

LAW AND ETHICS OF OUTER SPACE

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Law and Ethics

My aim of these brief considerations is to underline that this is the ideal opportunity to carry out an in-depth revision of the law that arises as a result of the advances imparted by new technologies. In particular, those referring to the Law of Outer Space, as in this sector, scientific findings have forced the legal experts to adapt to new circumstances. Circumstances which have not always taken into account the importance of the medium on which they are acting, until reaching saturation and contamination point in certain areas of outer space; as is the case, to cite an example, of the geostationary orbit of the earth¹.

When originally dealing with a 'virgin' space, untouched by the hand of mankind, the law was reticent, at

¹ The geostationary orbit of the earth is currently over saturated with a virtual belt formed by some 350 fixed satellites, without forgetting the space debris (it is calculated that there are some 8.500 objects with a diameter greater than 10 centimetres and between 70.000 and 150.000 fragments with a diameter of less than 10 centimetres).

first, to regulate the so-called "space conquest". It lagged behind the steps taken, and in the early years this new branch of the Law gave a decided and unjust "air" of science fiction. This caused delays, which have been alleviated, however, thanks to the pioneers of this discipline and to the praiseworthy efforts made during the first decades of space exploration, in the sixties and seventies, in the heart of the United Nations.

Fortunately, this tendency has changed radically today and Space Law is a branch that is already established in International Law. Also in many cases it regulates with priority the actions of the States in space, as is the case of the Intergovernmental Agreement (IGA) regarding the International Space Station (ISS), which was approved before construction started on this inhabited spacecraft; an indication of the maturity of this legal discipline.

The economic interests at stake, however, as well as the rigours of international policy have disregarded the

opportunity on many occasions to protect outer space. And the law has been incapable of regulating in time, in order to avoid the contamination and the deterioration of this space, which at present runs the risk of becoming a dumping ground for space debris².

It is here, where we need to reflect, as human beings, on what we are doing in outer space, and above all how we are doing it. So that we may try to find the parameters that serve as restrictions in order to avoid destruction of a medium such as outer space due to a battle of interests that pay little attention to the wellbeing of mankind.

It will be necessary to reinforce the notion of humanity and that of the "common heritage of mankind" which with great ambiguity is reflected in the 1967 Space Treaty in its first article. As Juan Antonio Carrillo Salcedo³ pointed out, the same notion of "common heritage of mankind" seems to be backing down. Yet, the concept of mankind is not a notion without meaning as "for more than twenty years the international community has undertaken to develop the legal,

² In this sense, *vid.* Faramiñán Gilbert, J.M.: "Space Debris: Technical and Legal Aspects", in *Outlook on Space Law over the Next 30 Years*, Ed. Kluwer Law International, The Hague 1997, pages. 305 and foll.

³ Carrillo Salcedo, J.A.: "Contribution de la notion d'humanité au renforcement de la dimension idéologique du droit international", in *Les droits de l'homme à l'aube du XXI*

regulatory and institutional implications of the notion of mankind in international law"⁴.

Whichever way you look at it, it is evident that mankind, as it is, lacks an international legal status. From there that practical dichotomy between the notion of mankind and common heritage of mankind that incapacitates it to defend and protect its interests as would be desired. A change is observed, however, in the International Community, which for the cited author, is detected as an ideological evolution of this Community which seems to preclude the possibility that the notion of mankind finds its corresponding place in the International Legal framework⁵.

In truth, if ethics are concerned with the duty to be and the right to be, when there is no desire for this, this impedes the practicality of the ethical models. Although the ethical debate must serve as a basis to the legal debate, as when one talks of the duty to be legal, one would be turning to the ethical 'background' of the law. Not in vain, indicates Agnes Heller that "not all ethical-political concepts of justice project a socio-political order in which all the norms are moral. Quite the opposite, the absolute utopia is the

siecle, Karel Vasak Amicorum Liber, Ed. Bruylant, Bruxelles, 1999, page. 116.

⁴ *Ibid.* Page. 123.

