

case with customary international maritime law), the actions of just one, or a very few players, could create the “norm of orderliness” that Haley called for.¹⁹²

Rather than spending the next few decades trying to get the international community to reach a consensus on the duties of nations to remove their own debris (since after all, this same community has been unable to even define where space begins after 50 years), maybe it is instead time for one of the major spacefaring nations to take one or more of the proactive steps outlined above to drive the final nail in the coffin of “the Big Sky” theory, and instead take the first steps to establishing customary international law that states that orbit debris is abandoned property, free to be removed by any party in order to ensure safe passage in all orbits. Anything less and all we will be able to do when the next major collision occurs creating thousands or hundreds of thousands of new pieces of debris will be to vocalize our “irate expressions of disdain.”¹⁹³ Fifty years after it was written, *Space Law and Government* demands more of us today, when advancement in space technologies and our understanding of the space environment can lead us to no other conclusion but that the orbital debris crisis will not be solved by merely sitting back and hoping the next big collision won’t occur in our lifetimes (or at least within the lifetimes of the satellites that we’re most interested in). There is, instead, a clear “call to arms” in *Space Law and Government* that requires all who call themselves “space lawyers” should take up, and do what they can to work aggressively toward solutions to orbital debris, before it is too late.

In context after context as problems are examined it must be kept in mind that as space science and technology move forward at hypersonic speed, the law cannot afford to remain earthbound. The mildest possible penalty for such a lag will be confusion. The maximum price we may pay is mutual destruction.¹⁹⁴

¹⁹² SPACE LAW AND GOVERNMENT, *supra* note 1, at 157.

¹⁹³ *Id.* at 150.

¹⁹⁴ *Id.* at 123.

A NATURAL SYSTEM OF LAW? ANDREW HALEY AND THE INTERNATIONAL LEGAL REGULATION OF OUTER SPACE

Steven Freeland¹

I. HALEY'S VISION FOR THE INTERNATIONAL LAW OF OUTER SPACE

It is, of course, trite to state that the vast majority of international law that now exists has evolved, both through custom and as codified in treaties, by way of, and for, application to 'terrestrial' situations. International law has been an incredibly important mechanism by which the relationships between States (and other entities that have international legal 'personality') have been regulated. Naturally, the vast majority of such interaction has taken place in respect of their dealings with each other on Earth – through trade, conflict, cooperation etc. International law has, in most situations, served States very well in this regard in the regulation of these interactions. It has ensured that there are standards for compliance, and pathways and forums for discussion and debate, so as facilitate mechanisms by which to best ensure that international society operates (relatively) efficiently and peacefully.

Of course, there are difficult areas where the necessary political will has been lacking, particularly by way of (self) enforcement – these are the things we would usually read about in the newspapers. But, for the main, this terrestrial-inspired form of international law works very well, and has facilitated great progress in many areas of human endeavor on Earth, even

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though it often operates in the background. This is vital in an ever-increasingly globalized world.

Yet, this is by no means a 'given' in all circumstances. As the dawn of the 'space age' was just emerging in the late 1950s, important questions were being raised as to how international law would and should be adapted for, and adapt to, humankind's activities in the new frontier that was outer space. In 1958, Andrew Haley, considered by many to be the world's first space law practitioner,² wrote of the need to develop a new 'international formulation of space law.'³ He believed that the level of positive benefits to be gained from humankind's endeavors in space would largely be dependent upon whether it had determined an appropriate body of law to govern such activities. In his view, the legal regime that would be most appropriate for the regulation of this new frontier could only be truly international in nature, without resort to the tools associated with what he referred to as 'municipal' (national) law. Moreover, for Haley, the international law to be applied to outer space must be of a *sui generis* nature, since 'it is evident that our space jurisprudence must be based on something other than the present day international law.'⁴

In other words, given the unique nature of outer space, and the complex and (in many senses) unprecedented character of much of humankind's activities in this 'different realm,' Haley firmly believed that care had to be taken 'not to attempt to apply to space rules which have meaning only when applied to terrestrial events.'⁵ He was conscious, even in those early days, of the emergent issues that would be associated with space activities,⁶ believing that specific international law norms should be developed to address these 'new' problems, and that the appro-

² See The University of Mississippi School of Law, National Center for Remote Sensing, Air, and Space Law: Andrew Haley Collection, <http://www.spacelaw.olemiss.edu/archives/haley/> (last visited Sept. 6, 2013).

³ Andrew G. Haley, *Law of Outer Space – A Problem for International Agreement*, 7 AM. U. L. REV. 70, 71 (1958).

⁴ *Id.* at 73.

⁵ *Id.* at 72.

⁶ See, e.g., Andrew G. Haley, *Space Age Presents Immediate Legal Problems*, 1 PROC. OF THE COLLOQ. OF OUTER SPACE 5 (1958).

ropriate legal framework should be based on a set of principles that are ‘beyond terrestrial disagreement.’⁷ ‘Terrestrial’ international law was therefore, in Haley’s view, wholly inapplicable to the legal challenges that outer space presented.

