

The Sources of International Space Law

Ram S. Jakhu and Steven Freeland***

Abstract

In order to have a comprehensive understanding of international space law, which is embedded in general international law, it is indispensable that one must have a clear view of the sources of this legal system. It is a well-established fact that the sources of general international law are widely considered to be articulated under Article 38 of the Statute of the International Court of Justice. These are generally relevant for the regulation of outer space, but other 'non-traditional' modes of guidance and/or regulation have also been developed in this area. This article examines the provisions of Article 38, in order to discern those traditional and other sources of international law that are applicable to outer space and outer space activities. Particular attention is given to the development of customary international space law, state practice, and the role of 'judicial decisions and the teachings of the most highly qualified publicists', as well as more broadly to so-called 'soft law', for the determination of rules of international space law.

Introduction

In order to have a comprehensive and full understanding of international space law, which is embedded in general international law, it is indispensable that one must have a clear view of the sources of this legal system. By 'sources', we mean systems or processes that allow international law to come into being. International space law neither possesses an identity independent of general international law, nor does it come into being outside the law-making processes established by the latter. Therefore, the sources of international space law are principally the same as those of general international law.

Article 38 of the Statute of the International Court of Justice (ICJ)¹ is generally considered to codify the modern sources of general international law. This Article specifies that:

* McGill University, Canada, ram.jakhu@mcgill.ca.

** University of Western Sydney, Australia, s.freeland@uws.edu.au.

1 The Text of the ICJ Statute is available online at: <www.icj-cij.org/documents/index.php?p1=4&p2=2&p3=0> (last accessed: 23 August 2013).

1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
 - a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
 - b. international custom, as evidence of a general practice accepted as law;
 - c. the general principles of law recognized by civilized nations;
 - d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.
2. This provision shall not prejudice the power of the Court to decide a case *ex aequo et bono*, if the parties agree thereto.²

Even a cursory reading of this provision indicates that Article 38(1) paragraphs (a), (b), and (c) contain three law-creating processes or authoritative sources (i.e. international conventions, international custom and general principles of law), at least one of which must be applied – relied upon – by the ICJ in ‘decid[ing] in accordance with international law’ those international disputes brought before it. Article 38(1) (d), on the other hand is not law-creating, but is only a law-determining source that can be used by the Court in a search for, or determination of, evidence or existence of the rules of international law as incorporated in the above-mentioned three sources.

However, we should be aware that Article 38 has been challenged as a complete list of the sources of international law.² Since the coming into force of the United Nations (UN) Charter in 1945, the structure, nature and composition of the international community have changed dramatically and, as a consequence, there has been increasing globalization of political, economic, social, cultural relations. The start of the space age, as well as the ever-expanding range of space exploration and utilization activities, has also significantly influenced such globalization. This development has resulted in: (a) the unique evolution of the role and importance of international organizations in addressing international concerns, including outer space activities; (b) a rise of new international players (new subjects and objects of international law); and (c) the emergence of other new ‘non-traditional’ modes (including ‘soft-law’) for guidance and/or regulation of all international relations, including those that relate to outer space and outer space activities.

In this brief article we examine the traditional sources, as well as some other sources of international law that are (or may be) applicable to outer space and outer space activities (i.e. sources of international space law) in the following order: international conventions, international custom and general principles of law. We then discuss the role of ‘judicial decisions and the teachings of the most highly qualified publicists’, as well as more broadly the so-called ‘soft

2 For a brief but precise assessment of Article 38, see Kirthi Jayakumar, ‘Where Does Article 38 Stand Today?’, 12 October 2011; available online at: <www.e-ir.info/2011/10/12/where-does-article-38-stand-today/> (last accessed: 23 August 2013).

law' (i.e. sources that are not specifically enumerated on Article 38 of the ICJ Statute), for the determination of rules of international space law.

With the rapid increase in space activities and space actors at the international level, international space law is gaining importance and popularity. Consequently, there has been a rapid proliferation of very good international space law literature and interesting intellectual interaction among writers. However, this also poses a serious challenge for students entering this field and others in search of valid sources of international space law and appropriate scholarly writings with different perspectives. We sincerely hope that this brief article will serve not only as a tool to search for the proper rules of international space law, but also as an important guide to those who seek to write papers and commentaries on several issues involving the international legal regulation of outer space in the future. While ignorance of law is no excuse, knowledge of incorrect law would be misleading and could be embarrassing.

International Conventions

International space law is essentially conventional in nature, as it has been initiated and developed by international treaties that have been primarily negotiated through the UN system. The UN General Assembly successfully negotiated five outer space treaties,³ which lay down the foundational and significant principles and rules of currently applicable international space law. In addition to these five treaties, the most important treaties that form part of international space law are the 1945 UN Charter, the 2010 ITU Constitution and Convention (as well as the 2012 ITU Radio Regulations), and the 1963 Partial Test Ban Treaty.⁴

3 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), adopted by the General Assembly in resolution 2222 (XXI), opened for signature on 27 January 1967, entered into force on 10 October 1967; Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Rescue Agreement), adopted by the General Assembly in resolution 2345 (XXII), opened for signature on 22 April 1968, entered into force on 3 December 1968; Convention on International Liability for Damage Caused by Space Objects (Liability Convention), adopted by the General Assembly in resolution 2777 (XXVI), opened for signature on 29 March 1972, entered into force on 1 September 1972; Convention on Registration of Objects Launched into Outer Space (Registration Convention), adopted by the General Assembly in resolution 3235 (XXIX), opened for signature on 14 January 1975, entered into force on 15 September 1976; and Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (the Moon Agreement), adopted by the General Assembly in resolution 34.68, opened for signature on 18 December 1979, entered into force on 11 July 1984.

