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### **ACTS OF AGGRESSION IN OUTER SPACE**

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"Dans le monde d'aujourd'hui (...), la fonction préventive du droit est d'une importance plus vitale que jamais auparavant. Il faudrait fair sentir cela aux hommes du monde entier ofin de les inciter à abandonner un peu l'esprit de clocher, de leur donner le sentiment de l'axistence d'un intérêt commun et d'une responsabilité dans l'application du droit dans la vie quotidienne des nations, leur fair comprendre – comme on l'a dit – qu'il vaut mieux agir avec sagesse ensamble que commetre des folies séparément."

Manfred Lachs (1)

"To dominate the enemy without combat, this, in truth, is the major hability."

Sun Tzu, The Art of War (2)

#### Introduction

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This paper focuses on qualitatively new tendencies in military uses of outer space, which could admit armed hostilities there, and the need for special regulations of such a serious situation to international peace and security, including the legal definition of acts of aggression in outer space.

The decision by the USA Administration to deploy an Antimissile National Defense System may lead to the outer space weaponization and consequently to the transformation of outer space into a theater of war, for the first time. In the same line, USA military doctrines aiming the establishment of control and superiority in outer space have as its central point the inevitability of warfare in outer space and the necessity to deny the access to outer space to "the enemies", defined by unilateral criteria.

The paper tries to answer to five questions that seem essential in order to understand the outer space total militarization project (at the point of

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transforming it into a war theater) proposed by the present USA Government and to visualize possible political and legal ways capable of facing it.

### Why think of outer space aggression today?

This is not a mere futurology exercise. The world is, indeed, facing a potential danger with severe global implications that must be studied with the necessary anticipation so that there are chances to prevent its surely disastrous effects.

It is not only a matter of a separate decision of a space aggression threat. It concerns, above all, the logical effects of the present mobilization envisaging the total militarization of space, with the use of armed forces from the ground into space, from space to the ground and in space itself, which can include aggression acts.

There has never been military violence in space. In the 44 years of Space Age, it is a fact, space has been used in a increasing scale, as an ever important support for the armed forces and its ground war operations, in the air and on the sea. Recent and eloquent examples are the Gulf and the Bosnia wars, where the most modern techniques of navigation, command, target precision and satellite communication where tested and used.

"There is no question that space has been militarized; U.S. armed forces would have great difficulty carrying out a military mission today if denied access to its guidance, reconnaissance, and communications satellites", observes John M. Logsdon, director of the Space Policy Institute of George Washington University (3).

Indeed, the military strategists began to think about the belligerent value of space and to imagine orbital combats even before the launch of the first man made satellite, Sputnik I, in October 4, 1957.

Nowadays, they are more excited and inspired

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than ever, thanks to George Bush ambitious plans of a complete renovation of the American Armed Forces and the installation of a antimissile defense wide system. (4)

Nevertheless, up to this date, there has never been a single aggression act at those altitudes. No satellite or any space object of any country has been knocked down by the forces from another country, not even by accident. The strong nations, even though provocative and sharp along the Cold War years, never dared to face a space conflict. (5)

With the end of the East-West duel, it was thought to be eliminated forever the possibility of converting space in a battle field.

A little more than ten years after the fall of the Berlin Wall, the emblematic and promising end of the confrontation age, the world watches again a strong official effort for the installation of space weapons.

John Logsdon explains that even today "military systems in space are used exclusively as 'force enhancers,' making air, sea, and land force projection more effective. The issue now is whether to go beyond these military uses of space to space weaponization: the stationing in space of systems that can attack a target located on Earth, in the air, or in space itself. Arguably, space is already partially weaponized. The use of signals from Global Positioning System (GPS) satellites to guide precision weapons to their targets is akin to the role played by a rifle's gunsight. But there are not yet space equivalents of bullets to actually destroy or damage a target."

Thus, what is in question in our days and in the years to come is if space will, or not, be transformed, as already has been with the ground, the sea and the air, in a theater for all sorts of military actions, including the use of weapons.

The present government of the United States already has a very clear position on this matter.

Proclaiming the vulnerability of its satellite network, considered as vital for the country's security and economy, the American administration decided to create a special project in order to defend its orbital patrimony, guaranteeing the control, superiority and the "military domain of space", as a necessary extension of its present global hegemony.