⁵ *Ibid.* Page. 124 and foll..

exception more than the rule”⁶. In short, ethics must give the suitable framework for the law to find its background, and maximise when we are discussing the protection of the interests of mankind.

As Kant⁷ pointed out, “the entire formula that expresses the need of my actions is a law”. He later adds, “law, in the measure that denotes legitimacy, rests on the conformity of the action with the ruling of law, provided that the action does not oppose the arbitration ruling or the moral possibility of the action, that is, that the action does not contradict the moral law”. From there, all written law should contain moral law in the background, or the *littera legis pragmaticae* must reflect the *anima legis moralis*, like a structure of ethical security for the scope of the rule that makes Law a direct route to Justice.

In this sense, in the Law of Outer Space, the interest of mankind for this common field and the state interests at stake have demonstrated that the legitimate interest of mankind as a whole in the exploration and exploitation of this medium has not been taken into account. On the

contrary, the International Community has been committed by those States more economically and technologically developed to the detriment of those less developed. In particular, to a certain extent they have been allowed to breach the principles on outer space, established by the United Nations, and that in spite of the efforts of the international organisation to safeguard the interests of mankind in outer space, the scales have not always been tipped in favour of mankind as a whole.

Ethics and Space Law

Perhaps due to oversight, carelessness, ignorance or having trivialised the importance of space in the scope of the law, many years of effort and study have been lost. Now they are trying to be recovered for the benefit of everyone, but only when a good part of outer space closest to us, that is the orbits of our planet are already alarmingly contaminated.

It is not so trivial therefore, that in the framework of the UNESCO they have formed a Sub-Commission on the ethics of outer space and as its narrator Alain Pompidou stressed, now more than ever it is necessary that ethics precede and guide the law⁸.

⁶ Heller, A.: *Más allá de la justicia*, Ed. Crítica, Barcelona 1990, (chapter regarding “The ethical-political concept of justice”), page. 67.

⁷ Kant, E.: *Lecciones de ética*, Ed. Crítica, Barcelona 1988, (chapter regarding “The Laws”) pages 72.73.

⁸ Pompidou, A.: *L'éthique de la politique spatiale*, Ed. UNESCO (COMEST) and ESA, Paris 2000, (vid. Recommendations, page 27).

Therefore, by initiative of the Director General of UNESCO, at that time Federico Mayor Zaragoza and the Director General of the European Space Agency (ESA) Antonio Rodotà a Work Group on ethics in outer space was created in December 1998. It is presided by the Professor Alain Pompidou and closely linked to the World Commission of Scientific and Technological Ethics (COMEST) in operation since January 1998 under the presidency of the former president of the Republic of Iceland Ms. Vidgis Finnbogadóttir. An intellectual forum had been born in the heart of the UNESCO, a consultative body capable of exchanging ideas and experiences and favouring dialogue between scientific communities, the decision-making bodies and society.

The work group on ethics in outer space, would be constituted as an interdisciplinary group and its function would be to establish the bases on the ethical implications in space policy which would pass to the approval of the COMEST. In this way, the group chose five lines of work: man in space, development of science and space technologies and their efficacy, the protection of the environment and the public liberties and cultural identities. The interest and importance of their work would give way to the creation of the Sub-Commission for outer space ethics which was created in the heart of the COMEST under the presidency of Professor Jens Erik Fenstad. This

groups together a dozen experts in a select group of varied disciplines and therefore with interdisciplinary nature.

As had already been pointed out by the President of the COMEST, during its inaugural session in Oslo in April 1999, this recently created Commission would have the aim of "detecting the first signs of danger (referring to the matters dealt with during that first session, such as ethics and energy and the information society and the ethics of space policy) and subsequently to advise the decision-making authorities (...) with the aim to contribute greater risk management and to become in the future the cornerstone of a culture of responsibility and solidarity."⁹

In short, the fundamental mission of COMEST is a better understanding by public opinion of scientific progress and technological challenges; the anticipation of risk situations; a sound balance between individual and collective protection with a view to recognise human dignity and the principle of equity. And finally, due allowance for a proportionate precautionary principle based on objective data and on transparent expertise, seeking to assure the best

⁹ Finnbogadóttir, V.: *Commission Mondiale de l'Éthique des Connaissances Scientifiques et des Technologies (COMEST)*. Actes de la première session, Oslo April 1999. Ed. UNESCO, page 138.

possible conditions for sustainable development.