4 The 1945 Charter of the United Nations, applicable to 193 States Members of the UN; (b) Constitution and the Convention and Convention of the International Telecommunication Union, 1994 (as amended in 2010 (ITU Constitution) and ITU

Pursuant to Article III of the Outer Space Treaty,⁵ numerous other international treaties are applicable to outer space and can be considered as part of international space law. As has been mentioned elsewhere, ‘the applicability or non-applicability of an international treaty to outer space ought to be determined on the basis of its objective, scope and provisions, as well as the States Parties concerned.’⁶ One must keep in mind that a number of international treaties are also applicable to outer space irrespective of the dates of their conclusion. For example, the 1936 Broadcasting Convention,⁷ which was adopted before the start of the space age, is considered to be applicable to outer space activities, particularly to international broadcasting by satellites.

Moreover, for an international treaty to be considered to be valid and to represent a source of international space law, it must conform to the requirements of international law of treaties, a major portion of which has been codified in the 1969 Vienna Convention on the Law of Treaties.⁸ In general, a treaty is not binding on those States that have not ratified (or acceded to) that instrument, or where the treaty has not come into force. For example, the 1969 Vienna Convention on the Law of Treaties is not applicable to the U.S., which has not yet

Radio Regulations, Edition of 2012 (ITU Radio Regulations) - currently, there are 192 States Parties these instruments; and Treaty Banning Nuclear Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty), opened for signature on 5 August 1963; entered into force on 10 October 1963.

- 5 Article III of the Outer Space Treaty specifies that ‘States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.’
- 6 Ram S. Jakhu and Isavella Maria Vasilogeorgi, ‘The Fundamental Principles of Space Law and the Relevance of International Law,’ forthcoming in the proceedings of a conference entitled ‘In Heaven as on Earth? The Interaction of Public International Law on the Legal Regulation of Outer Space’, held on 1 and 2 June 2012, at the Institute of Air and Space Law, Cologne University, Cologne, Germany.
- 7 International Convention Concerning the Use of Broadcasting in the Cause of Peace, adopted at Geneva on 23 September 1936, entered into force on 2 April 1938. As of 23 August 2013, there are 15 Signatories and 54 States Parties to the Convention: <<http://treaties.un.org/doc/Publication/MTDSG/Volume%20II/LON/PARTII-1.en.pdf>> (last accessed: 23 August 2013).
- 8 Vienna Convention on the Law of Treaties, adopted in Vienna, 23 May 1969, entered into force on 27 January 1980, UNTS, vol. 1155, p. 331. This Convention applies only to those treaties that are among States. Treaties between States and International Organizations will be governed by the 1986 Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations, when and if it comes into force. See also Ram Jakhu and Steven Freeland, ‘The Relationship between the United Nations Space Treaties and the Vienna Convention on the Law of Treaties’, (2012) *Proceedings of the International Institute of Space Law* 375-391.

ratified this instrument. Similarly, the 1996 Comprehensive Nuclear Test Ban Treaty,⁹ which was adopted to fill the *lacunae* that arose out of the 1963 Partial Test Ban Treaty, is not binding on the 159 States that, as of 12 April 2013, have ratified this treaty,¹⁰ since the treaty itself has not yet come in force. Unless a treaty specifies otherwise, a signatory State to a treaty is not bound by its provisions, except that it must 'refrain from acts which would defeat the object and purpose of a treaty' it has signed.¹¹

It should be kept in mind that, due to the rapid expansion of space activities and space actors, specific space activities and several States may not be governed by the five UN Space Treaties. For example, the scope of the 1972 Liability Convention is limited in several respects. It is not applicable to more than 100 States that are not parties to it. Similarly, the 1967 Outer Space Treaty is not applicable to more than 100 States. This international regulatory *lacunae* is filled to a large extent by the rules of general international law. Therefore, when addressing the issue of responsibility and liability regime for damage caused by space objects, a proper analysis would require a careful consideration of the rules of international law beyond the Liability Convention and the Outer Space Treaty. The Outer Space Treaty is occasionally pronounced by some authors to be the constitution (i.e. supreme law) of outer space. In fact, it is not the constitution, but a principal (framework) treaty laying down important principles for outer space governance, that may be confirmed, developed upon, or varied, in subsequent treaties. It neither creates any organisation for its implementation and monitoring compliance, nor is capable of making invalid other treaties that are and will be inconsistent with its provisions. Moreover, like any international agreement, the Outer Space Treaty is subject to the provisions of Article 103 of the UN Charter,¹² as well as several rules of international law, for example *jus cogens* (discussed below). Additionally, by virtue of Article 31(3) (a) and (b) of the Vienna Convention on the Law of Treaties, the provisions of the Outer Space Treaty may be interpreted differently, or their meaning might be changed by subsequent agreements among, and the subsequent practice of, States Parties to the Treaty.¹³ In this regard, for example, one may note the practice of some States Parties to the Outer Space Treaty that consider 'peaceful uses' of

9 The Text of the Treaty is available online at: <www.ctbto.org/fileadmin/content/treaty/treaty_text.pdf> (last accessed: 23 August 2013).