The premise is that USA today depends on its satellites as never before. The US Command estimates that by 2010, some 2000 operating satellites will orbit the Earth, compared to roughly

600 today. Much of this growth will be tied to civilian and commercial applications, especially those in communications-related sectors. Since 1996, revenues from commercial space ventures have exceeded government space expenditures, and this differential continues to widen. The US Space Command figures that by 2003, the Global Positioning System alone will have generated US\$ 16 billion per year in revenues. Space policy expert James Oberg estimates that last year, space-technology industries realized US\$ 125 billion in profits. By 2005, global telecommunications revenues could reach US\$ 1.2 trillion and by 2010, the cumulative US investments in space could well reach US\$ 500 bullion to US\$ 600 billion—equaling the value of all current US investments in Europe. (6)

"The relative dependence of the US on space makes its space systems pottencially attractive targets", assures the Report issued in 11 January 2001 by the Commission to Assess US National Security Space Management and Organization (7), designated by USA Congress. This is the "Rumsfeld Commission", chaired by Donald Rumsfeld, that soon after assumed as Secretary of Defense for George W. Bush Government, announcing thereform of whole US military system. (8)

To this Commission "those [nations) hostile to the US possess, or can acquire on the Global market, the means to deny, disrupt or destroy US space systems by attacking satellites in space, communications links to and from the ground or ground stations that command the satellites and process their data."

The Commission presumes that space warfare has become "a virtual certainty" and evaluates that "an attack on elements of US space systems during a crises or conflict should not be considered an improbable act". The Commission report emphasizes that "if USA is to avoid a 'Space Pearl Harbor' it needs to take seriously the possibility of an attack on US space systems". The Report urges nation's leaders to reduce country's vulnerability by developing "superior space capabilities", including the ability to "negate the hostile use of space against USA interests." This means "new military capacities for operation to, from, in and through space", or simply "power projection", which firstly requires the development, testing and deployment of antisatellite weapons (Asats) based in space or on earth.

At the same time, the Commission intends to minimize the legal-international implications of its

proposals. It sustains that "there is no blanket prohibition in international law on placing or using weapons in space, applying force from space to earth or conducting military operations in and through space" and recommends that "the USA must be cautions" of agreements that may restrict these activities.

And, "there is no way such a blanket prohibition could be made verifiable or enforceable", the president of the Center for Security Policy in Washington adds. (9)

Thus, the government of the U.S. tries to sustain the legal point of view that it has all the right to adopt, unilaterally, its own security measurements, as well as to assure the exercise of its "space power", "space control" and its position of "militry space dominance".

"What is proposed as a means of reducing U.S. space vulnerabilities while enhancing the contribution of space assets to U.S. military power is 'space control'", recognizes John Logsdon. He recalls that this conception is defined in the US Space Command Long Reach Plan, responsible for all space military systems within the country. It consists in the "the ability to ensure uninterrupted access to space for U.S. forces and our allies, freedom of operation within the space medium, and an ability to deny others the use of space, if required." (10)

Is that possible? It does not seem so, since, as arguments John Logsdon, "in a world in which many countries are developing at least rudimentary space capabilities or have access to such capabilities in the commercial marketplace, achieving total U.S. space control is not likely".

If the plan is not very viable, it does not have the slightest chance of been licit. How to accept, legally, that a country assumes the competence of a judge and a police with the own-given right of judging and at the same time repressing who can or cannot have access to space? How many countries support the thesis of the US Defense Secretary, Donald Rumsfeld, that "the security and the stability provided by USA Armed Forces are the critical underpinning of peace and prosperity in the world"? (11)

The US, ironically, can be the major victims of its own plan by the same reason alleged to create it: they depend on telecommunication satellites and of data transmission more than any other country. With the simple ambience of belligerent tension and anxiety, even though there might not be any concrete conflict or even a threat of that, the insurance for all space objects must become

considerably more expensive, decreasing investments, making business more expensive, damaging all industry. (12) Notice that the telecommunication satellites companies have not shown interest in asking for military protection for its billionaire orbital patrimony.

In May 1998, the computer that controlled the telecommunication satellite Galaxy IV brokedown and most of it went off. Result: 80% of USA pagers—affecting 37 million users—went dead. Some radio and television stations were knocked off the air, while gas station and retail stores found themselves unable to verify credit card transactions. (13) Losses were great, but there was an inestimable gain: the world already has an idea, even if pale, of the effects of a war to destroy satellites and the lesson that the most sensate is to avoid in the safest way possible that this ever happens.