For similar reasons, Haley also saw little value in considering that the by then well-established legal regulation of other ‘regimes,’ such as maritime law and aviation law, might offer a level of significant guidance as to how outer space should be governed. He concluded that those specific regimes, too, had evolved to address specific issues that were peculiar to their own circumstances, and that these were very different to the pertinent questions that related to the use and exploration of outer space. In any event, he saw that the legal problems that would arise with respect to space - citing as an example, those associated with human space travel - were ‘vastly more complicated’⁸ than with other regimes;⁹ yet another reason, in his view, to bypass those ‘precedents’ and thus avoid the temptation to develop a legal framework for space by way of legal analogy. Instead, he in effect advocated for a ‘clean-slate’ approach to the development of international space law, based on his conceptions of how this process was to be undertaken.

Having declared his hand in this way, Haley went on to discuss in subsequent writings his ideas as to the appropriate nature of the international law regulation that should be applied to outer space, representing as it did a framework for development of the necessary rules. He took very much a theoretical and traditional approach to the bases upon which international law was ‘created,’ comparing two distinct – and in his mind largely opposed – philosophies of international law: the ‘natural law’ theory of international law and the ‘positivist’ approach.

Based on a historical survey of some of the leading legal theorists and practitioners, Haley characterized the former ap-

⁷ *Law of Outer Space – A Problem for International Agreement*, *supra* note 3, at 73.

⁸ *Id.* at 72.

⁹ As an illustration of both his foresight and the importance he placed on the longer term regulation of issues arising from human space travel, Haley opined that: “[a]s the venture into space continues there will arise, in a new frame of reference, problems of neutrality and belligerency, of nationality, domicile, statelessness, internment, asylum, sequestration, blockade, hovering, extraterritoriality, embargo, and so on”. *Id.* at 77.

proach (which he championed) as 'based upon certain fundamental moral principles arising from the nature of man which are unchanging and which underlie, or should underlie, every body of law in every human community,'¹⁰ He describes this philosophy of law in almost spiritual terms, contrasting it with the positivist viewpoint (which he thought as totally inappropriate and reflective of a 'municipal' approach to international law), whose 'weakness' was that it 'lack[ed] a body of principle more fundamental than existing specific rules of law.'¹¹

Yet, although he regarded these two positions as philosophically opposed, he acknowledged that 'many specific rules may pass the tests ... of both'¹² and that some form of harmonization (compromise) may be necessary, although not desirable. Nonetheless, in his view, the natural law approach was superior in a number of important aspects, and 'recognizes the possibility of an invalid law . . . [while] the positivist does not.'¹³ It was on this premise that he went on to describe the basis of international law, revolving around notions of (State) consent, which he thought were vital in the formation of the 'new law of the space age.'¹⁴

This brief article will consider the principal points raised by Haley as seen in a more modern context, some 50+ years on, in order to examine how and whether they have stood the test of time in terms of the *lex specialis* of space law, as well as the other (semi-? non-?) legal trends relating to the regulation of outer space that have emerged, and the practice of States and non-governmental entities. Much has happened since the halcyon days of the 1960s with respect to the development of the fundamental principles of (international) space law. In the end, Haley's conception of the need for a natural evolution of fundamental principles has been proven not to precisely describe the current international regulation of the use and exploration of outer space; but neither is it totally inaccurate.

¹⁰ ANDREW G. HALEY, *SPACE LAW AND GOVERNMENT* 25 (1963).

¹¹ *Id.* at 31.

¹² *Id.* at 37.

¹³ *Id.*

¹⁴ *Id.* at 38.

In reaching this conclusion, it is necessary to briefly canvas the following issues: (i) the nature of existing international space law; (ii) the ‘applicability’ of existing (terrestrial) international law to space activities; and (iii) the tendencies towards so-called ‘soft law’ regulation with respect to the use and exploration of outer space.

II. THE NATURE OF EXISTING INTERNATIONAL SPACE LAW

As is well known, on 4 October 1957, a Soviet space object, *Sputnik I*, was launched and subsequently orbited the Earth over 1,400 times during the following three month period. Thus began humankind’s adventures in outer space. This milestone heralded the dawn of the space age and, over the ensuing decades, has given rise to the gradual development of fundamental principles that would underpin the legal regulation of the use and exploration of outer space.

Whilst there had been some (largely) academic scholarship prior to *Sputnik I* regarding the nature and scope of those laws that might be relevant and appropriate in relation to activities in outer space, these had generally been discussed only at a hypothetical level.¹⁵ The journey of *Sputnik I* highlighted almost immediately some of the difficult (practical) legal questions, involving previously undetermined concepts, upon which Haley was soon to comment, and which led him to quickly conclude on the need to create a completely new international legal framework untainted by existing law. Indeed, with the launch of *Sputnik I*, the reality of humankind’s aspirations and capabilities with respect to outer space had all of a sudden become apparent, and the world had to react – quickly – to an unprecedented event in an unregulated legal environment, particularly as it was clear that this was just the beginning of what would become an ever-increasing quest to undertake a wide range of space activities.

