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ASTRO LAW AS LEX COMMUNIS SPATIALIS*

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Abstract

International space law, often called *Corpus Juris Spatialis*, refers to space treaties and selected international law in order to regulate the behavior of nations in their dealings with each other. It does not feature a common law. Astro law is asserted as the extension of common law into space as a venue, thereby supplementing the treaty system with a *Lex Communis Spatialis*, a common law in space. This would focus on the venue itself in order to regulate the behavior of all people of space. Although the essential features of this new body of law are well defined historically, immediate modification would be required in order to use it in space. The astro law result therefore is a common law modified by the rule of A-E-I-O-U and sometimes Y, which is described herein. A proposal on how to initiate astro law is described as a future UN activity that would follow up after a citizen convention as planned on August 4, 2000 AD, in Denver, Colorado, under sponsorship of United Societies in Space Inc. and others.

Introduction

International space law consists of five space treaties,[1] certain UN General Assembly resolutions,[2] dicta from the UN Committee on Peaceful Uses of Outer Space (UNCOPUOS),[3] as well as select multinational agreements contemplated by treaty.[4] These provide for the exploration of space and the use of space resources by nations as well as establish universal principles of behavior in the venue of space as to all nations.

However, there is a void in space law as to a common law of property rules, contract administration, tort law, and public policy beyond the conception of space policy. The every day behavior of people in space is not addressed by the treaties (except inside of the space vessel). Private property as a fundamental starting point in common law is denied under the non-appropriation clause of the 1967 treaty.[5] This codifies a basic tenant of space law that was part of the

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earliest UN provisions about space.[6]

Denial of the right of private ownership of real and personal property (that classifies as space resources rather than space objects carried into space by astronauts), seriously modifies the entire idea of common law in space. The subject is skewed because of the impressed public interest in space resources. More perplexing, there are at least three differing versions of how that public principle of non-appropriation works.[7] The 1979 Moon Treaty extended this to a larger meaning under the phrase "common heritage of mankind." It also clarified that non-appropriation applied to natural persons and commercial corporations.[8] A UN proposal in 1982 may have catapulted part of these treaty burdens, particularly benefit sharing as a principle of space law, far beyond the earlier conception of it: all nations should actively manage the resource and actually receive dividends from its use.[9] Gorove has observed that the expansion of this simple principle has led to animosity and dissention by the spacefaring and developed nations.[10]

Despite the lack of detail and the disputes that exist among states as to implementation, the space treaty principles are well established as universal principles. Moreover, they permeate all of space resource planning and management so as to affect, if not to determine, the character of such use.[11]

Therefore, our starting point is that treaty burdens known as international cooperation, non-appropriation, and benefit sharing are statutorily overriding principles under any appellation and description. Astro law by definition will have to include these in the formula for common law that it obtains.

Extended Common Law

Perhaps the first rule of common law is that it only applies where statutory law is silent, or where it is so ambiguous as to need reference to the common law to interpret it. The very confusing, conflicting, and changing interpretations of the space treaty burdens suggest a long term ambiguity, particularly in reference to space properties. The need for clarity has been asserted because space policy has come to represent a barrier to space travel:

> "Nevertheless, rules must be established regarding the manner in which property may be acquired and maintained (in space), and to apply those rules to all entities, whether they be individuals, corporations, states, or international organizations."[12]

Historically the common law has not only been a useful tool in solving difficult legal problems with workable rules, it has also been able to grow and extend itself to new venues. In Merrie Olde England, the king's law applied in the outlying villages often caused problems that reflected rather fundamental unfairness. The church court provided relief where the king's court could not respond. This became the Court of Equity and the common law of England became incorporated in due course into British law.

After America became established it too needed a common

law to bridge the gap between statutory law and day to day human experience. It borrowed the British common law and extended it to all of the states. The cut-off date of 1690 was used, conveniently the year that England finally abdicated its claim of sovereignty over the high seas. The federal and state governments both used this *Corpus Juris* to their advantage because it reduced uncertainty.

Congress extended the common law to all of its extraterritorial courts in 1850 AD. Again, this flexible and nevertheless traditional set of rules assisted in the management of people and properties in far flung places. Colonial England and territorial America managed most of the free world for centuries under this legal paradigm.

It is proposed that common law as developed at 2000 AD be extended to space. The newly constructed *Lex Communis Spatialis* would be modified to accommodate treaty burdens and venue specific requirements and, as modified, should be known as "astro law." These changes are described below.

The process of extension is a problem in itself and that is work in process. Since there is no governance structure in space the task is not like previous extensions. It has been proposed that space be managed by a Metanation, a governance structure on earth with jurisdiction in space, in order to fill the void, manage the property, and regulate activity of all for the benefit of all.[13] Extension would be part of that process.