The Galaxy IV exemplary case also made John Logsdon to alert: "If the USA GPS system were to experience a major failure, it would disrupt fire, ambulance, and police operations around the world; cripple the global financial and banking system; interrupt electric power distribution; and in the future could threaten air traffic control."

Allofthis has been generating profound worries, including within the US. In his recent article "Lost in Space – The Misguided Drive toward Antisatellite Weapons", Michael Krepon delineates, among the possible repercussions of the project, the following: new international competition to put weapons in space, further strains in alliance relations, weakened non proliferation treaties. (14)

John Logsdon, on his side, proposes: "What is needed now, before the country goes down the slippery path of taking steps toward achieving space control by developing space weapons, is a broadly based discussion, both within this country and internationally, of the implications of such a choice."

Here are some central questions to be debated:

- Is this the best way to avoid the danger of orbital aggression and to assure peace and security for all countries to all humanity?
- -What will be the impact on strategical stability, the global political picture and the international rules if the US conquer, indeed, the position of decisive military advantage in space?
- How to conciliate space control from one country with the right of the others to the exploration and use of space for peaceful uses?

So there are good reasons for a juridical analysis

of the possible acts of aggression in space, today, when research and services space activities have already become indispensable in the day-to-day life and for the development of all people.

### Is it really possible to expect for a "Space Pearl Harbor"?

The expression "Space Pearl Harbor", everything points to, was created to produce emotional impact on the US elder population. It memorizes the famous surprise attack made by Japan, in December 1, 1941 ("Ignominy Day", according to president Franklin Delano Roosevelt), that destroyed the whole North American war fleet parked in the most important navy base of Hawaii, in the Pacific Ocean.

For the Rumsfeld Commission Pearl Harbor now would be no less devastating: it would destroy North American satellites, generating chaos and incredible losses to economy and to the country's normal life.

Is it possible to think that this terrifying hypothesis can be taken seriously?

Indeed, it is difficult, if not impossible, to imagine a space Pearl Harbor. The comparison among an attack to US satellites and the air attack to Pearl Harbor does not resist to the smallest analysis.

In the beginning of the years 40, a world war, provoked by nazis and fascists, went on devastating Europe, Asia and North Africa, threatening historical democratic conquests. Today, the general picture of the economic, political and strategic forces in the world are totally distinct. The US Defense secretary himself, Donald Rumsfeld, says that "at this moment, we are enjoying the benefits from a global economic expansian without precedent, which is drove by information technology, by innovative entrepreneurs, as well by the spread of democracy and of economic free market". (15)

Besides that, the degree of surprise and the dimension of the attack to Pearl Harbor would not have the slightest chance of been repeated now. The sophisticated radar, observation, tracking, recognition and alarm networks maintained mainly by the US certainly would not allow nothing similar to that.

But this is not the only exaggeration in the whole history. There is also the notorious tendency to overestimate the danger that could represent to the US the future military power of countries such

as North Korea, Iraq and Iran, from where these attacks to North American satellites could come. Only one single amount is sufficient to reduce this threat to its real dimension: the addition of the internal gross product of these countries together does not reach the amount of US\$ 325 billions predicted in the US military budget for the fiscal year of 2002. (16)

Nevertheless, arguments apparently as inconsistent as these do not eliminate the threat of aggression in the outer space. The use of force can come from whom occupies in it a dominant position and feels itself possessed and strong enough to point out, by its own criteria, the "hostile countries", according to its interests, that could not have access to space.

The military space dominance and control can create an absolutely unacceptable situation of privilege and exception for a country in detriment of all the others. It is not by any chance, that Russia and China, in special, insistently reject the US plan. They consider themselves as the main targets of this North American unilateral position.

Thus, the danger is not a "Space Pearl Harbor", but a much more unsafe world for everybody.

## What instruments have the contemporary International Law to face acts of aggression in the outer space?

The international principles and norms in force today on such relevant subject are extremely healthy. They must be preserved, improved and amplified as soon as possible.

In fact, there is no legal vacuum in relation to the "hostile use of space against the interests of the US" or of any other country.