¹⁵ For a summary of the main academic theories relating to “space law” in the period prior to the launch of *Sputnik I*, see, e.g., FRANCIS LYALL & PAUL B LARSEN, *SPACE LAW: A TREATISE* 3-9 (2009).

First and foremost, this necessitated clarification as to the legal categorization of outer space for the purposes of international law. This marked an important aspect of Haley's conception that outer space was *different* from other legal areas, such that unique legal solutions had to be found. Haley was particularly concerned with the legal status of celestial bodies and the pressing need for all the space faring States to clearly enunciate that there was no possibility of establishing sovereignty over them. One of his most profound concerns was that 'colonialism' must never be permitted to occur in outer space, since he believed that 'wars, colonialism and strong nationalism [had] . . . overwhelmed the sound basis of international law' that was grounded on his cherished philosophy of natural law.¹⁶

In the end, Haley's concerns in this regard were, in fact, immediately addressed. Although the Soviet Union had not sought the permission of any other State to undertake the *Sputnik I* mission, there were no significant international protests asserting that this artificial satellite had infringed any country's sovereignty as it circled the Earth. The almost total international (in) action that stemmed from the *Sputnik* mission confirmed that this new frontier for human activity – outer space – did not, from a legal perspective, possess the traditional elements of sovereignty that had already been well established under the binding terrestrial international law principles that regulated land, sea and air space on Earth, and which Haley regarded as irrelevant for the legal characterization of outer space. Haley's arguments against turning to other regimes for guidance in the development of international space law thus seemed well-founded.

Instead, it was almost immediately assumed that outer space was to be regarded as an area beyond territorial sovereignty. Describing the early emergence of this customary international principle in the context of outer space, Judge Manfred Lachs of the International Court of Justice observed, shortly

¹⁶ See generally, SPACE LAW AND GOVERNMENT, *supra* note 10, at 3-35, & 132-133.

after the first of the United Nations Space Law Treaties had been finalized, that:¹⁷

[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.

This view as to the possibility of what has sometimes been referred to as ‘instant’ customary law accords with Haley’s own conclusion that there was ‘no rule in international law which would require that consent, [for the purposes of determining whether something constituted a rule of customary law] clearly shown, must be fortified by prolonged usage.’¹⁸ As such, virtually immediately after humankind had begun its quest to explore and use outer space, a number of foundational principles of the international law of outer space were born – in particular the so-called ‘common interest,’ ‘freedom,’ and ‘non-appropriation’ principles. In a certain sense, one could classify these as constituting a pure form of Haley’s ‘natural law’ theory for the regulation of outer space, although Haley himself characterized customary law (which these principles represented even before their codification in the Outer Space Treaty) ‘as much a positive, man-made law as is treaty law.’¹⁹

In any event, such principles flowed from humankind’s desire that outer space be regarded in such a way as to minimise the potential for conflict and disagreement, and instead serve to facilitate cooperation. As Haley had anticipated, these fundamental rules underpinning the ‘new’ international legal order for outer space represented a significant departure from the legal rules relating to air space, which from a legal perspective, is categorised as constituting part of the ‘territory’ of the subjacent

¹⁷ North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark and Federal Republic of Germany v. The Netherlands) (Judgment), [1969] ICJ Rep 3, 231 (Dissenting Opinion of Judge Lachs).

¹⁸ SPACE LAW AND GOVERNMENT, *supra* note 10, at 60.

¹⁹ *Id.* at 58.

State, as was reflected initially by way of customary law,²⁰ and then in the principal air law treaties. For example, reaffirming the principle that had already been codified as early as in 1919,²¹ the 1944 Convention on International Civil Aviation²² provides that:²³

every State has complete and exclusive sovereignty over the air space above its territory.

The International Court of Justice has also concluded that this characteristic of air space represents customary international law.²⁴ As a consequence, civil and commercial aircraft only have certain limited rights to enter the air space of another State,²⁵ in contrast to the freedom principle relating to outer space.²⁶

As noted above, Haley strongly opposed the influence of municipal law on international law. The jurisdictional classification of air space in this way, although practical and an inevitable consequence of national security interests, was ‘a concept completely repugnant to the nature of our proposed travels in space [and] . . . the antithesis of natural law.’²⁷ It was therefore

²⁰ *Id.* at 59.

²¹ See Convention for the Regulation of Aerial Navigation of 1919, Oct. 13, 1919, 11 L.N.T.S. 173.

²² 15 UNTS 295 (Chicago Convention).

²³ Convention on International Civil Aviation art. 1, Dec. 7, 1944, 15 U.N.T.S. 295, T.I.A.S. 1591 [hereinafter Chicago Convention]. For the purposes of the Chicago Convention, the territory of a State is regarded as “the land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State”. *Id.* at art. 2.

²⁴ *Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States)* (Merits) (Judgment), [1986] ICJ Rep 14, 128 (whereby the court noted that “[t]he principle of respect for territorial sovereignty is also directly infringed by the unauthorized overflight of a State’s territory by aircraft belonging to or under the control of the government of another State”).