10 See <www.ctbto.org/the-treaty/status-of-signature-and-ratification/> (last accessed: 23 August 2013).

11 Vienna Convention on the Law of Treaties, Article 18.

12 This provision specifies that, '[i]n the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.'

13 For a detailed discussion, see Georg Nolte, 'Introductory Report for the Study Group on Treaties over Time Jurisprudence of the International Court of Justice and arbitral tribunals of *ad hoc* jurisdiction relating to subsequent agreements and subsequent practice', available online at: <www.auswaertiges-amt.de/cae/servlet/content-

outer space to include military but non-aggressive uses, even though, in general terms, peaceful uses are considered to refer only to non-military uses.

Furthermore, four UN space treaties¹⁴ adopted subsequent to the Outer Space Treaty contain special and specific provisions largely emanating from – but not always ‘exactly mirroring’ – the general principles of the Outer Space Treaty. Therefore, in case of any inconsistency, the provisions of these subsequent treaties will generally prevail over those of the Outer Space Treaty for those States that are Parties to each of those treaties, due to the applicable legal principle (doctrine) of *lex specialis derogat legi generali*, which is a commonly accepted technique of interpretation of international law.¹⁵

Since the conclusion of the 1979 Moon Agreement, no significant space treaty has been adopted, except: (a) the revisions to the ITU Constitution and Conventions, as well as the Radio Regulations; and (b) the adoption of the 2012 Space Assets Protocol.¹⁶ Currently no specific treaty for governing outer space is being considered. Instead, there appears a noticeable trend towards the adoption of ‘soft-law’ international instruments, which are discussed below.

International Custom

It has long been accepted that customary international law represents one of the ‘sources’ of space law.¹⁷ Describing the early emergence of customary international law in the context of outer space, Judge Manfred Lachs of the ICJ observed, shortly after the Outer Space Treaty had been finalized, that:¹⁸

‘[t]he first instruments that men sent into outer space traversed the air space of States and circled above them in outer space, yet the launching States sought no permission, nor did the other States protest. This is how the freedom of movement into outer space, and in it, came to be established and recognised as law within a remarkably short period of time.’

blob/582682/publicationFile/156231/NolteTreatiesOverTime1.pdf> (last accessed: 23 August 2013).

14 These are, as noted above, the 1968 Rescue Agreement, the 1972 Liability Convention, the 1975 Registration Convention and the 1979 Moon Agreement.

15 For a detailed discussion, see Bruno Simma and Dirk Pulkowski, ‘Of Planets and the Universe: Self-contained Regimes in International Law’, (2006) 17:3 *The European Journal of International Law*, 483.

16 The Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets, adopted in Berlin, Germany, 9 March 2012.

17 See, for example, Vladlen S Vereshchetin and Gennady M Danilenko, ‘Custom as a Source of International Law of Outer Space’, (1985) 13:1 *Journal of Space Law* 22.

18 *North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark and Federal Republic of Germany v. The Netherlands)* (Judgment), Dissenting Opinion of Judge Lachs [1969] ICJ Rep 3, 230.

Moreover, many of the principles contained in the Outer Space Treaty also reflect customary international law and thus bind State parties and non-Parties to the Treaty alike.

A valid rule of customary international law must consist of two elements: (a) consistent State practice typically of a not insignificant period (the so-called objective test); and (b) this practice must be accepted as law by States, often known as *opinio juris sive necessitatis* (the so-called subjective test). Though several writers of international law often make wide-ranging assertions about the existence of some rules of customary international law, yet in fact it is extremely difficult and highly complex to provide sufficient and valid evidence to meet both the objective and subjective tests.

A general principle of law called *actori incumbit probatio* (a party making an assertion must prove that assertion) has also been followed in international law. Whosoever claims the existence of a rule of customary international law is under an obligation to prove its existence. This burden of proof is substantial as, in practice, it is very difficult and complex and often beyond the capabilities of a large majority of publicists. Hence the role of judicial decisions expressing such existence becomes important (discussed below).

The relevant rules of general customary international law apply to outer space relations, as is confirmed by the terms of Article III of the Outer Space Treaty.

General Principles of Law

As noted above, Article 38(1) (c) of the ICJ Statute refers to ‘general principles of law recognized by civilized nations’. As a preliminary point, the reference to ‘civilized nations’ reflects a by-gone era, when underdeveloped or ‘primitive’ countries were somehow not regarded on the same plane as the more developed (western European) ones. Things have certainly moved forward from that viewpoint, as reflected by the jurisprudence of the ICJ itself,¹⁹ and the scope of the provision is now regarded as covering such principles derived from *any* State, although not necessarily from *all* of them.