The "hostile use of space" – such as on the ground, sea or in the air—consists as an illicit use of force or as an act of aggression, according to the central sources of International Law which regulate this vital question (with no prejudice to previous documents). These sources are:

- 1) Charter of the United Nations (UN), from June 26, 1945 (17);
- 2) UN General Assembly Resolution 2625 (XXV) containing the "Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations", from October 24, 1970 (18); and

3) UN General Assembly Resolution 3314 (XXIX) on the Definition of Aggression, dated December 14, 1974 (19).

The Article 2°, § 4, of the UN Charter affirms the principle considered as "the basis of the international juridical order" (20). According to this principle, all countries "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 the first Purpose, expressed in the UN Charter Article 1<sup>st</sup> is exactly "to maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the supression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might led to a breach of the peace".

In developing the principle of prohibition of threat or use of force by States, the 1970 Declaration assures that the threat or use of force constitutes "a violation of international law and the Charter of United Nations and shell never be employed as a means of settling international issues". The Declaration also recognizes that "the war of aggression constitutes a crime against the peace, for which there is responsibility under international law". Consequently, the State which starts a war of aggression must answer for this crime before the international community.

The Declaration also indicates that "States have aduty to refrain from acts of reprisal involving the use of force". In reality, acts of reprisal have any relations with the right of individual self-defense. These acts were condemned by the UN Security Council in its Resolution 188, from April 9, 1964, as "incompatible with the purposes and the principles of United Nations". It is important to recall that the Security Council resolutions are mandatory.

Onits turn, the Aggression Definition Resolution says in its Article 1° that "aggression is the use of armed forces by State against the sovereignty, terristorial integrity or political independence of another State, or any other manner inconsistent with the Charter of United Nations". Here, very properly, the term sovereignty was included, completing the rights and values that can be

reached by an aggression act.

According to the Artigo 2° of this Resolution, "the first use of armed force in contravention of the Charter shall constitute *prima facie* evidence of an act of aggression although the Security Council may, in conformity with the Charter, conclude that determination that an act of aggression has been committed would not be justified in the light of other relevant circumstances, including the fact that the acts concerned or their consequences are not of sufficient gravity".

The Article 3°, in turn, rolls a series of acts that, regardless of a declaration of war, shall, subject to and in accordance with the assessment of the Security Council (Article 2°), "qualify as an act of aggression". Among them we have "the attack by the armed forces of a State on the land, sea or air forces, or marine and air fleets of another State". Thus, there is not any mention to an attack in outer space. But, by analogy, such instrument can be extended to a space attack.

All these legal documents apply to outer space. That is disposed by the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (21), from January 27, 1967, the cornerstone of international space law, known as "Space Treaty".

On its Article 3°, this basic instrument universally accepted establishes that the exploiration and use of outer space must be undertaken "in accordance with international law, including the UN Charter, in the interest of maintaining internacional peace and security and promoting international cooperation and understanding". War actions, either defensives or offensives are forms of space utilization. Therefore must be judged under the light of this provision.

The Article 1° of this Resolution states that agression is "the use of armed forces by State against the sovereignty, terristorial integrity or political independence of another State". How to apply such a definition to outer space, if this space, as determined by the Article 2° of the Space Treaty, is not subject to national appropriation by claim of sovereignity, by means of use or occupation, or by any other means?

In fact, in the light of the non-appropriation principle of outer space, there are not and neither can exist areas or portions of the outer space that a State has the right to assume as integral part of its sovereignty, as its territory or as its political independency. Outer space cannot belong to any State and "shall be free for exploration and use of all States without discrimination of any kind, on a basis of equality and in accordance with international law", according to the Article 1° of the Space Treaty.

It happens that under Article 8° of the same Treaty, the State on whose registry a satellite or any other space object launched into outer space is carried "shall reatain jurisdiction and control over such object". According to this Article "ownership of objects launched into outer space (...), and of their component parts, is not affected by their presence in outer space; and if they are founded "beyond the limits" of the State on whose registry they are carried shall be returned to that State".

It means that, in case of an attack to a satellite in orbit, the object of aggression is not a territory, but a property, a good of a State. This does not chance the character of aggression.

Such a consideration is also valid for satellites and other space objects belonging to non-governmental entities (private enterprises), given that its activities require, under the Article 6° of the Space Treaty, authorization and continuing supervision by the appropriate State.

The same can be said about the aggressor. This one will always be a State or a group of States, given that the international responsibility for all and any space activity, including those carried out by non-governmental entities, enterprises or private groups, and by intergovernmental organizations, shall be borne by the appropriate State as well as by the international organization and by the States articipanting in such organization.