²⁵ See Chicago Convention, *supra* note 23, at art.s 5 & 6.

²⁶ Of course, any space activities requiring a launch from Earth and/or a return to Earth will also involve a “use” of air space. In this respect, the law of air space may be relevant to the legal position if, for example, the space object of one State travels through the air space of another State. See also, Convention on International Liability for Damage Caused by Space Objects, art. II, *opened for signature* Mar. 29 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter Liability Convention] (applies *inter alia* to “aircraft in flight” (i.e. operating in air space)).

²⁷ *Law of Outer Space – A Problem for International Agreement*, *supra* note 3, at 73.

clearly at odds with what he regarded as the essential element for the proper regulation of outer space.

Yet, his vision was, in other senses, not fully self-contained, nor completely sufficient. Notwithstanding the emergence of these fundamental principles – generated by the consent of the (major) space faring and other nations,²⁸ and supported by the international community as a whole – it was still considered vital that these principles be (further) elaborated and codified into legal instruments. Thus, the fundamental principles of space law, having first been the subject of a number of United Nations General Assembly resolutions,²⁹ were later incorporated into the terms of the formal United Nations Space Law Treaties.³⁰

As a consequence, there is now a substantial body of international written law dealing with many – although not all – aspects of the exploration and use of outer space. These principles are primarily to be found in these Treaties, but also in subsequent United Nations General Assembly resolutions, bilateral arrangements, and determinations by Intergovernmental Organisations. But there is, of course, even more: over recent years, an increasing number of States have promulgated na-

²⁸ See, generally, *The Role of Consent in the International Law-Making Process*, in SPACE LAW AND GOVERNMENT, *supra* note 10, at 56-62.

²⁹ See International Co-operation in the Peaceful Uses of Outer Space, U.N. GAOR Res. 1721, 16th Sess., 1085th plen. mtg., U.N. Doc. A/RES/1961(XVI) (Dec. 20, 1961); Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962 (XVIII), U.N. GAOR, 18th Sess., 1280th plen. mtg., U.N. Doc. A/RES/1962(XVIII) (Dec. 13, 1963) (hereinafter Space Principles Declaration); Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies, U.N. GAOR Res. 2222, 1499th plen. mtg., U.N. Doc. A/RES/1966(XXI) (Dec. 19, 1966).

³⁰ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies, *opened for signature* Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty]; Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, *opened for signature* Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 [hereinafter Rescue and Return Agreement]; Liability Convention, *supra* note 26; Convention on Registration of Objects Launched into Outer Space, *opened for signature* Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15 [hereinafter Registration Convention]; and Agreement Governing the Activities of States on the Moon and other Celestial Bodies, *opened for signature* Dec. 18, 1979, 1363 U.N.T.S. 21 [hereinafter Moon Agreement].

tional space law to compliment their space activities, but also as part of an overall regulatory regime. There currently exists a wide (and increasing) range of national legislation, as well as some relevant decisions by national courts regarding space activities, particularly those involving non-State commercial actors.

One would suspect, therefore, that Haley would not be too impressed by this increasing proliferation of municipal space law, even though it represents a logical adjunct from the terms of, in particular, article VI of the Outer Space Treaty, and the precise definitions in, and requirements of the Liability Convention. Moreover, each of these pieces of domestic space law have been drafted to suit the specific national requirements of the particular State – and therefore they differ in scope and effect – although they may share certain common characteristics.³¹ There are therefore some important aspects of the legal regulation of outer space that are neither entirely uniform nor universally supported, although the fundamental terms of the Outer Space Treaty itself may well constitute customary international law.

This appears to be at odds with Haley's call for the regulation of outer space to be determined solely by principles of natural law, or at least by a natural law 'lite' approach that sees little, if any, room for national interests in determining what the law should be. Although past experience may have some value, he emphasized that 'novel activities in a new environment [such as outer space] must be dictated by the needs of the future,'³² Indeed, the national implementation of the international law principles of outer space by various States is very much a matter of municipal influence, notwithstanding Haley's strong objections, and bears specific *ad hoc* characteristics. Yet, this need for codification and, to a certain degree, modification of the initial fundamental principles into a written 'legislative' form –

³¹ In this regard, see Steven Freeland, *The Development of National Space Law*, in Steven Freeland, Rada Popova & Solomon Passy (eds.), *CONTEMPORARY ISSUES FOR NATIONAL AND INTERNATIONAL SPACE LAW: COMMENTARY AND SOURCE MATERIALS* 12-35 (2012).

³² Stephen E. Doyle, *Book Review – "Space Law and Government"*, 208 *DUKE L. REV.* 214, 216 (1965).

initially at the international level but, increasingly, also at the national level – was and is inevitable. Given the strategic, military and (ultimately) commercial importance of outer space – which may well be different for each space faring State – it was important for the rules of the road not only to be understood, but also to be codified and, at least to the greatest extent possible at the time, clarified into a written form.