That said, there still remains some disagreement as to the precise focus of the provision, particularly in the sense that it is regarded as a source of international law.²⁰ There has been some conjecture as to whether the provision refers to general provisions of *international* law, or of *national* law, or both. Nevertheless, the most accepted view is that the provision contemplates that principles that are common to *national* legal systems may be incorporated into the framework for resolving disputes in accordance with international law. Such

19 See, for example, the reinterpretation of the concept of *terra nullius* in the *Western Sahara Case* (Advisory Opinion) [1975] ICJ Rep 75.

20 For a discussion of the various viewpoints as to the scope of Article 38(1) (c), see, for example, Humphrey Waldock, ‘General Course on Public International Law’, (1962-11) 106 *Hague Recueil* 54 *et seq.*; Martin Dixon, *Textbook on International Law* (5th ed, 2005), 38 *et seq.*

principles may themselves ultimately come to be recognized as autonomous customary (or conventional) sources of law,²¹ but resort to Article 38(1) (c) involves their application to the dispute in a different way.

Two of the most significant of such principles are those of ‘good faith’ and of ‘equity’.²² Both of these principles are of relevance to the regulation of the exploration and use of outer space. The underlying obligation of cooperation and shared ‘trusteeship’ of outer space, and its natural resources, by all States necessitates good faith on all sides. Indeed, this is reflected in the opening words of the Outer Space Treaty, which stipulates that the exploration and use of outer space shall ‘be carried out for the benefit and in the interests of all countries ...’²³ There are also a number of references to the need for international cooperation throughout the UN Treaties and ‘soft law’ space law instruments (see below), as well as to share information with other States, typically through the auspices of the UN Secretary-General. Implicit in these obligations is the requirement that they be undertaken in good faith – to do otherwise would be contrary to the object and purpose associated with the treaties and instruments, given the fact that they are underpinned by the need for mutual cooperation.

With regard to the principle of equity, this emerges in a number of ways with respect to the exploration and use of outer space. The words quoted in the previous paragraph from the Outer Space Treaty make clear the requirement for all States engaged in outer space activities to be cognizant of the interests of other States when conducting such activities. This is also reflected in a number of the hard law and soft law space law instruments, with the result that the peculiar and specific circumstances of each (relevant) State must be considered so as to ensure that activities do not unduly prejudice any one State’s interests. In essence, principles of equity and fairness – in the broadest sense of those words – are highly relevant in the regulation of outer space.

Other forms of equity and equitable principles are also relevant to outer space. The Moon agreement, for example, makes reference to the ‘interests of present and future generations’²⁴ – a concept that is known, particularly in discussions relating to environmental law, as the principal of ‘inter-generational equity’.²⁵

21 For example, the general principle that an injured party is entitled to compensation (reparation) for a violation of a legal obligation was initially utilized by the PCIJ partially as a principle ‘generally accepted in the jurisprudence of international arbitration, as well as municipal courts’; *Chorzow Factory Case (Merits)* [1928] PCIJ, Series A, No 17. Subsequently, the legal duty to make reparation for a breach of an international law obligation has become universally accepted as a customary international law principle.

22 See generally, Bin Cheng, *General Principles of Law as Applied by International Courts and Tribunals* (2006).

23 Outer Space Treaty, Article I.

24 Moon Agreement, Article 4.

25 This is a theory that has also been increasingly utilized under international law; see, for example, Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law & the Environment* (3rd ed., 2009), 119-122.

Moreover, the Moon Agreement then goes on to provide that the benefits derived from such exploitation are to be subject to an 'equitable sharing by all States Parties'.²⁶ Whilst, as is well known, this requirement is not without its controversies and is perceived to be a factor in the reluctance of the major space-faring and industrialized States to ratify the Moon Agreement, at least thus far, it is an important requirement that is to be taken into account when the 'international regime' is to be established in accordance with the Moon Agreement, 'as such exploitation is about to become feasible'.

Finally, the doctrine of abuse of rights, which is common to several systems of law, has been accepted into international law,²⁷ and is also applicable to outer space activities. The application and relevance of this general principle of law is pertinent in cases of the intentional creation of significant amount of space debris that endangers the exploration and use of outer space by all States.

Judicial Decisions and Teachings of Publicists

Since there is no central law-making institution in the world and the sources of international law are diverse, it is a complex and very challenging process to precisely determine what legal rules would apply to a given specific situation or international dispute. Article 38(1) (d) of the ICJ Statute specifies only two methods; i.e. judicial decisions and the teachings of the most highly qualified publicists of the various nations. They are, as noted above, not 'sources', but only means for the determination of rules of law that are subsidiary (secondary or subordinate) to the primary sources listed in Article 38(1) (a) to (c). Secondly, the provisions of Article 38(1) (d) are themselves controversial with respect their meaning, scope, and importance.

Judicial Decisions refer to judgements and advisory opinions of duly constituted international judicial bodies mandated to address or/and decide upon issues involving international law. Included in this category will be the ICJ, the PCIJ, the Permanent Court of Arbitration (PCA), and other international judicial bodies and arbitral tribunals. We must be cognizant of the fact that the mandate of the ICJ is not to make international law, but to apply it to the disputes or issues brought before it. Its decisions are binding and final, but have 'no binding force except between the parties and in respect of that particular case',²⁸ and consequently do not create formal precedent for other subsequent cases.

