### CELESTIAL ANARCHY: STATES' RIGHT TO SELF-DEFENSE IN OUTER SPACE\*

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#### Abstract

This article examines to what extent States' right to self-defence should be applied in the outer space. The concept of self-defence within international regulations remains debatable. Brought by the existing reality in international system, this article analyses and suggests in further details that the act of States' right for self-defence should be limited to the act of militarization and not weaponization in the outer space. The argument in this article is carried by the perspective of realism that argues the structure of international system as an anarchy in which states are naturally competing one and another for the purpose of power due to the effect of living within power stratification. Consequently, if states are allowed to exercise their right to self-defence without any limitation, the context of selfdefence becomes broader and will constitute a threat towards international peace and security. Therefore, the right of states to self-defence should be limited within the context of outer space to support only military purpose without any form space-to-space, space-to-earth, or earth-to-space weapons.

#### Intisari

Artikel ini menelaah sejauh mana hak bela diri suatu negara dapat diaplikasikan di ruang angkasa. Perdebatan penerapan konsep dari hak bela diri yang dianut di aturan internasional menjadi status quo. Didorong dengan adanya pengaturan di dalam tatanan internasional, artikel ini menganalisa dan memberikan saran serta arahan bahwa hak bela diri suatu negara seharusnya hanya dibatasi untuk militerisasi bukan mempersenjatai ruang angkasa. Argumen didalam artikel ini terpengaruh akan sudut pandang realism yang menyatakan bahwa struktur hukum internasional dapat diibaratkan suatu anarki yang mana tiap negara berlomba-lomba untuk mencapai kekuatan yang paling hebat, hal ini dikarenakan adanya pemikiran dimana negara yang paling kuat akan menguasai. Maka dari itu, apabila negara diperbolehkan untuk menerapkan hak bela dirinya di ruang angkasa tanpa adanya batasan, maka konteks hak bela diri akan menjadi lebih luas dan menjadi ancaman tersendiri bagi perdamaian internasional. Sehingga, hak bela diri negara di ruang angkasa haruslah dibatasi hanya untuk militerisasi bukanlah untuk mempersenjatai dirinya.

Keywords: Self-defence, outer space, militarization, weaponization, space law. Kata Kunci: Hak bela diri, ruang angkasa, Militerisasi, mempersenjatai, hukum ruang anakasa.

<sup>\*</sup> Preferred Citation Format: Tobing, D.H. & Maryatmo, O. N. (2016). Celestial Anarchy: States' Right to Self-Defense in Outer Space. J.G.L.R., 4 (2), 9-18.

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### A. The nature of self-defence in space

The exploration of the outer space was initially begun as agenda during the Cold War period. The Soviet Union was the first party initiating the launch of Sputnik I in October 1957 followed by Sputnik II. Seeing the Soviet Union has stolen the first start, later in January 1958, the U.S. began its space mission by launching the Explorer I in January (Launius, 2004). The space race of the Great Powers during the Cold War was seemed to be a common practice, however, after the fall of the Soviet Union, the space race has ended and the international community began to invest on their own space missions.

There has been a little argument during the time that the outer space would be used for military purposes. It was then only being used for the purposes of communication, which became the reason on why States launched satellites constantly to support the means of telecommunication. Nowadays, the issues faced by states are broader than space exploration. We have come into an age in which space is seen as a source of defence and economics. There has been a huge debate on the attempt of militarization of space and especially the weaponization of space made by states. However, the legal frameworks related to the utilization of the outer space made in the 20th century seemed to be lacking on regulation related to this matter.

The provision written on Art. 51 of the Charter of the United Nations grant "the inherent right of individual or collective selfdefense if an armed attack occurs against a Member of the United Nations". The concept of self-defense is one of the most relevant topics in international relations because it is a peremptory norm (Green, 2011), which can be utilized by states when others are infringing their sovereignty.

The right for self-defense is also very important because it justifies any action conducted by states to protect their people, territorial integrity, and any other domestic aspects. However, in the 21st century, the debate of individual and collective selfdefense has extended up to the exercise on states' rights to conduct anticipatory or preemptive self-defense. This debate has been around the international community to justify active military exercise in foreign soil due to emergence of threat towards national sovereignty.