In the field of space activities, the private responsibility is normally secondary, the primary and higher responsibility is always public, of the involved States. With yet more reason, this is true in the case of aggression that affects directly security and international peace—the supreme interests of the countries community and of all mankind, under the saying and spirit of UN Charter.

Therefore, UN Charter prohibits either acts of aggression as any form of use or threat of use of force for settlement of disputes in outer space.

However, as in land, sea and in air, in space too the armed force can be used legally as a reaction to an aggression or undue use of force by other country. They are the so called counter measures, of two kinds: the individual or collective self defense, adopted by the country or countries attacked, and the ones approved by UN Security Council, involving the use of force to face consummate aggression, re-establishing peace.

This defensive system is based in Chapter VII of the UN Charter on the "Actions with respect to threats to peace, breaches of the peace, and acts of aggression". Two moments here are of most importance for the application in armed conflicts in outer space:

- 1) The competence to determine the existence of any threat to the peace, breach of peace, or act of aggression, and make recommendations, or decide what measure shall be taken in each case to maintain or restore international peace and security belongs to the Security Council (Article 39);
- 2) The inherent right of individual or collective self-defence if an armed attack occurs against a State, can be exercised only "until the Security Council has taken measures necessary to maintain international peace and security". And measures taken in the exercise of this right of self-defence shall be inmediatly reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council to take at any time such action as it deems necessary in order to maintain or restore international peace and security. (Artigo 51).

This means that, by current international legal order, with the announcement, for example, of a supposed attack to US satellites, it competes to the Security Council, and not to the US, to determine the existence of peace rupture or aggression act; the US, evidently, can exercise its defense right, but only until the Council adopts the necessary measurements, in a concrete case, in order to punish the aggressor and restore peace and security.

This collective security system aimes to prevent arbitrary military actions by one State or a group of States. Under this rule, for instance, Governments have nother right to start a preventive war. Only their own perceptions and reasoning are no sufficient to justify the use of force against any other country. Such unilateralism is unaceptable in the light of UN Charter.

Definitly a State or a group of States in particular could not be competent to determine the existence of any threat to the peace, breach of peace, or act of aggression, and decide what measure shall be taken to maintain or restore international peace and security. Otherwise, we would have an international desorder. It is even more important in outer space, whose exploration and use are of common interest of all countries.

That system excels by its good sense and intent. However, this is not enough to make it work. In fact, such a system, adopted by the end of Second World War by the precarious coalition which defeated Nazi Germany and its allies, contributed very little or not at all for the solution of land, maritime and air conflicts, during and after the Cold War. Actually, it only worked in 1990, when for the first time the five permanent members of the Security Council agreed to condemn and expel the invasion of Kuwait by Iraq.

Thus, how guarantee that the collective security system works in relation to outer space conflicts, especially considering that, to act with the readiness and efficacy that such situations will require, the UN and the Security Council must have available the technical means and special armed forces?

In fact, the world community today, is not equipped to respond through international mechanisms to acts of space aggression and make prevail the current rules. This, with no doubt, is the major actual deficiency in this subject. Sooner or later, it will have to be faced.

On the other hand, the use of force in outer space already has important legal barriers, even though equally far from been sufficient.

The use of mass destruction weapons in outer space is prohibited – nuclear, chemical and biological. The Space Treaty, in its Article 4°, prohibits the deployment of such weapons in orbit around the Earth, on the Moon and other celestial bodies. Nuclear weapons also cannot be tested in outer space, by force of the Treaty Banning Nuclear Weapons tests in the Atmosfhere, in Outer Space and Under Water, done in August 5, 1963. (22) Also one cannot introduce intentional modifications in the natural processes of the environment, either on the Earth or in the outer space, for military purposes, as prays the Convention on the Prohibition of Military or Any Other Hostile Use of Environment Modification Techniques, from May 18, 1977 (23).

In the epicenter of the debates around the question of space weaponization is today the Treaty Between the USA and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty), from May 26, 1972. Its Article 5° prohibits the

development, test and deployment of such systems or components, which are sea-based, air-based, space-bsed, or mobile land-based. (2)

Known as the Anti-Ballistic Missile Treaty (ABM Treaty), it is the major legal obstacle for the entrance in space of weapons destined to intercept ballistic missiles. In the years 80, in special, when the US government, by the rule of president Ronald Reagan, tried politically and legally to undertake its project Strategic Defense Initiative (the well known Star War), that had as a goal the creation of a great antimissile defense national system, there have been many attempts to reinterpret the main rules of the ABM Treaty. All the attempts found obstacles in the way they were written: instead of indicating all that is permitted, as in general do the treaties on weapons limitation, it prohibits everything and, following, it exposes the exceptions. This includes in limine the new approaches and technologies, that could change the original meaning of the treaty. (25) And explains why the present US government, also eager to construct an antimissile defense system, already announced its intention to renounce to the ABM Treaty.