However, in practice, the decisions and advisory opinions of the ICJ are widely considered to be highly authoritative statements regarding (interpretations of) international law, by international and national courts, various States, and international organisations. The ICJ itself often relies upon its own previous rulings and determinations for making decisions in cases at hand. The ICJ's

²⁶ Moon Agreement, Article 11(7) (d).

²⁷ Ian Brownlie, *Principles of Public International Law* (7th ed., 2008), 444.

²⁸ Statute of the ICJ, Article 59.

determinations of the existence of particular rules of customary international law and general principles of law are highly complex tasks, which prove particularly relevant and important to other judicial bodies. Brownlie correctly upholds that:²⁹

‘it is obvious that a unanimous, or almost unanimous, decision [of the ICJ] has a role in the progressive development of the law. Since 1947 the decisions and advisory opinions in the *Reparation*, *Genocide*, *Fisheries*, and *Nottebohm* cases have had decisive influence on general international law.’

However, by citing the example of PCIJ’s ruling in the *Lotus* case, Brownlie also cautions that the decisions of the ICJ, and of its predecessor the PCIJ, must be carefully assessed for their value as an appropriate means for determining a rule of international law.³⁰

‘The *Lotus* decision, arising from the casting vote of the President, and much criticized, was rejected by the International Law Commission in its draft articles on the law of the sea ...’

It is not uncommon to see that some space law writers use, as a source of international space law, the ruling of the *Lotus* case, even though it is generally considered to be inapplicable to outer space and outer space activities.³¹ It is difficult to predict the nature of the approach the Court may take in the determination of rules of international space law. However, as noted earlier, since international space law is embedded in international law, the ICJ can be expected to continue following its decision-making tradition in international law in a determination of issues involving international space law. Moreover, it will be fascinating to see the emergence of the role of the PCA, which has recently adopted its Optional Rules³² for space law disputes that could arise between States, between States and private parties, and between private parties.

Teachings of publicists (scholarly writings, the doctrine), is the most doubtful, and thus the least resorted to, means for determining rules of international law by the ICJ. In the past, the writings of classical legal scholars used to be well-respected by international judicial institutions as a means to determine *lex lata* (what the law is), but they also, as *lex ferenda* (what the law should be), had significant influence on the formulation of rules of international law. By contrast, the contemporary practice of the international judicial bodies shows a

29 Ian Brownlie, *Principles of Public International Law* (7th ed., 2008), 20.

30 *Ibid.*

31 For details, see Ram Jakhu, ‘Legal Issues Relating to the Global Public Interest in Outer Space’, (2006) 32 *Journal of Space Law* 31, at 41 *et seq.*

32 Permanent Court of Arbitration, Optional Rules for Arbitration of Disputes Relating to Outer Space Activities, adopted at The Hague and effective 6 December 2011.

noteworthy reluctance to use scholarly writings as a means to search for the *lex lata* of international law. In 2012, Michael Peil analyzed more than 600 Judgments, Advisory Opinions and Orders, and found that the ICJ:³³

‘has cited publicists in only 22 of its 139 Judgments and Advisory Opinions.’

Peil describes several reasons for this sorry state of affairs and cites very authoritative views of highly qualified publicists, including those who served on the ICJ. For example, according to Manfred Lachs:³⁴

‘not even of my heroes, could I say: ‘this man made law.’ For teachers are not legislators, nor lawmakers in international relations.’

George Schwarzenberger did not hesitate to rebuke the scholars themselves, and noted that:³⁵

‘Nothing has brought the doctrine of international law into greater disrepute than proneness of individual representatives to present desiderata de lege ferenda in the guise of propositions de lege lata.’

In the context of international space law, there are two most crucial questions: who are ‘the most highly qualified publicists’, and how does one identify who these people are? A cursory examination indicates that person to be classified in this category must not only be qualified but most highly publicised; i.e. he/she must have high level of formal education, research skills, original scholarship, credible publications, and the holder of (or has held) high professional position(s) not only in the basic legal system of his/her country, but also with regard to international law and international space law.

The second question is highly sensitive and very difficult to answer. However, there appears to be a general consensus that Judge Manfred Lachs, Prof. Bin Cheng, and Prof. Carl Christol are the most highly qualified publicists of international space law. Their scholarly writings certainly deserve to be used for determining the *lex lata* of international space law.

In contrast to individual publicists, their collective institutions might have more credibility than their members. Of course, it depends upon the mandate, composition, and nature of the activities of such institutions. Undoubtedly, the International Law Commission (ILC) singularly stands out on the top of all such

33 Michael Peil, “Scholarly Writings as a Source of Law: A Survey of the Use of Doctrine by the International Court of Justice,” (2012) 36:1 *Cambridge Journal of International and Comparative Law* 136, 143.

34 Manfred Lachs, (1976/III) 151 *Hague Recueil* 161, at 169. Cited in *ibid*, 141.

35 Georg Schwarzenberger, ‘The Province of the Doctrine of International Law’, (1956) 9 *Current Legal Problems* 235, at 244. Cited in *ibid*, 143.

institutions as it commands more respect than freelance individual writers who often have political overtones and national biases in their writings. So far, the ILC has not taken up any international space law subject for the preparation of draft articles, but the time is ripe for asking the Commission to draft articles particularly for the regulation of space debris, which could then serve as an authoritative source for codification and/or progressive development of international space law.