Thus, to a large degree, the (to Haley) undesirable influence of positivism has played a significant role in defining the nature of the existing corpus of international space law, and the broader framework of space regulation – albeit for important reasons. Space law has indeed developed as a mixture of fundamental (natural) principles and pragmatism, leading at times to compromise in the adaptation and application of the rules. In certain respects, given the circumstances in which it was formulated – in the midst of the Cold War and with two opposing superpowers as the only major space faring States at the time – it was inevitable that the fundamental principles that were agreed were ‘self-serving,’ a characteristic associated with international law that Haley vigorously opposed.

Yet, Haley’s pessimism about what such an approach to space law-making would mean for humankind is also somewhat overstated, given that, in many (although, admittedly not all) aspects of space activities, the prevailing legal regime has served us well, and continues to do so. Even though a purist’s approach to humankind’s use and exploration of outer space – despite Haley’s undoubted clarity of reasoning – has not quite eventuated, humankind’s endeavors in outer space have generally brought with them many significant benefits to all of us.

This municipal influence does not, however, (yet) apply with respect to Haley’s vision of ‘Metalaw,’ which he develops in his various writings as ‘a workable system of laws applicable to all our relations with alien intelligences.’³³ As described by his former law clerk, Haley believed that:³⁴

³³ New Mexico Museum of Space History, *International Space Hall of Fame – Andrew G. Haley*, <http://www.nmspacemuseum.org/halloffame/detail.php?id=12> (last visited Sept. 6, 2013).

³⁴ Doyle, *supra* note 32, at 215.

continued reliance on anthropocentric concepts of law could be fatal to the community of mankind if and when contact is established with other sentient societies on distant celestial bodies.

In this regard, Haley might still have his wish, since it appears that the existing *lex specialis* is, and was intended to be limited only to humankind's activities in space, and does not purport to bind, or indeed apply to our interaction with extraterrestrial life. Haley believed that the basic rules of anthropocentric law – 'the law of human beings' – would simply not be applicable to such interactions. This gave rise to his so-called 'Golden Rule' – 'we must do unto others as they would have done unto them.' If and when the need for such extraterrestrial interaction does eventuate, it may well be the case that the appropriate regulatory rules and guidelines will emerge precisely as a process of natural evolution as envisaged by Haley, rather than as man-made law.

III. THE APPLICABILITY OF EXISTING (TERRESTRIAL) INTERNATIONAL LAW TO OUTER SPACE

Haley's call for a completely *sui generis* regime of legal regulation for outer space was, in certain senses, completely logical. The fact that most existing international law at the time had been developed for 'terrestrial' purposes meant that it was not readily or directly applicable in every respect to this new paradigm of human endeavor. Moreover, the non-sovereignty aspect of outer space meant that any then existent national law (which, in any event, did not at that time specifically address space-related issues) would not *prima facie* apply to this frontier, and would not be the appropriate legal basis upon which to establish the initial framework for regulating the conduct of humankind's activities in outer space. It was clear, therefore, that, at the dawn of the development of 'space law,' specific international binding rules would be required to address the particular characteristics and legal categorization of outer space.

Yet, once again, it seems that Haley's vision of the international law of outer space has not come to pass, at least in the

unequivocal terms that he wished for. This appears to be the case in several respects and for a number of reasons.

First, to this author at least, and notwithstanding Haley's pleas, it is clear that the international regulation of outer space is, in fact, 'embedded' within general international law. It is not, and cannot function as an esoteric and separate paradigm, despite its undoubted unique features. In a sense, this is an obvious point, but one that is worthwhile emphasizing. To consider it otherwise would, it is submitted, be to cast off this ever-increasingly significant area of regulation into a singularity that is not in keeping either with the close inter-relationship it has with a whole range of other human activities (on Earth as well as in space), or its importance in the overall maintenance of international peace and security (very much a 'terrestrial,' as well as 'extraterrestrial' concept).

This conclusion is also a logical consequence of the codification of international space law in the United Nations Space Law Treaties, particularly 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.' Indeed, Haley himself was opposed to the adoption of such an idea to the regulation of outer space, finding it 'surprising' that the United Nations General Assembly had adopted an earlier resolution to the effect that, *inter alia*, '[i]nternational law, including the Charter of the United Nations applies to outer space and celestial bodies.'³⁵ He believed that such an approach was illogical, since it purported to 'modify' existing international law – traditionally based on notions of territoriality – by introducing the prohibition against appropriation. Yet, it should be noted that this achieves, in the end, the result that Haley had called for, and it is not entirely clear from his writings what alternate methodology he would have offered to get to that same point.

Secondly, international law is dynamic and evolving, as has been made clear by the International Court of Justice on a

³⁵ SPACE LAW AND GOVERNMENT, *supra* note 10, at 29.

number of occasions.³⁶ It has tremendous breadth and tremendous depth, and extends to include non-traditional areas that are not ‘territorial’ in nature. One only has to consider the applicability of both UNCLOS³⁷ to the ‘Area’,³⁸ as well as the terms of the Antarctic Treaty.³⁹ Both of these instruments regulate areas that are (for the present time at least) characterized in a different way from territory in the ‘international law’ sense, as is, of course, outer space.⁴⁰

Likewise, public international law principles are (in theory) capable of extending to the regulation of outer space, and many would say that, in doing so, their application should be of an equally dynamic and evolving character. Whilst this is a truism, it also raises some equally difficult questions, some of which are addressed below.

