

III. MULTILATERAL MEASURES PRESENTED TO THE UNITED NATIONS ORGANIZATION (UN) TO IMPROVE TRANSPARENCY AND EQUITY IN OUTER SPACE

Throughout the years many proposals have been presented to the UN to bring both transparency and equity to Outer Space, but to date these initiatives have been blocked by powerful national interests. Such initiatives include:

A) UN resolution on transparency and confidence-building measures in outer space¹¹

The draft resolution which was introduced by Russia and co-authored with 58 states,

emphasized the need for further measures to endorse agreements to prevent an arms race in outer space, including the weaponization of outer space, the use of force and threats of force against space objects.¹²

The Draft resolution was approved by the UN First Committee on October 30, 2009 by a vote of 166 in favor, 1 against (US) and 1 abstention (Israel). The resolution made reference to previous resolutions (45/55 of December 4, 1990 and 48/74 of December 16, 1993), which focused on the need for increased transparency and confirm the importance of confidence building measures for the prevention of an arms race in outer space. The resolution also made reference to a report of the Secretary General dated October 15, 1993 which included an expert study on the need for confidence-building measures in outer space and the debates that took place during the Conference on Disarmament in 2008. It noted also the proposal of a draft treaty on the prevention of weapons in outer space, and the threat or use of force against outer space objects.

The resolution urged member states to continue submitting to the Secretary-General concrete proposals on international outer space transparency and on confidence-building measures. The purpose of the resolution was to foster international peace and security, promote international cooperation, and prevent an arms race in outer space. The process of submitting such proposals for concrete measures involved sending them to the Secretary General for consideration by the UN's 64th General Assembly.

In response, the US delegation stated the Obama Administration was in a comprehensive review of US space policies and programs, as well as options for international cooperation in

space. The US vetoed the draft resolution on grounds that it would lead to "futile negotiations on unnecessary and unverifiable space arms controls agreements." It noted the reference in the resolution to a new draft treaty on disarmament (described below) that had been introduced by Russia and China, over US opposition. The US stated it was better to continue to pursue opportunities to establish bilateral space security dialogues with Russia, China and other space-faring nations.¹³

B) UN resolution on the prevention of an arms race in outer space¹⁴ (176 votes in favor, with abstentions by the US and Israel)

This resolution contained the following statements: i) the prevention of an arms race in outer space would avert a grave danger for international peace and security, ii) the conclusion of an international agreement to prevent arms race in outer space would be a priority task of the Conference on Disarmament together with concrete measures on confidence building; iii) a working group should be established as early as possible during its 2010 session and, iv) the provisional agenda of its 65th session should include a topic on "Prevention of an Arms Race in Outer Space."

C) European Community (EU) Draft Code of Conduct for Outer Space Activities (December, 2008)

The Draft Code proposed measures to "enhance the safety, security and predictability of outer space activities" and "prevent outer space from becoming an area of conflict". It also called for Subscribing States to share information on space activities including national policies and procedures, with a mechanism for consultations. The Code sets out a voluntary set of guidelines based on transparency and

confidence-building measures aimed at preventing space from becoming an area of conflict. It would apply to civilian, military and commercial uses of space. The EU is now holding bilateral consultations with spacefaring countries to revise the draft code and gain more acceptance.¹⁵

D) China and Russia draft treaty on the Prevention of an Arms Race in Outer Space (February, 2008 Conference on Disarmament)

The draft Treaty calls for a ban on space-based weapons or terrestrial-based ASAT systems. It was rejected by the US on the grounds that an effective, verifiable ban on space-based weapons or earth-based ASAT systems would be impossible. The EU has proposed bilateral consultations towards amending the project and developing a text that would be acceptable by the greatest number of countries.

E) A Canadian-proposed ban on the placement of weapons in outer space

This move, by the Government of Canada, seeks a prohibition of testing and of using weapons on satellites, as well as a prohibition of using satellites themselves as weapons¹⁶.

F) The Hague International Code of Conduct against Ballistic Missile Proliferation (November, 2002 HCOC Conference)¹⁷

Although this code has been signed by 130 countries, its implementation remains a challenge. Some States argued that the Code's standing is in question because it was drafted outside the UN and without the participation of all interested parties. Non-subscribing states have argued that a more inclusive approach to

this issue has already been proposed in the resolution on prevention of an arms race and transparency and confidence-building measures in outer space, mentioned above (in A and B).

IV. ALTERNATIVE MEASURES BEING TAKEN TO SAFEGUARD THE RIGHTS OF HUMANITY IN SPACE

New paths are being explored for future generations to work together on a peaceful and mutually beneficial basis in outer space, notwithstanding current deadlocks over the multilateral agreements to increase transparency and to reduce risks of an arms race in Outer Space. Below are examples of initiatives to increase consciousness regarding the use and cost of weapons, and to include citizens in developing countries as participants and beneficiaries in space activities:

A) UN Conference on Disarmament for Security - 62nd Annual Public Information Gathering of Non Governmental Organizations (NGOs)

More than 1000 NGOs assembled in Mexico to discuss global disarmament in September, 2009. The goal of the Conference was to advance the disarmament and non-proliferation agenda and expand transparency about the costs of weapons. Nobel Peace Prize winner Jody Williams was among the featured speakers. The Conference explored opportunities to apply future savings from a reduction in military spending to benefit Humanity in areas such as education, health, and natural disaster prevention.