Another valuable provision of the ABM Treaty, expressed in Article 12, is the one that prohibits the interference in the normal functioning of reconnaissance satellites, treated as "national technical means of control and verification" of compliance with the international agreements.

Finally, it is worth to mention the existence of an informal agreement among the major space powers for the non-deployment in outer space of antisatellite weapons, as stressed by John Logsdon.

Nevertheless, all these instruments are not sufficient to face possible acts of aggression in outer space. There has been permitted the use of weapons not classified for mass destruction, since they are not prohibited. Among them, there are especially the anti-satellite weapons (Asat), conceived in the years 50, which began to be developed and tested in the years 70. (26)

How to place such artifacts out of law? Here is one of the greatest political and juridical challenges of today, when it is so much emphasized, with interest or not, the danger of outer space aggressions.

#### How to prohibit anti-satellite weapons?

The international community started to think about this subject more than 20 years ago.

Among generalized fears, negotiations on antisatellite weapons between the US and the USSR began in 1978. But they were interrupted by the White House still in 1979. The fact caused a general concern.

In 1978, the Final Document of the 10th Special Session of the UN General Assembly on Disarmament already recommended that "in order to prevent an arms race in outer space, further measures should be taken and appropriate international negociations held in accordance with the spirit 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".

Coherently, in December 1981, the General Assembly approved two resolutions on the theme. The first one, entitled "Prevention of an arms race in outer space", inaugurated a series of resolutions which are annually repeated up to date. It requested the Disarmament Committee – in charge of examine the problems of disarmament control, including in the outer space – that it consider the negotiation of effective and verifiable agreements aimed at preventing an arms race in outer space, taking into account all the existing and future proposals in this direction.

At the same time, it considered as a matter of priority "the question of negociating an effective and verifiable agreement to prohibit antisatellite systems". This resolution was adopted by a majority of 130 members in favour, none against, and 13 abstaining. The second Resolution (36/99), entitled "Conclusion of a treaty on the prohibition of the stationing of weapons of any kind in outer space", was adopted by a majority f 124 members in favour, none against and 21 members abstaining. (27)

The problem of the militarization of outer space was not specifically on the agenda of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (Unispace II) held in Vienna in 1982. Nevertheless, its Report, which was adopted by consensus, urged all nations, particularly those with major space capabilities, "to contribute actively to the goal of preventing an arms race in outer space and refrain from any action contrary to that aim". (28)

It is worth noticing that the question of "Prevention of an arms race in outer space", was inscribed for the first time on the agenda of the UN Disarmament Committee exactly in 1982. (29)

By this time, three drafts of international agreements on this subject were presented in the United Nations:

- 1. Additional Protocol to the Space Treaty, submitted by Italy in 1979, "with a view to prevent an arms race in outer space". It proposed a new wording for the Article 4° of Space Treaty, "in order to prohibit, *inter alia*, the development and use of earth or space-based systems designed to damage, destroy or interfere with the operations of other States satellites". Not only the weapons of mass destruction but "any other types of divices designed for offensive purpose" would be forbiden by this instrument. (30)
- 2. Draft treaty on the prohibition of the stationing of weapons of any kind on outer space, presented in 1981 by the USSR and included on the agenda of the 36th session of the General Assembly. It would establish the obligation "not to place in orbit around the earth objects carrying weapons of any kind, install such weapons on celestial bodies, or station such weapons in outer space in any other manner, including on reusable manned space vehicles of an existing type or of other typess which States Parties may developed in the future". By this treaty the States Parties would assume the obligation "not to destroy, domage, disturb the normal functioning os change the flight trajectory of space objects of other States Parties", if such objects were placed in orbit in accordance with international law, including the UN Charter. (31)
- 3. Draft Treaty on the prohibition of the use of force in outer space and from space against Earth, presented in 1983 also by the USSR. According to the Soviet Government, this propolsal was an answer to the new plans of creation and deployment of different systems of space wepons capable of destroying targets both in space and on Earth. This text was much more broad that the previous one. The Article 1° prohibited the resort to the use or threat of use of force in outer space, in the atmosphere, and on Erth through the utilization, as instruments of destruction, of space objects in orbit around Earth, on celestial bodies, or stationed in space in any other manner. Similarly, it would be prohibited to resort to the use of threat of use of force against space objects in orbit around Earth, on celestial bodies, or stationed in outer space in any other manner. The Article 2° included a number of specific commitments: not to test or deploy any space-based weapons; not to utilize space objects as a means to destroy any target on Earth, in atmosphere, or in outer space; not to destroy or damage the functioning of space objects