Thirdly, 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 legal challenges. For some of these issues, there might not necessarily be an ‘obvious’ (natural) answer. Moreover, no-one doubts that, if one were to look solely at the *lex specialis* of space law, there are areas of lacunae. However, this reality cannot deny the need to ‘answer the question’ when a difficult legal issue arises – one cannot simply say that there is ‘no law.’ In the absence of appropriate natural or positivist law that directly answers a par-

³⁶ See, e.g., Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion) [1996] ICJ Rep 226.

³⁷ United Nations Convention on the Law of the Sea, 1833 U.N.T.S. 3 (hereinafter UNCLOS).

³⁸ *Id.* at art. 1(1). Article 89 of UNCLOS provides that, “[n]o State may validly purport to subject any part of the high seas to its sovereignty.” *Id.* at art. 89.

³⁹ Antarctica had seen a series of sovereign claims by several States in the period leading up to the finalization in 1959 of the Antarctic Treaty. Antarctic Treaty, 402 U.N.T.S. 71 (1959). Article IV of the Antarctic Treaty has the effect of suspending all claims to territorial sovereignty in Antarctica for the duration of that instrument, as well as prohibiting any “new claim, or enlargement of an existing claim.” *Id.* at art. IV. The Protocol on Environmental Protection to the Antarctic Treaty, 30 I.L.M. 1455 (1998) (augments the Antarctic Treaty by protecting Antarctica from commercial mining for a period of 50 years).

⁴⁰ See Outer Space Treaty, *supra* note 30, at art. II. See also Steven Freeland & Ram Jakhu, *Article II*, in STEPHAN HOBE, BERNHARD SCHMIDT-TEDD & KAI-UWE SCHROGL (EDS), COLOGNE COMMENTARY ON SPACE LAW, VOLUME I – OUTER SPACE TREATY 44 (2009).

ticular question, it is necessary to seek to apply other legal methodologies and concepts, so as to create (at least some) clarity, if not certainty. There is clearly a need for regulation of such activities in an appropriate way, even by way of applying other notions of law, and there is no doubt that general international law – perhaps also supplemented by national space law – has an important role to play in this continuing evolution.

So, the concept is relatively simple to state – general principles of international law do apply to activities in outer space. In this regard, therefore, it seems that Haley would once again be disappointed. Yet, this is so because it has to be so, particularly since, as is the case in many areas of scientific endeavor, the development of space-related technology has far outpaced both the emergence of natural international space law (as envisioned by Haley), as well as the development of positive international space law (as reflected in much of the practice and space legislation). For example, it is evident that many current and emerging space activities were not even contemplated by the drafters of the space treaties.

However, Haley's astute observation that space is unique is still very valid in this regard, particularly when determining precisely *how* the applicability of general international law may work for specific situations, and whether 'terrestrial' international law is sufficient, adequate and appropriate for this purpose, notwithstanding our need to use it anyway when the circumstances dictate. In this regard, two brief examples may serve to at least highlight this point. There has already been considerable discussion in relation to the applicability of the *jus in bello* to armed conflicts involving space assets,⁴¹ as well as the incorporation of general principles of international environmental law to address increasingly pressing issues associated with the problem of space debris.⁴² Whist it is beyond the scope

⁴¹ See, e.g., Steven Freeland, *In Heaven as on Earth? The International Legal Regulation of the Military Use of Outer Space*, 8:3 US-CHINA L. REV. 272 (2011), and the references therein.

⁴² See, e.g., Ulrike M. Bohlmann & Steven Freeland, *The Regulation of Space Activities and the Space Environment*, in SHAWKAT ALAM, ET AL. (EDS), ROUTLEDGE HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 375 (2013), and the references therein.

of this brief article to discuss those issues in detail, suffice to say that in both of those instances, important and difficult questions arise as to whether it is possible simply to transpose those principles to space-related situations in an entirely seamless way.

Yet, on the other hand, and despite Haley's reluctance to do so, it is submitted that there is value in considering those regulatory models, which, although not necessarily appropriate for total application by analogy, may be important by way of experience and adaptation. Sometimes, it may not be the most appropriate strategy to have to 'reinvent the wheel' when it comes to legal rule-making – particularly when the situation calls for an answer, even if one does not appear self-evident from the existing *lex specialis* (including customary, as well as conventional space law) body of law.

One possible example of this is the issue of commercial space tourism, which is forecast by some to become a significant space activity in the not-too-distant future, but which is not contemplated by the United Nations Space Law Treaties. In this regard, it may be useful to at least consider those elements of the air space regime that deal with aspects of commercial air travel, to perhaps gauge some possible inspiration for the creation of regulations that will address complimentary questions for commercial space travel, such as safety standards, liability issues, and the rights and legal status of commercial space tourist passengers.⁴³

In any event, there may well be important lessons to learn from our experience in regulating other regimes, so as *not* to repeat prior mistakes when it comes to formulating and implementing the international regulation for outer space. Prior practice may also represent a precedent of what *not* to do.