Similar to what is being debated by the international community, the contested concept of 'anticipatory' or 'preemptive' of self-defense have drawn-out to the outer space. The notion of preemptive selfdefense is about the use of force by a state to repel an attacked before an actual attack has taken place, before the army of the enemy has crossed its border, and before the bombs of the enemy fall upon its territory (Lohr, 1985). The 'anticipatory' refers to the ability to foresee the consequences of an action and to take measures aimed at checking or countering those consequences (Joyner & Arend, 2000).

States may have right to do anything in airspace because the concept of sovereignty has made them eligible to do so if their actions do not breach other states' sovereignty, yet it is different on the case of space. The concept of sovereignty is not applicable in space, as Art. I of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies sets as follows;

"The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their

degree of economic or scientific development, and shall be the province of all mankind."

As well as what is being clearly emphasized under the provision of the similar treaty on Art. II, that;

"Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

In this regard, when this specific treaty has already provided regulation that no states in this world shall claim sovereignty in the outer space, the concept of sovereignty on the outer space can be concluded to be distinct from any other concept whether it is aerial, land, or water sovereignty. Reflected from the provision of the treaty, then states must refrain from any action that will endanger the existence of outer space and other nations (Vasilogeorgi, 2011) and thus, the nature of the outer space has shifted from any concept related of sovereignty because it is not subject to any claim. Being brought by this idea on the nature of the outer space, this article suggests that the employment of outer space for defense purpose under Art. 51 of the United Nations (UN) Charter shall only be limited to states' militarization action weaponization.

Although, states may claim that such action related to the attempt of space weaponization would enhance the creation of peaceful environment for the benefits on mankind, and even though it seems this project would actually work in line with the UN through the Committee on the Peaceful Uses of Outer Space (COPUOS), the lack of agreement on understanding the definition of 'peaceful uses of outer space' provides advantages for states to conduct any action in which they believe would be 'peaceful'. However, it would bring massive disadvantages for the international community for this loophole in international law. Thus, if states' right for self-defense were not limited, there would be an increasing number of percentages on states' suspicions towards their neighbor and the sense of insecurity, which would constitute threat to international peace and stability.

## B. Outer space in the system of anarchy

Before moving on the understanding related to space and the system of anarchy, we must fully understand the distinction of militarization and weaponization. An act of space militarization is very different towards space weaponization. While space militarization has been an accomplished fact since the early age of space era (Wolff, space weaponization having no single provision under legal term related to militarization and weaponization - not even the UN has provided legal term on this. Many scholars believe that militarization would be similar weaponization but to a certain degree this is not accurate. It is indeed that militarization may end up in the act of weaponization, but fundamentally, they are different because space weaponization is related on states' use of space weapons, with attempt, whether, to target earth or space objects. Therefore, such words 'space weaponization' is not only limited to the placement of weapons in the outer space as what many people have believed.

Canadian Government has submitted Working Paper on the agenda of Prevention of an Arms Race in Outer Space (PAROS) to the Conference on Disarmament (CD) on the classification of weapons as Earth-to-Earth (or Earth-to-Space-to-Earth), Earth-to-Space, Space-to-Space, Space-to-Earth weapons. However, this is

not an agreed term because states have different agenda on the outer space, which leads to the lack of definition on "space weapons".

In the international community, the use of space weapons has not been entirely banned because states have different agenda related to the use of space, especially when it is related to militarization and weaponization. For instance, China and Russia have agenda to refrain from any action related to placement of weapons in space. This includes the placement of spaceto-space and space-to-earth weapons, reflected on the draft treaty submitted to CD. However, seeing that the U.S. stayed abstain on the resolution of the UN General Assembly (GA) on "Prevention of an arms race in outer space" and firmly stands against on the resolution on "No first placement of weapons in outer space", the U.S. might have another hidden agenda in this issue. As an implication, thus, the U.S. does not classify yet the definition of space weapons.

Although space not yet weaponized as there are no weapons deployed yet in space to attack terrestrial objects or active terrestrial weapon in purpose to target space, such action should preferably be eliminated. This is because the possibility of emerging space arms race in the future if not being prevented. Derived by the basic assumption of the "Realism Grand Theory" in international relations which emphasized on the idea of power maximization and security (Morgenthau, 1948), states are characterized as a power seeker because they exist in an international system characterized by the nature of "anarchy" (Bull, 1977).