B) Global companies with innovative communications, GPS and remote

sensing solutions for “Base of the Pyramid” markets

Google, Hughes, IPStar, and other leading technology companies are working to bring affordable space-based services to formerly under-served markets in poor communities around the world. Google’s 03B Network Ltd. and Liberty Media, for example, plan to launch 16 low earth orbiting satellites in late 2010 to bring affordable Internet access to the world’s least affluent regions.¹⁸ Continued advances in communications, navigation, and geo-sensing technologies promise to extend skills, telework job opportunities, telemedicine, agricultural productivity, and disaster management services on an unprecedented scale.

C) Moves by new space powers to promote social inclusion in space activities

New spacefaring countries – including India, China and Brazil – are signalling a readiness to see space resources developed on an increasingly equitable global basis. India’s space agency has been focusing its efforts in space on practical applications, partnering with schools in remote areas, teaching students about space exploration and cutting-edge technology. It is training thousands of young scientists and will open its first astronaut training center in Bangalore. India plans its first manned space mission in 2015.¹⁹

The Brazilian Space Agency, in parallel, has been pursuing a policy of joint technological development. Initially it relied heavily on the US, but after meeting difficulties on technological transfers, Brazil has branched out, working with such nations as China, Russia and Ukraine. On

October 21, 2003, the Brazilian Space Agency and the National Space Agency of Ukraine established a cooperation agreement creating a joint venture space enterprise called Cyclone Space. The new company will focus on launch operations at Brazil’s equatorial launch centers.²⁰

D) Emergence of practical new approaches for governance to ensure equity and transparency in shared resources

Two innovations for managing the commons and for promoting transparency in public institutions have gained prominence in the past year, with potential applicability to global space development. In 2009, Elinor Ostrom became the first woman to receive the Nobel Prize in economics in recognition of her work on *Governing the Commons: the Evolution of Institutions for Collective Action*.²¹ Dr. Ostrom introduced the concept that common resources can be managed successfully by nongovernmental associations of users, rather than by public sector bodies or private corporations.

On a related track, Paul Romer, a former Economics Professor of Stanford University, introduced the concept of “Charter Cities” to promote more transparent policies and institutional practices than have been applied to date by nation states.²² Noting the success of China’s Special Economic Zones in fostering reforms and stimulating rapid growth, he has proposed that a new generation of experimental cities be established. Such reforms could generate investment and land value gains in areas associated with global satellite launch centers, and help to fund space development

initiatives of benefit to Humanity. They might also provide transnational institutional frameworks that could be extended to space-based communities in the future.

E) Recent precedents set by International Environmental Law (IEL)²³

In keeping with transnational recognition of Human Rights, new systems in international environmental law have been created to ensure direct access by individuals and communities to global tribunals. The establishment of International Environment Law (IEL) in 1972 at the Conference for the Human Environment gave NGOs, for the first time, direct representation in international meetings. The decision to allow such participation flowed from the principles of IEL, which are inclusive and based on a global as well as national consciousness. (Like outer space, the global environment transcends national boundaries and its protection has been deemed by treaty to be the responsibility of every individual on the planet.) In this manner, the centuries-old Westphalian system, in which only nation states are objects and subjects of international law, has given way to mechanisms that give individual and community rights direct standing under international law.

Another principle of International Environmental Law applicable to outer space is that of Intergenerational equity: present activities cannot damage the interests of future generations. Treaties applying to the international environment, moreover, are goal-focused as well as process-oriented. They have operational protocols that emphasize individual

participation (with full access to judicial and administrative proceedings) and requirements for government transparency and accountability to the people. Transparency in environmental law is recognized as essential to track harmful activities and deter actions that threaten our common environment. As a result of these IEL precedents, International Space Law has an opportunity to apply similar principles to Outer Space as the Province of Humanity.

V. CHALLENGES AHEAD

The main challenges afflicting outer space law arise primarily from unilateral national actions in outer space. These actions -- growing militarization, restrictions on technology transfer, and the accumulation of space debris²⁴ -- are grounded in national economic and defense interests. As such, they underscore the importance of new solutions to limit the spheres of state actions in areas beyond the domains that are subject to state sovereignty. According to Garrett Hardin in "The Tragedy of the Commons", letting national governments use and dispose of the common property of humanity would produce unfortunate consequences: "they would manage natural resources to satisfy their electors, without being accountable to future generations."²⁵

Most citizens in the developed and developing world have little knowledge about the scope or cost of outer space activities undertaken by their governments. Although outer space uses in accordance with international law are expressly to be for the benefit of mankind, key aspects of national space programs have been cloaked on grounds of national security to

avoid scrutiny and citizen participation. The realm of outer space, for this reason, so far has remained beyond the reach of global democracy and governance.