From here it was possible to look for the bases for a “space culture”, ever essential in our day and age. In this way with the United Nations framework, in the heart of the UNESCO, and integrated in the COMEST, the Sub-Commission was born for ‘ethics in outer space’.

Its first formal meeting took place in Paris, at the UNESCO headquarters on 10-11 July 2000 during which the members of the Sub-Commission¹⁰ drafted a series of recommendations that were passed to the consideration of the COMEST. These must be approved, for their subsequent proposal as rules of behaviour and suggestions to UNESCO Member States with the aim that outer space is considered under the perspective of the interests of mankind as a whole. In such a way that they considered four lines of work: the Ethical issues relevant to space; space as a dimension; space as an instrument and space as a perception.

In this way, it was understood that the ethical matter should preside

¹⁰ The Sub-Commission for ethics in outer space is composed of the following members: Jens Erik Fenstad, Alain Pompidou, Cheick Modibo Diarra, Juan Manuel de Faramiñán Gilbert, André Lebeau, Antonio Rodotà, Lu Yongxiang, Franco Malerba, and U.R. Rao.

and guide the elaboration of the national space policies with the aim to elaborate a true space culture. Three principles should govern space as a dimension: the non-appropriation of space, freedom of access and seeking benefits for all mankind; to consider space as a scientific area; to protect access to the geostationary orbits and avoid contamination; avoid technological illusion in the preparation of programmes, in resource allocation, and in presentations to public opinion; ensure the protection of the planetary environment with the creation of a permanent global system for observation of the earth’s environment, global warming, depletion of the ozone layer, the sea levels; on data protection, whether on legal protection of data bases or copyright protection; also this will enable an effective pedagogy of mediation to be set up, drawing extensively on ethical reflection, by citing certain matters dealt with during exhaustive and extensive work meetings of the Sub-Commission.

In short, the conclusion was reached that an emergence of space ethics, in accordance with world-wide consultations must be intensified with a view to the definition of rules and norms. This might evolve in the light of progress of knowledge and technologies, while remaining based on unanimously recognised essential

H.E. Ms. Vigdís Finnbogadóttir assists as

principles: respect for dignity and socio-cultural identities, respect for free choice and critical spirit and respect for the principles of equity and solidarity.

The Sub-Commission has taken into consideration the legal vision establishing an analysis on "How can the definition of a law of space and its application be promoted with a view to improved protection of intellectual property and respect for human rights?" with the aim to analyse these matters from the perspective of Space Law, and to enrich in this way the debate, taking into consideration the jurist perspective.

This does not mean that all the legal issues must be circumscribed to these matters, however, the Sub-Commission believed, with good criteria, that they should carry out a series of considerations on the specific matters that might have repercussion in different mediums of space exploration. These two themes were paradigmatic of a series of interests at stake that would have to be regulated from the ethical and legal point of view.

In effect, the intellectual property is perfectly defined by law but technological progress, notably the development of activities in outer space, has opened up new opportunities which cause us to review intellectual property law in depth. Also human rights is a

field in which important progress has been made since the creation of the United Nations Organisation with regard to the defence and guarantee of freedom of individuals. Measures have now been adopted at regional level. Intergovernmental regional organisations served as the framework for promotion of their legal development through declarations, agreements and conventions. The conquest of space, however, has drawn attention to legal shortcomings, which must be fulfilled, in particular because, as we have already pointed out, space exploration and research are developing in an environment, which has been promoted as the common heritage of mankind by the United Nations.

The issue is already centred, and now, from the creation of this group of experts working on the matter, the COMEST and the Ethics Sub-Commission for outer space will call attention to all that referring to the research of outer space, where law and ethics must walk hand in hand as a guarantee and to the benefit of mankind as a whole.

president of the COMEST.