Anarchy does not mean chaos at all, however, it simply describes the nature of international system in which would be very dependent on states' interests. Reflected form this idea, it also applicable to explain the existence of international regimes. Realism perspective does not ignore order the existence of international institutions, arrangements, or regimes (Waltz, 1978). It simply argues that international regimes are determined by structural patterns in which it should be supported by capabilities and reflect systemic patterns, if not they would largely be ignored and break down (Gehring, 1994). This idea goes similarly in the case of space arms race.

Although idea of the space weaponization is claimed for self-defense purpose, if not being prevented, the strategic balance of power in international politics would be disrupted. The idea is derived by realist perspective, which argues that states' are naturally lust for power and therefore, the other states' attempt on pursuing space weapons would trigger the rest to do likewise, although the expansion of space weaponization is claimed on behalf of defensive purpose. This is the nature of international politics in which a defensive behavior of a state can be seen as an offensive measure by the rest because states are exist under the livelihood of power stratification in which they would naturally race to accumulate power in order to gain more influence or simply to balance others in order to achieve their national and self-defence interests. This idea is realized from the case 'space race' as international agenda during the Cold War period. After around four months after the Soviet Union stunned the world through launching the Sputnik, the U.S. began to launch Explorer I, America's first artificial satellite, in January 1958 (New York Times, 2008). If space weapons are not to be banned, in the near future, the similar race will take place in more destructive manner.

# C. International regulations on space weaponization

The concept of sovereignty for states extends to air, land, and water. There is no doubt for water sovereignty as regulated by The United Nations Convention on the Law of the Sea (UNCLOS) legally recognizing this issue. For the case of aerial sovereignty, the international community has also created a legal framework as codified in Art. I of the Chicago Convention regulating that "the contracting State has complete and exclusive sovereignty over the airspace above its territory" in which more or less has been ratified by all member states of the UN. As the case is different for the outer space as sovereignty does not extend to the outer space, supposedly, there should be an agreed definition on when does airspace ends and outer space begins.

Scientifically speaking, the outer space begins at approximately 100 km as aeronautical proposed by scientist Theodore von Kármán in which he believes that a vehicle would fly faster after passing this point (Jenkins, 2005). Unfortunately, speaking of a legal matter, there is no such international regulation that defines the legal distinction that strictly separates the airspace and outer space yet (Freeland, 2010). The implication on the lack of definition provided for the term "outer space" in legal science would be related to activities being conducted in space.

In this matter, even though some scholars argue that the altitude of 100 kilometers above sea level can be considered as relevant customary space law or "edge of space", in which any activities and objects placed beyond this "edge of space" would be considered as space activities and space objects (Ferreira-Snyman, 2013), there is no single international arrangement to agree on this custom, therefore, not all entities recognize this as an agreement due to the fact this idea has not been codified in international law. The implication would be states may claim their space activities being

conducted within their sovereign airspace due to this obscurity.

The U.S. claimed that the outer space for them starts at the altitude of 80 kilometers and anyone who have travelled to an altitude of 80 kilometers or more shall be regarded as astronauts (Pimbblet, 2010). However, another scientific finding also claimed that space begins at 118 kilometers above Earth's surface (SPACE, 2009). The legal implication derived from such claims can be terrifying due to the lack of agreement on international level because astronauts deployed in the outer space are 'standing' on its own country's sovereignty because they have stepped out from their country's legal boundaries of their sovereign airspace.

Furthermore, in the case of countries that acknowledge the legal edge of space below the approximate number of the socalled international custom and scientific findings, it would not be a problem. However, what if there are countries that launch weapon activities in the space and claimed that the activities fall under their sovereignty because it is still taking place within their airspace? The lack of definition of the term "outer space" would have great implication on human security and national security of a country when it is related to the act of militarization and weaponization. If the legality of weaponization of outer space for self-defense is not to be defined in this vacuum of legal definition on the outer space, states can claim that their weapon activity takes place within a country's airspace and not passing through the edge of space. Absolutely this action would have a great impact on the stability of the international environment due to the emergence of the sense on insecurity. To some extent, there is a possibility where space arms race can be triggered.

The first loophole which has been addressed related to international space law lies on the definition of outer space and secondly, it is associated to the law on weaponizing the space. What is missing from Art. 4 of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies and other international treaties regulating space activities is related to the placement of weapons in which do not fall under the categories of nuclear weapons or Weapons of Mass Destruction (WMDs). The first paragraph of Art. 4 of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies only says as follows;

"States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner."