Haley's call for a pure legal regime designed for the unique environment of outer space is, to a certain degree, seductive. Overall, however, there are various important and practical

⁴³ For a discussion of the various legal issues that arise with respect to commercial space tourism, and various possible legal frameworks for such activities, see Steven Freeland, *Fly Me to the Moon: How Will International Law Cope with Commercial Space Tourism?*, 11:1 MELBOURNE J. OF INT'L. L. 90 (2010).

reasons why terrestrial principles of international law do also play an important part in the regulation of the use and exploration of outer space. Haley's vision represents the ideal scenario when it comes to the evolution of international space law, but it does not completely reflect reality, nor the cold hard fact that, in the end, international law will primarily (though not always) be 'reactive' rather than 'proactive' in areas where the scope of human endeavour is moving so quickly.

This latter point is highly relevant to the creation of international space law. One important question that comes to mind when reading Haley's work is whether the law-making processes for international space law should seek to establish rules beforehand to meet certain, perhaps unforeseen, situations that have not yet arisen. To a certain degree, it could be said to have done so; for example, some of the fundamental customary law principles that were codified in the Outer Space Treaty – including those that were aimed at minimising the possibility of conflict and the risk of contamination⁴⁴ – were designed to *prevent* certain situations from arising. In this sense they were proactive in design and intent.

Yet, this is probably an exception rather than a rule. With reference to the plethora of new and emerging space activities, the question arises as to whether, even if we wanted to, we are in a position to be proactive in relation to areas where we still do not fully understand the technology, and the risks and consequences of utilising that technology. Again turning to the area of commercial space tourism, are we really able to 'create' international legal standards at this point, before the fact? Isn't there a risk that, if we attempt to do so, we may be setting standards that subsequent experience will show were not appropriate? Nothing could be worse from a regulatory perspective, for example, than a tragic accident occurring in circumstances where a commercial space tourism operator complied fully with the prescribed standards, only for those standards to be shown to be woefully inadequate, perhaps even constituting as a contributing factor to the accident.

⁴⁴ See Outer Space Treaty, *supra* note 30, at arts. II, III, IV & IX.

To a large degree, therefore, we will need to ‘wait and see’ – and when the broad parameters of what is required becomes apparent, that is the time to draw upon both past experience and creative adaptability to design international law that is apposite, relevant, and effective (although, of course, those terms themselves have elements of subjectivity associated with them). This may no doubt lend itself to some *sui generis* legal principles, but will also build upon existing legal principles and standards. In the end, space law has been, is, and will remain a combination of Haley’s pure vision of law coupled with current principles that have been seen to work in other contexts. This is not the ideal corpus of law that Haley envisioned, but perhaps the only one that can best deal with the undoubted challenges that are yet to arise.

IV. THE TREND TOWARDS ‘SOFT LAW’ IN THE REGULATION OF OUTER SPACE⁴⁵

As noted above, Haley was somewhat of a traditionalist when it came to international law. He was primarily concerned with the law-making process, and focused on the role of consent (either by way of custom or through the finalization of a treaty) to formulate rules that ‘are regarded as binding by the community and which perform the functions of law in regulating human and national relationships.’⁴⁶ Moreover, his vehement opposition to a basis for law formulation that he thought would, in practical terms, allow States to shift in and out of compliance depending upon their respective national interests (either real or perceived) highlighted further his quest for binding rules that were both suited to the unique characteristics of outer space, and were ‘conceived and developed in an atmosphere of interna-

⁴⁵ For the purposes of this article, ‘soft law’ instruments are intended to refer to written instruments that might purport to specify rules of conduct, but do not emanate from the traditional ‘sources’ of public international law. This qualification is itself not unanimously supported; however, it is beyond the scope of this article to discuss what might be encapsulated in the various alternate theories of soft law.

⁴⁶ SPACE LAW AND GOVERNMENT, *supra* note 10, at 38.

tional consent and practiced as a customary usage' in relation to space activities.⁴⁷

It is therefore unlikely that Haley would approve of the emergent trend in the regulation of space law that has increasingly involved resorting to so-called 'soft law' instruments to set standards and guidelines for specific activities in outer space. To Haley, this might appear unacceptable for a number of reasons, including the (apparent) lack of a truly 'binding' framework for such rules,⁴⁸ and also its *ad hoc* 'hit or miss pattern' that he feared would distort the law-making process for outer space through the functioning of the United Nations.⁴⁹

Yet, it is clear that non-binding mechanisms were already used to develop the initial codification of the fundamental principles of space law, even as Haley was writing on the appropriate legal structures. When the United Nations Committee on the 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 *Sputnik I*, it was evident that a comprehensive legal code governing space activities would not be appropriate, or possible, at that stage.⁵⁰ Instead, the UNCOPUOS Legal Sub-Committee opted to undertake a progressive approach to remain in step with the development of space technology and applications.⁵¹ 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 United Nations General Assembly Resolution, before completing the negotiations on multilateral treaties.⁵²

⁴⁷ *Id.*

⁴⁸ For a discussion of the concept of 'soft (space) law' and the legal status of the various relevant 'soft law' instruments, see Steven Freeland, *For Better or For Worse? The Use of 'Soft Law' within the International Legal Regulation of Outer Space*, XXXVI ANNALS OF AIR AND SPACE L. 409 (2011).