Sources Not Mentioned in Article 38

As noted above, new - and potentially significant - sources of international law (and consequently those that may also be directly applicable to international space law) are emerging, irrespective of the fact that they are not specifically enumerated in Article 38 of the ICJ Statute. In this brief article, it is not possible to discuss all of them. The most important of them include the principles of *ius cogens*, *erga omnes*, and unilateral declarations. We will concentrate only on the resolutions of the UN General Assembly and Security Council as 'soft-law', which sometimes, though wrongly, referred to as *lex ferenda*.

For the purposes of this discussion, soft law instruments refer to written instruments that might purport to specify rules of conduct, but do not emanate from the traditional 'sources' of public international law.³⁶ It could be noted in passing that certain provisions contained in the United Nations Space Law Treaties might have characteristics of what has been described as 'legal soft law'.³⁷ For example, it could be asserted *arguendo* that the requirement that:³⁸

'the exploration and use of outer space ... shall be carried out for the benefit and in the interests of all countries ...'

is a 'soft' obligation, or at least constitutes a 'grey area', in the sense that, in many circumstances, it would simply be impossible to comply with, or to verify compliance. This might need to be the subject of further discussion and debate in the future.

When the United Nations Committee on Peaceful Uses of Outer Space (UNCOPUOS) began deliberations on the legal principles applicable to space activities shortly after the 'space race' had begun in earnest with the launch of Sput-

36 For a more detailed discussion of the applicability of soft law instruments under general international law and international space law, see Steven Freeland, 'The Role of 'Soft Law' in Public International Law and its Relevance to the International Legal Regulation of Outer Space', in Irmgard Marboe (ed), *Soft Law in Outer Space: The Function of Non-binding Norms in International Space Law* (2012), 9.

37 See, for example, CM Chinkin, 'The Challenge of Soft Law: Development and Change in International Law', (1989) 38 *International and Comparative Law Quarterly* 850, 851 and the corresponding footnote.

38 Outer Space Treaty, Article I(1).

nik I by the Soviet Union in October 1957, it was evident that a comprehensive legal code governing space activities would not be appropriate, or possible, at that early stage.³⁹ Instead, the UNCOPUOS Legal Sub-Committee opted to undertake a progressive approach, in order to allow for the further development of space technology and applications.⁴⁰ It was considered that, in relation to specific satellite applications, for example, it was more appropriate to adopt an instrument containing legal principles in the form of a UN General Assembly Resolution before completing the negotiations on multilateral treaties.⁴¹ This gave rise to a number of such resolutions prior to the finalization of the Outer Space Treaty, the most significant of which was:

- (i) 1963 Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space;⁴²

and, subsequent to the conclusion of the five UN Space Law Treaties, the UN General Assembly adopted a number of additional space-related principles, the first of which was in 1982. These include:

- (ii) 1982 Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting;⁴³
- (iii) 1986 Principles Relating to Remote Sensing of the Earth from Outer Space;⁴⁴
- (iv) 1992 Principles Relevant to the Use of Nuclear Power Sources in Outer Space;⁴⁵ and
- (v) 1996 Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries.⁴⁶

39 Vladimir Kopal, 'The Role of United Nations Declarations of Principles in the Progressive Development of Space Law', (1988) 16 *Journal of Space Law* 5, 6.

40 Report of the Ad Hoc Committee on the Peaceful Uses of Outer Space to the United Nations General Assembly (1959) U.N. Doc. A/4141, Part III.

41 See Manfred Lachs, *The Law of Outer Space: An Experience in Contemporary Law Making* (1972), 27-41.

42 UN General Assembly Resolution 1962 (XVIII) on the Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963) (Space Principles Declaration).

43 UN General Assembly Resolution No 37/92 on the Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982) (Direct Broadcasting Principles).

44 UN General Assembly Resolution No 41/65 on the Principles Relating to Remote Sensing of the Earth from Outer Space (1986).

45 UN General Assembly Resolution No 47/68 on the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992) (Nuclear Power Principles).

46 UN General Assembly Resolution No 51/122 on the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (1996) (Benefits Declaration).

These five resolutions have always been considered as *per se* constituting soft law. However, a number of the principles set out in these instruments have later been incorporated into hard law instruments. The terms of the Space Principles Declaration, which was the first codification of the fundamental principles that were ultimately to govern the exploration and use of outer space, are a case in point. This resolution sets out a series of nine general principles that were, with only relatively minor amendment, included in the Outer Space Treaty some four years later.

Yet, even though it was undoubtedly a very important instrument in the evolution of the formal rules governing the exploration and use of outer space, it was clear that the Space Principles Declaration was, at the time it was concluded, regarded only as a non-binding set of principles that should 'guide' States in their space activities.⁴⁷

More recently, voluntary 'guidelines' have also been agreed that are intended to address the problematic issue of space debris,⁴⁸ as well as in a number of other space-related areas. There has been a clear trend towards the use of such instruments, continuing the long-established understanding that soft law is a well-accepted methodology for furthering an understanding of how humankind should continue its endeavours in outer space.