If we analyze the wording in the aforementioned article, it is clear that the sentence in bold only regulates the placement of nuclear and WMDs and does not provide a legal basis containing prohibition to proliferate other types of weapons in space. In other words, the specification provided in the Art. 4 of the treaty only refers to nuclear weapons and WMDs, thus it entails a deliberate exclusion of conventional weapons on the part of the framers of this specific article from the scope of its application (Bourbonnie  $\square$  re, 2007). Consequently, this loophole in international law can lead to the possibility of states claiming that their action on placing weapons in space does not violate international law because the attempt of such 'weapon installment' is not governed under the treaty.

However, nobody can actually ensure that such weapon that is being installed falls under the categorization of nuclear of WMDs or not. Therefore, there is a high necessity to ban all action related to the placement and installment of any kinds of weapon in the outer space, although the claim is non-nuclear or non-WMDs and in like with the purpose of self-defense. The importance to limit states' action on the outer space is needed to ensure that space arms race does not emerge as it will disrupt international stability in the system of anarchy.

Related to the attempt to entirely ban the placement of weapons on the outer space, the People's Republic of China and Russian Federation have already introduced draft Treaty for negotiation since 2008 to the CD named as Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT). However, although the treaty was updated by revision in 2014, still, One Major Power in international community, the U.S., remains staying as an opposing actor towards the treaty.

The U.S. claimed that the "draft PPWT (CD/1985) proposed by Russia and China, like the 2008 version, remains fundamentally flawed". This is very worrying because the U.S. delegation put justification that, "it is not possible with existing technologies and/or cooperative measures to effectively verify an agreement banning space-based weapons," when there aim of the draft PPWT is to "prevent outer space turning into a new area of weapons placement or an arena for military confrontation and thereby to avert a grave danger to international peace and security" by mainly not to place any weapons in outer space and not to resort to the threat or use of force against outer space objects of States Parties.

Another worrying fact is also related to the adoption of the General Assembly Resolution A/RES/69/32 concerning the commitment of international community on "No first placement of weapons in outer space". The U.S. is one of the parties in which voted against the resolution. Related to this, the international community is to question what is the agenda of the "space racer" countries in space.

Although some people argue that the UN Charter Art. 2 (4) indeed provides that "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations" and even though the provision of Vienna Convention on the Law of Treaties on the "later treaty" would prevail over an "earlier treaty" is not applicable due to effect of Art. 103 of the UN Charter, this means that the right to individual and collective self-defense as a jus cogens norm would also prevail over the prohibitions contained in the Outer Space Treaty (Bourbonnie  $\square$  re, 2007).

Due to its jus cogens nature, selfdefense will always prevail. Therefore, there should be an international agreement to limit the extent of self-defense that should be applied in outer space and to prevent states' argument of anticipatory or preemptive self-defense. If the loophole of international space law is to be closed by establishing frameworks on elaboration of the extension on the right to self-defense application in outer space, space arms race can be prevented due to the fact that lex specialis derogat lex generali rule is widelyaccepted in international sphere.

If there is a guideline on the application of self-defense in outer space, the UN Charter would still remain as the most fundamental source of law yet the specific rule will prevail. As the expected guideline is to prevent weaponization but only grant militarization as a matter of self-defense, thus, insecurity of states on arms race would be decreased and stability of international community would be restored. At last, there is a shared burden to ban space weaponization to limit alibi likewise the justification that if a humanitarian crisis creates disruptive towards international order that would likely soon create an imminent threat states, then, pre-emptive attack can be considered as self-defense (Tobing, 2015) due to the legal vacuum on the extension and practicality of states' rights to self-defense.

### D. Conclusion

States' outreach for their outer space interests is not merely a dream anymore. We are currently living in a space era where all of us, entities of the Earth, are depending on the use of space for daily life purposes. Similar to the interests of individual, states individually would pursue their national interests for the benefits of their being. As reflected on the UN Charter, the right to self-defense has been a primary interest of states to ensure their livelihood by exercising 'self-help' to ensure their 'survival'. In the system of anarchy and the uncertainty of international regulation on the use of space, states will pursue their security interests as the steps are clear in this space age of the world. Therefore, as what the article argues, there should be a shared burden in the international community to close the loophole of the outer space treaty, particularly as being mentioned, to define the legal edge of space, the regulation on the placement of conventional weapons, and also to create a specific regulation on to what extent states' rights to self-defense shall be enacted in space. These regulations should be taken into account in international policy-making process in order to prevent space arms race and warfare from emerging by justifying such actions conducted by states are in accordance to the right of self-defense, codified in Art. 51 of the UN Charter.