of other states; not to test or create new antisatellite systems; to destroy any anti-satellite systems that might already exist; and not to test or use manned spacecraft for military, including antisatellite, purposes. (32)

All these projects had the glory of been born in the midst of the cold war and to oppose to its destructive way. They were defeated by it, but not annihilated. They are valuable references for the debate today, in a situation maybe even more unfavorable, as to how to slow down and make draw back the insidious process of total militarization of space, cutting by its roots the possibility of aggressions in Earth orbits.

# How to establish wide and solid juridical guarantees of peace and security in space, in order to prevent acts of aggression?

The theme not only did not die, as it is more alive than ever. The worries and ideas of today are, more or less, the same as yesterday. Only bigger, more urgent, more realistic, more free from the dictations, injuctions and ideological prejudices capable of unrecognizing interests and values of global nature.

A sample of that was the International Conference for the Prevention of Space Militarization, promoted in Moscow, 11-13 April, 2001, by the Ministry of Foreign Business of the Russian Federation, Russia Space and Aviation Agency and the Russian Academy of Cosmonautics Tsiolkvski, with the support of other Russian ministries, of the Russian Academy of Sciences, of the International Astronautical Federation and the International Academy of Astronautics.

The Russian government, through his viceminister for Foreign Business, Gueorgui Mamedov, presented the basic elements for a multilateral agreement on the banish of space weapons, that, in great part, remind us of very well known positions:

- 1. Use of space in conformity with the International Law and with the interest on the maintenance of peace and of security, as well as of the promotion of international cooperation;
- 2. Obligation of not deploying on Earth orbit objects with any kind of weapons on board and of not installing such weapons in celestial bodies or in outer space in any other form;
- 3. Obligation of not resorting for the use or threat of the use of force in relation to space objects;

4. Establishment of a mechanism to monitor the implementation of this agreement, based on the trust and transparence of space activities, including the previous presentation of information about space objects to be launched, inspection of sites from where the space objects must be launched, consultation procedures in order to solve doubtful situations and creation of an appropriate international body to implement such procedures.

It is true that among the representatives of 105 countries (including Brazil) present to the conference, the North Americans and British were absent. But the USA are hearing, more and more, similar ideas in its own home and in his traditional allies, as well as in regional and international organisms.

One must look at what happened in the recent session of the UN Committee on the Peaceful Uses of the Outer Space (Copuos), in Vienna, Austria, 6-15 July, 2001, which discussed, as a matter of priority, the theme "Ways and means of maintening outer space for peaceful purposes", attending to UN General Assembly Resolution 55/122, from December 8, 2000. (33)

According to the official report of the meeting, some delegations adverted that a trend towards "weaponization" of outer space and towards an arms race in outer space was becoming more obvious. It was also said that the placement of weapons in space could undermine the global strategic balance, intensifying the arms race on the ground, creating obstacles for established armas control and disarmament regimes, and undermining the mutual trust among countries. Other consequences pointed out would be an even greater increase of the restrictions to the free flow of information and of technologies – restrictions which are already growing due to commercial and political interests. One of the delegations sustained that the most direct and effective way of maintaining space for peaceful uses is the conclusion of one or more international agreements, prohibiting tests, installation and the use of any type of weapons, weapons systems or their components in outer space; the tests, deployment and the use on the ground, sea or the atmosphere of any kind of weapons, systems of weapons or their components aimed at outer space warfare and the use of any object launched into space for the purpose of warfare. The same delegation defended the idea that the point of the order of the day entitled "Ways and means of maintenaning