As well as their incorporation into hard law treaties, commentators have argued that a number of specific provisions contained in these soft law instruments may have also subsequently crystallized into rules that represent customary international law.⁴⁹ There is no doubt that soft law can eventually become customary international law.⁵⁰ Indeed, a soft law provision (in a soft law instrument) may even be declaratory of customary international law in certain circumstances.

To give just one possible example, once again from the Space Principles Declaration, one of the provisions of that instrument specifies that:⁵¹

'[o]uter space and celestial bodies shall not be subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.'

47 See Space Principles Declaration, preamble paragraph 8.

48 See UNCOPUOS, 'Report of the Scientific and Technical Subcommittee on its forty-fourth session', 2007, A/AC.105/890, Annex 4, 42 <www.oosa.unvienna.org/pdf/reports/ac105/AC105_890E.pdf> (last accessed: 5 January 2011).

49 See, for example, Ricky J. Lee and Steven Freeland, 'The Crystallisation of General Assembly Space Declarations into Customary International Law', (2004) 46 *Proceedings of the Colloquium on the Law of Outer Space* 122.

50 CM Chinkin, 'The Challenge of Soft Law: Development and Change in International Law', (1989) 38 *International and Comparative Law Quarterly* 850, 857.

51 Space Principles Declaration, paragraph 3.

This provision was subsequently incorporated (with only minor amendment) to form Article II of the Outer Space Treaty, the so-called ‘non-appropriation’ principle.⁵²

It has quite often been the case that the task of negotiating and finalizing the terms of a soft law space-related instrument has been complex and a time consuming endeavour – for example, it took almost 10 years to negotiate the Nuclear Power Principles,⁵³ which contains some complex but specific technical recommendations written in mandatory (norm creating) language relating to the use of nuclear power sources in outer space. In such circumstances, it may be more difficult to categorically argue that the final result – even if in the form of a soft law instrument – is not intended to have *any* legal consequence whatsoever. On the other hand, the 1996 Benefits Declaration, which contains very broad principles without specifying any specific rights and obligations, might not have any legal value.

In this regard, the role and perspective of the ICJ are interesting, as that Court sometimes looks at the UN General Assembly Resolutions more positively, particularly in the determination of the existence of a rule of customary international law. In one of its Advisory Opinions, the Court notes that:⁵⁴

‘General Assembly resolutions, even if they are not binding, may sometimes have normative value. They can, in certain circumstances, provide evidence important for establishing the existence of a rule or the emergence of an *opinio juris*.’

Nevertheless, that ‘normative value’ might not be recognised in the UN General Assembly Resolutions on the Prevention of Arms Race in Outer Space (PAROS), which have been repeatedly adopted every year for the last about fifteen years with almost unanimity of the UN Members, but with one invariably negative vote by the most concerned and powerful State, the U.S. The role of the U.S., as the persistent objector,⁵⁵ is critical in not allowing the formulation of rule of customary international law imposing limitation on the development of space weapons.

The Resolutions of the UN Security Council as a source of international law are particularly important due to the more forthright and mandatory language of Article 25 of the UN Charter. Under this Article, UN Member States have undertaken ‘to accept and carry out the decisions of the Security Council.’ In the *Namibia* Advisory Opinion, the ICJ extensively discussed the implications

52 For a detailed analysis of Article II of the Outer Space Treaty, see Steven Freeland and Ram Jakhu, ‘Article II’, in Stephan Hobe, Bernhard Schmidt-Tedd and Kai-Uwe Schrogl (eds), *Cologne Commentary on Space Law, Volume I – Outer Space Treaty* (2009), 44.

53 For a details, see IH Ph Diederiks-Verschoor and V Kopal, *An Introduction to Space Law* (3rd ed., 2008), 101-106.

54 *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, [1996] ICJ Rep 226, 254-255.

55 Ian Brownlie, *Principles of Public International Law* (7th ed., 2008), 11.

of UN Security Council Resolutions and expressed the view that even non-Member States are required to act in accordance with (some of) decisions of the UN Security Council.⁵⁶ In this context, it will be interesting to see the interaction between the 2006 UN Security Council Resolution⁵⁷ and the provisions of the Outer Space Treaty and principles of *jus cogens*. Under this Resolution, the Security Council demanded that the Democratic People Republic of Korea (DPRK) not launch any further ballistic missiles; that it suspend all activities related to its ballistic missile program; and that it abandon all other existing ballistic missile programs in a complete, verifiable and irreversible manner. The DPRK, is undoubtedly obliged to comply with this Resolution pursuant to Articles 25 and 103 of the UN Charter. Sarah Teo, a Senior Analyst with the Multilateralism and Regionalism Program, Nanyang Technological University, reported on 12 December 2012 that:⁵⁸

‘North Korea successfully launched a rocket to put a working satellite in orbit. According to Pyongyang, the launch [was] ‘an important occasion of putting the country’s technology for the use of space for peaceful purposes on a new, higher stage’. The United States and its Northeast Asian allies, however, [saw] the launch as a cover for a ballistic missile test in violation of United Nations Security Council.....resolutions.’

Brian Weeden, a Technical Advisor for Secure World Foundation, thoroughly examined the 12 December 2012 launch by DPRK, and reached the conclusion that:⁵⁹

‘[a]ll evidence points to a satellite launch, despite headlines.’