### **BIBLIOGRAPHY**

### **Books and Journals**

A, F. (2014). Legal Challenges Relating To The Commercial Use Of Outer Space, With Specific Reference To Space Tourism. Potchefstroom Electronic Journal/Potchefstroomse Elektroniese Regsblad, 17(1).

Bourbonniere, M. & Lee, R. (2007). Legality of the Deployment of Conventional Weapons in Earth Orbit: Balancing Space Law and the Law of Armed Conflict. European Journal Of International Law, 873-901. http://dx.doi.org/10.1093/ejil/chm051

Bull, H. (1977). The anarchical society. New York: Columbia University Press.

Freeland, S. (2016). Fly Me To The Moon: How Will International Law Cope With Commercial Space Tourism?. Melbourne Journal Of International Law, 11(1), 90-117.

Gehring, T. (1994). Dynamic international regimes. Frankfurt am Main: P. Lang.

Green, James A. (2011) Questioning the Peremptory Status of the Prohibition of the Use of Force. Michigan Journal of International Law.

Government of Canada, (2006). A Gap **Analysis** Of Existing International Constraints On Weapons And Activities Applicable To The Prevention Of An Arms Race In Outer Space Agenda Item Of The Conference On Disarmament. International Civil Aviation Organization,. (1947).Convention On International Civil Aviation. Chicago: ICAO.

Jenkins, D. (2005). Schneider walks the Walk. NASA. Retrieved 12 June 2016, from http://www.nasa.gov/centers/dryden/new s/X-

Press/stories/2005/102105\_Schneider.ht

Joyner, Christopher C. & Arend Anthony (1999-2000). Clark Anticipatory Humanitarian Intervention: An Emerging Legal Norm, 10 USAFA J. LEG. STUD. 27, 32.

Launius, Roger D. (2004). Sputnik and the Space of the Origins Age, http://history.nasa.gov/sputnik/sputorig.ht ml

Lohr, Michael Franklin (1985). Legal Analysis of US Military Responses to State-Sponsored International Terrorism, 34 NAVAL L. REV. 1, 16

Morgenthau, H. (1967). Politics among nations. New York: Knopf. Researching Critical Will.

Tobing, D. (2015). The Legitimacy Of U.S.-Led Internvention Against ISIL. Juris Gentium Law Review, 3(1), 36-43.

Waltz, K. (1979). Theory of international politics. Reading, Mass.: Addison-Wesley Pub. Co

Where does space begin?. (2010). ABC Science. Retrieved 12 June 2016, from http://www.abc.net.au/science/articles/20 10/01/13/2791372.htm

Wilford, J. (2008). Remembering When U.S. Finally (and Really) Joined the Space Race. New York Times. Retrieved 12 June http://www.nytimes.com/2008/01/29/sci ence/space/29space.html?\_r=4&

Wolff, J. (2003). "Peaceful uses" of outer space has permitted its militarization.

Conventions and UN Documents

United Nations, (1945). Charter Of The United Nations. San Francisco: United Nations.

(2008).United Nations,. Russian Federation And China: Draft PPWT. United Nations.

United Nations,. (2014). Analysis Of The 2014 Russian - Chinese Draft "Treaty On The Prevention Of The Placement Of Weapons In Outer Space, The Threat Or Use Of Force Against Outer Space Objects" (PPWT) ( CD/1985. United Nations.

United Nations,. (2014). Official Records On General Assembly 62nd Plenary Meeting. United Nations.

Nations,. United (2014).Russian Federation And China: Updated Draft **PPWT.** United Nations.

Nations, (1966). Treaty On Untied Principles Governing The Activities Of States In The Exploration And Use Of Outer Space, Including The Moon And Other Celestial Bodies. New York: Untied Nations.

(1969).Vienna Untied Nations,. Convention On The Law Of Treaties. Untied Nations.