outer space for peaceful purposes" could, naturally, include the establishment of a legal regime to maintain outer space for peaceful purposes. Another delegation gave a contrary opinion, asserting that the Copuos was created exclusively to promote international cooperation on the peaceful use of space and that the disarmament questions are of competence of the UN General Assembly First Committee and of the Disarmament Conference. Other delegations. nevertheless, soon became in favor of the thesis that the Copuos is competent to examine all the problems referent to the peaceful uses of outer space, including any form of space militarization contrary to the International Law, expressed on the UN Charter and on the 1967 Space Treaty. For these delegations, the exam of the theme on the prevention of an arms race in outer space by the UN General Assembly First Committee and by the Disarmament Conference should not exclude the Copuos from also studying the subject. Indeed, some delegations defended the need of a coordination mechanism among the work of the Copuos and of the Disarmament Conference. There was still, on this direction, some who proposed that the Copuos, when approaching the ways and means to prevent the militarization of outer space contrary to the International Law, should not limit itself to the speeches of its delegates, but that it should also include the adoption of proposals and concrete actions. It is important to underline, finally, the final recommendation of Copuos that the subject continues to be considered, in a priority manner, in its next session, in 2002.

It seems clear that the tendency of many Copuos delegations, probably the majority of its 63 members countries, in assuming the question of outer space militarization. However the organization operates by consensus and USA as some other allies, do not seem to have the willing to accept this hypothesis. Therefore it is difficult to envisage real advances in this matter in the near future.

But this processual freeze certainly will not overcome the necessity, that is growing, to create more efficient legal and politics warranties for peace and security in outer space, so as to prevent for aggression acts and to assure the development of the space activities under the best possible conditions and in the benefit of all countries.

What will best comply with this necessity, the multilateral, the cooperation among countries and the collective security or the unilateral and the individual action of each country or of a small group of countries?

If we assume the unilateral approach and the use of force in outer space, even as in the exercise of the right of self defense, we will face even more complexifnotimpossible tasks, as that of regulating space wars. This would include the insane work of defining aggression acts in outer space with its myriad of specificities—unless we would accept to leave this definition to each country or the law of the more powerful.

Norberto Bobbio considers four types of relationship between war and law: the war as a means to establish (or to re-establish) rights; the war as an object of legal regulation; the war as the source for rights and the war as the antithesis of the rights. (34)

We do not need space war to establish the law. We already have basic international law, universally accepted, represented above all by UN Charter and the Space Treaty. A space war would destroy it simply.

What type of law would a space war as the source of the rights create? The more democratic, the better accepted by all countries independently of the development level of each one of them, or the right of the powerful and of the more prosperous?

The space war could re-establish in principle a broken law, to repel an aggressor, but probably at such high price in losses and damages that would not worth taking the risks.

None of known regulation experiences of armed conflicts, either in sea, air or land provided results that deserve to be mentioned. Why it would be different with the space war, in which, with no doubt, the more sophisticated, destructive and fast technology would be used?

Everything leads to the believe that the more adequate and correct is to consider the space war as the antithesis of the law. That is, as the denial of the law. Or as the denial of any idea of law and justice.

Let us see what Bobbio himself writes about the war as the antithesis of law: "Once recognized the war as legibus soluta, that is, above any possibility of juridical control, the warturns to be a primordial force that, wherever it appears, it turns down the realm of law. Thus we go back to a traditional representation, classic, of war: inter arma silere leges (among arms, law gets silent). Intervenes at this point the conception of law as a compound of ordered

rules which final end is the peace: and the peace is the elimination of war. Wherever goes the realm of the law, ceases the state of war: indeed, the victory of law consists in the gradual elimination of the unregulated force relations in which the war consists: and, thus, by its turn, the law is the antithesis of war."

In this way it is not regarding to only repress and punish aggression acts, and to regulate the use of force in outer space. It regards above all, to inhibit, by all means and with the active participation of the whole international community, that aggressions be undertaken and armed forces be used in outer space, because, in all cases, the result would be always deleterious and irreparable.

This question of global characteristics is so relevant to the human civilization history that would be of plenty pertinency to convoke a United Nations Conference to deal specifically with peace keeping and security in outer space.

Logic and vital provision, in a first moment, would be to improve the existent UN Security Council to enable it to take a decisive role with respect to aggression acts, breaches of peace and in general the employing of force in outer space in the benefit of major objective in defending the peace and international security, counting with the respect, the confidence and the reconaissance, if not all, of the absolute majority of the countries and peoples.

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