If one considers missiles to be essentially launch vehicles, then there might be a conflict between the contents of this Security Council resolution and the freedom of use of outer space as guaranteed under Article I(2) of the Outer Space Treaty, which is also believed to have become a principle of *jus cogens*. This principle of freedom entitles all States to use outer space both for civilian and military purposes. A question arises: is the UN Security Council empowered to

56 *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)* (Advisory Opinion) [1971] ICJ Rep, 16, 44 (para 126).

57 Resolution 1718, adopted by the UN Security Council at its 5551st meeting, on 14 October 2006, UN Doc No. S/RES/1718 (2006).

58 Sarah Teo, ‘North Korea’s Rocket Launch: Opportunity for Regional Cooperation?’, *RSIS Commentaries*, No. 226/2012 dated 19 December 2012; available online at: <www.eurasiareview.com/19122012-north-koreas-rocket-launch-opportunity-for-regional-cooperation-analysis> (last accessed: 23 August 2013).

59 Brian Weeden, ‘Almost Everything You’ve Heard About the North Korean Space Launch Is Wrong’, *WIRED*, 18 December 2012, available online at: <www.wired.com/dangerroom/2012/12/launch/all/> (last accessed: 23 August 2013).

adopt resolutions which are contrary to the rules of international treaty law, or even a principle of *jus cogens*? Irrespective of this controversy, it appears safe to say that, although UN Security Council resolutions may not be a traditional source of public international law, they do appear to create binding international obligations for States.

To conclude our discussion in this section, perhaps the last word in this regard should be reserved to Sir Robert Jennings who, in 1980, when discussing UN General Assembly Resolutions, wrote that:⁶⁰

‘recommendations may not make law, but you would hesitate to advise a government that it may, therefore, ignore them, even in a legal argument.’

Concluding Remarks

It is important for anyone associated with international space law to recognize that the international regulation of outer space is embedded in international law. It is not an esoteric and separate paradigm. In a sense, this is an obvious point, but one that is worthwhile emphasizing. It is a logical consequence of the wording of Article III of the Outer Space Treaty, which requires that activities in the exploration and use of outer space are to be carried on ‘in accordance with international law, including the Charter of the United Nations’.

Moreover, international law is dynamic and evolving, as has been made clear by the ICJ on a number of occasions. It has tremendous breadth and tremendous depth and extends to include non-traditional areas that are not ‘territorial’ in nature. Likewise, the application of general international law principles to the regulation of outer space is equally dynamic and evolving. It is obvious that the future will see an even greater range of space activities evolve. This will give rise to considerable opportunities, but also considerable challenges. There is clearly a need for regulation of such activities in an appropriate way, and there is no doubt that international law – supplemented by national space law – has an important role to play in this continuing evolution.

As a consequence, the ‘sources’ of international law – both traditional (in an ‘Article 38 sense’) and non-traditional – are applicable to the regulation of the exploration and use of outer space. Of course the UN Space Law Treaties are highly significant and pertinent to space activities; but there is much more. A determination of the true legal position relating to a specific activity involving outer space technology would typically involve a consideration of a considerably broader and more complex (and perhaps also comprehensive) range of international rules than those contained in the UN Space Law Treaties, as important as those treaties are. These considerations cover areas as diverse as the

60 Robert Y Jennings, *What is international law and how do we tell it when we see it?*, The Cambridge-Tilburg law lectures, (3rd series, 1980), page 14, as quoted in David Harris, *Cases and Materials on International Law* (7th ed, 2010), 57.

use of outer space for the purposes of armed conflict,⁶¹ and the environmental rules relating to the exploration and use of outer space.⁶² The situation is even more complicated by the fact that space technology, and the range of space activities that this gives rise to, has moved forward very quickly from the days of Sputnik I. As is the case in many areas of scientific development, the technology has progressed far more rapidly than the law, which to the outsider appears to be lagging far behind. Many of these new activities in space were not even contemplated by the drafters of the UN Space Law Treaties. That does not mean that the fundamental principles of space law do not apply to those activities as well; we cannot simply say that there is 'no law' that applies to such situations. What we must do instead is to understand how these various sources of international (space) law operate, how they are developed and how they shape the dynamic legal paradigm associated with our ever-increasing dependency upon outer space technology in a globalized world. As this brief article has indicated, there are many varied factors to consider in undertaking this task. Whilst it certainly does not purport to be comprehensive in its coverage, we have endeavored in this article to raise some of the major considerations associated with arriving at an analytical and logical legal solution to the myriad activities that humankind is now, and will continue to undertake in outer space. Without a careful consideration of the nuances and intricacies of general international law, and how its creation determines the rules that dictate how such activities are to be undertaken, our understanding of what is and should be possible in this increasingly mainstream area for human activity will be significantly compromised.

61 See, for example, Steven Freeland, 'In Heaven as on Earth? The International Legal Regulation of the Military Use of Outer Space', (2011) 8:3 *US-China Law Review* 272.

62 See, for example, Ulrike M Bohlmann and Steven Freeland, 'The Regulation of Space Activities and the Space Environment', in Shawkat Alam, Md Jahid Hossain Bhuiyan, Tareq M.R. Chowdhury and Erika J. Techera (eds.), *Routledge Handbook of International Environmental Law* (2013) 375.