⁴⁹ *Law of Outer Space – A Problem for International Agreement*, *supra* note 3, at 76.

⁵⁰ Vladimir Kopal, *The Role of United Nations Declarations of Principles in the Progressive Development of Space Law* 16 J. OF SPACE L. 5, 6 (1988).

⁵¹ Report of the Ad Hoc Committee on the Peaceful Uses of Outer Space to the United Nations General Assembly, U.N.Doc. A/4141, Part III (1959).

⁵² See MANFRED LACHS, *THE LAW OF OUTER SPACE: AN EXPERIENCE IN CONTEMPORARY LAW MAKING* 27-41 (1972).

As noted above, this gave rise to a number of such resolutions prior to the finalization of the Outer Space Treaty. Probably the most significant of these was the Space Principles Declaration. 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 regarded as a non-binding set of principles that should merely 'guide' States in their space activities.⁵³ This is further emphasized by the very next resolution passed on the same day by the United Nations General Assembly, dealing with 'International co-operation in the peaceful uses of outer space', which recommended to Member States that:⁵⁴

consideration should be given to *incorporating in international agreement form*, in the future as appropriate, legal principles governing the activities of States in the exploration and use of outer space

Indeed, the terms of the Space Principles Declaration sets out a series of nine general principles that were, with only relatively minor amendment, included in a binding international instrument, the Outer Space Treaty, some four years later.

Moreover, as is well known, in the context of the regulation of the exploration and use of outer space, a further series of resolutions were also adopted in the period following the finalization of the five United Nations Space Law Treaties to address certain specific activities.⁵⁵

⁵³ See Space Principles Declaration, *supra* note 29, at preamble para. 8.

⁵⁴ International Co-operation in the Peaceful Uses of Outer Space, *supra* note 29, at para. I (1) (emphasis added).

⁵⁵ These include: Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting, G.A. Res. 37/92, U.N. GAOR, 37th Sess., 100th plen. mtg., U.N. Doc. A/RES/37/92 (Dec. 10, 1982); Principles Relating to Remote Sensing of the Earth from Outer Space, G.A. Res. 41/65, U.N. GAOR, 41st Sess., 95th plen. mtg., U.N. Doc. A/Res/41/65 (Dec. 3, 1986); Principles Relevant to the Use of Nuclear Power Sources in Outer Space, G.A. Res. 47/68, U.N. GAOR, 47th Sess., 85th plen. mtg., U.N. Doc. A/Res/47/68 (Dec. 14, 1992); and 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, G.A. Res. 51/122, U.N. GAOR, 51st Sess., 83^d plen. mtg., U.N. Doc. A/Res/51/122 (Dec. 13, 1996).

More recently, voluntary ‘guidelines’ have also been agreed that are intended to address the problematic issue of space debris and with respect to other space-related areas of concern.⁵⁶ There is a clear trend towards the use of such instruments, continuing the long-established understanding that the soft law ‘process’ is a well-accepted methodology for furthering an understanding of how humankind should continue its endeavours in outer space. This tendency shows no sign of abating.

Whilst the legal status of such instruments may vary depending on the precise circumstances, it is clear that this process of regulation of space activities offers significant flexibility to all relevant stakeholders. One would suspect that Haley would find it most unnerving that many space activities only have informal ‘rules of the road’ as the guiding standard, and that States are free, from a strictly legal perspective, to decide not to follow such standards as and when it suits them, without the possibility of legal sanction under the general international law principles of State Responsibility.

Yet, perhaps the situation may not be quite as dire as Haley would suggest in this regard, bearing in mind the observation of Sir Robert Jennings who, in 1980, when discussing United Nations General Assembly Resolutions, wrote that:⁵⁷

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

V. CONCLUDING COMMENTS

Andrew Haley was, without doubt, a remarkable thinker and a true space law pioneer. He, more than many of his contemporaries, was able to very quickly identify the crucial and difficult legal issues that arose as soon as humankind’s ventures into outer space became a reality. His foresight, practical ex-

⁵⁶ For details and an analysis of these various instruments, see IRMGARD MARBOE (ED), *SOFT LAW IN OUTER SPACE: THE FUNCTION OF NON-BINDING NORMS IN INTERNATIONAL SPACE LAW* (2012).

⁵⁷ Robert Y. Jennings, *What is international law and how do we tell it when we see it?*, in DAVID HARRIS, *CASES AND MATERIALS ON INTERNATIONAL LAW* 57 (7th ed, 2010).