It follows that within the present political national framework, future generations will continue to lack a means to ensure that their interests are preserved in a commonly held vital frontier for Humanity. In the words of Judge C. Trindade, of the Hague International Court of Justice:

*“We cannot visualize Humanity as subject of International Law from the perspective of the State; it is necessary to recognize the limits of State from the perspective of Humanity; the role of the jurist is not to simply take notes of these inconsistencies, but to work for the construction of a new Jus Gentium of the XXI Century-The Universal Law of Humanity.”*²⁶

In legal terms, the meaning of Humanity is ambiguous. This has contributed to a failure to recognize Humanity as a continuing and powerful influence on international law.²⁷ Yet jurists now have an opportunity to build a new definition based upon principles and precedents set by international environmental and human rights law, which demand transparency and accountability from States. Citizen participation and responsibility for environmental uses has given individuals and civil society a new voice in international relations. In accordance with both environmental and human rights law, the UN has recognized the direct consultative status of the non-governmental organizations, which are considered neither public nor private. NGOs in such instances are considered directly to be subjects of Public International Law, even if they do not have a nationally defined legal

personality.²⁸ These precedents can be used to help build a framework for a New Universal Law of Humanity to gradually replace the current system grounded on the supremacy of nation states, establishing a new legal framework for global governance.

As stated in the Vienna Declaration on Space and Human Development of 1999, “Outer Space transcends borders and national interests, allowing for the development of global solutions to solve common challenges, offering a global vision of our planet.” As the people of the world increasingly connect and form a global society, the self-asserted interests of nation states should recede, allowing outer space to be the new province of all mankind.

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¹ “Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Celestial Bodies,” January 27, 1967 (effective Oct. 10, 1967).

² Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Transnational/United Nations University, 1989).

³ Baslar, Kernel. *The Concept of the Common Heritage of Mankind in International Law*, The Hague/Boston/London: Martinus Nijhoff Publishers, 1998.

⁴ The theory of Positivism emerged in the work of Hugo Grotius in De Jure Belli ad Pacis (1625), which dealt with the creation of internal state laws and of legislative and judiciary systems of individual states.

⁵ It is estimated that there are at least 150 operational dedicated military satellites worldwide, with the US operating 76 and Russia 35 (Space Security. Org 2009)

⁶ The Mutual Security Act of 1954 as amended by the International Traffic in Arms Regulations (ITAR) of February, 1976

⁷ Export Administration Act of 1969.

⁸ A Congressional review of the US export controls has been launched. <http://pmdtcc.state.gov/regulations-laws/itar-official.html> and 2009 SpaceSecurity.org

⁹ SpaceSecurity.org, 2009, executive summary

¹⁰ It is estimated that there are over 300,000 objects in space with a diameter larger than one centimeter, and millions smaller. SpaceSecurity.org 2009, Space Environment.

¹¹ A/res/64/49, Sixty-fourth session Agenda item 96(v)- 55th plenary meeting, on December 2, 2009.

¹² UN Doc.A/C.1/63/L.44/Rev.1

¹³ US Mission to the UN- explanation of vote by Garold N. Larson, Alternate Head of the US delegation to the UNGA First Committee, on Draft resolution L.40: Transparency and Confidence-Building Measures in Outer Space Activities, in Conference Room 2, N.Y. October, 2009. <http://usun.state.gov/briefing/statements/2009/13108.htm>.

¹⁴ UN Doc. A/CL.25/- 64th session, First Committee, agenda item 94

¹⁵ Jeff Abramson, EU Issues Space Code of Conduct, Arms Control Today, 2009 (<http://www.armscontrol.org/act/2009-01-02/eu-issues-space-code-conduct>)

¹⁶ Presented during the UN 64th General Assembly First Committee on October, 2009

¹⁷ UNGA/Agenda item 89, First Committee, General and complete disarmament, 63 Sess., UN Document A/C1/63/1L.38(2009). Spacesecurity.org 2009.

¹⁸ O3b Networks, with support from Google, Liberty Global and HSBC, is preparing to deploy the world's first high-speed, low-cost satellite system to transform communications access for billions worldwide www.03bnetworks.com/press.

¹⁹ Saligramm Bhatt, Inspiration to Humankind from Space Law and Science and Experience in India, Journal of Space Law, Volume 35, number 1, 2009, page

291.

²⁰ <http://www.aeb.gov.br/>

²¹ Ostrom, Elinor, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.

²² <http://www.chartercities.org/blog>

²³ Louka, Elli, International Environmental Law: fairness, effectiveness, and world order Cambridge University Press, 2006.

²⁴ James Dustan and Berin Szoka, Beware of Space Junk: Global Warming is not the only major environmental problem," published in Forbes.com, December 17, 2009.

²⁵ Hardin, Garrett, "The Tragedy of the Commons," Science Magazine, 1968

²⁶ Antonio A.Cancado Trindade, O Direito Internacional em um Mundo em Transformacao, Ensaios, 1976-2001, Renovar, Rio de Janeiro, 2002.

²⁷ Ian Bownlie, Principles of Public International Law, 7th edition, Oxford University Press, 2008.

²⁸ UN Resolution 96/31