Astro Law Described

The concept of astro law as a necessary future component of international space law has been recognized for over two decades: it would incorporate common law and metalaw principles.[14,15] The third part of this formula is proposed herein: the incorporation of international space law treaty principles. This can be preplanned at the Convention 2000 AD as part of the space paradigm curative activity.[16]

The common law transformation from England to the United States of America in 1690 and its extension extraterritorially in 1850 occasioned some changes in that body of law because the venue required changes.[17] Interestingly, this is well known to be the strength of common law, not its weakness.[18]

Substantial changes may be expected as we transform it into astro law on the high frontier. Not only do the treaty principles need to be incorporated, but, also, we may anticipate future changes as the idea of jurisdiction evolves and matures in that venue.[19] For example, there is no effective municipal governance in place at any space venue currently. When that occurs, astro law may be expected to respond with supporting rules and offer new applications for older principles.

This point is not difficult. If a Lunar Economic Development Authority were to adopt the Moon Agreement of 1979 and require all habitats to contain extra quarters for strangers found in distress on the moon, a new regulation regarding space would become enforceable. A common law contract between two or more developers on the moon to avoid that regulation, thereby suggesting an illegal contract, should be voidable under astro law, rendering that contract

unenforceable. The new venue, therefore, presents a new application of an old common law and metalaw principle: illegal contracts are not enforceable among parties to that illegality (*in pari delecto*). The Outer Space Treaty of 1967 probably permits this kind of extension of older principles into space venues.[20] Clearly it does not resolve the riddle as to a developer's duty to over build habitats on the moon to accommodate strangers, however.

One of the major changes to the future of astro law may be anticipated when a Metanation or other direct governance paradigm becomes established in space. Statutes enacted by that entity for the entire jurisdiction would preempt astro law, much like the space treaties do at this time. But for this kind of change, the Metanation plans are to adopt astro law as the common law of outer space at Convention 2000 AD in Denver, Colorado, on August 4, 2000 AD.[21] The work product of this convention and a proposed treaty on jurisdiction in outer space would be tendered to UNCOPUOS for consensus adoption. Eventually the UNGA will be asked to ratify it. The extension of astro law as the common law of space will be part of this proposal, as currently planned.

The intention is to preplan a legal paradigm that can work for developers of the moon and settlers well before the need arises. The fear is that a lack of such planning will delay our going to space agenda substantially, if not lead to chaos and conflict. Work on the anticipated rules that will constitute astro law should begin sooner rather than later because a great deal of debate will be required.

Limitations

Astro law should be limited to situations that occur outside of the space vessel and away from the space habitat of the sponsoring nation.[22] Clearly, international space law has legislated in this area so the sponsoring nation retains jurisdiction over the vessel, its interior, the crew members therein or thereabout, and space objects carried into space.[23] A contractual type of document called "Mission Rules" traditionally covers the conduct of all mission participants. One of the peculiarities of space travel is that governance consists of very lofty treaties and very detailed mission rules and absolutely nothing in between. As we enter the third millennium and technology permits space travel more often by more nations, a wider spectrum of rules is necessary.

The common law would permit equitable estates in space. This is a consequence of the prohibition on legal ownership of space resources. Equitable estates include leaseholds, easements, trusts, and mortgages. Astro law has the juridical capacity to define and protect these traditional estates.

Whatever astro law evolves as rules of property law, it will remain inchoate as to the final paradigm. Someday a king or sovereign or supreme court or conquering nation may establish itself in space. Perhaps it will be the UN as a representative of 185 nations or the Metanation as trustee for 269 nations (all in the world at 1995 per *Town & Country* magazine -- but eight did not order Coca-Cola so there may be

only 261) and all of humankind per its charter. Regardless, the void political paradigm in space is subject to change, from within or from without, and that will affect the laws we preplan. The new king may require an easement over all property to support schools, churches, and its own government. Common law estates would shift accordingly.

Because of the absolute nature of this political and governance void, however, all estates would change equally and everywhere. Any space government actually founded would have universal jurisdiction in space until a border was found. Even a station could be a nation because there are no limits.[24] Therefore, inchoate estates would all change equally and, as to each other, their relative bundle of rights and duties would remain equal.

A similar limitation may be anticipated due to universal applicability in outer space of the treaty burdens, non-appropriation, benefit sharing, international cooperation, and disclosure of research results. These permeate everything and must be incorporated into astro law from the beginning.[11]

One of the benefits of the municipal model and a primary reason for designing a Metanation in advance of lunar settlement is treaty compliance by regulation. No development could occur at a station unless and until equitable leases were taken instead of claims to ownership, benefits for future generations were zoned into the project, and international involvement was satisfactory. Without this kind of traditional municipal planning our space policy problems would become exacerbated, rather than cured, by space development activity.[25]

Astro law therefore can be subject to the rule of A-E-I-O-U:

- **A** is in the astro venue only.
- **E** is equitable estates only.
- **I** is inchoate character of equal rights.
- **O** is outside of space vessels only.
- **U** is universal easement quality of treaty burdens -- past, present, and future.

A Caveat

"And sometimes Y," meaning Spanish for "and. . ." must be considered. We must remember that nations can and will assert various novel and important positions in space from time to time. The equatorial nations have asserted their own jurisdiction over geosynchronous orbits, for example.[26]

Other examples of not yet ready for prime time legal positioning for space includes abusive waivers, reciprocal waivers, space constitutions for space stations, and a long list of soft law problems. No solution is proposed for any of these but a recommendation is made clearly: astro law needs to be made available as *Lex Communis Spatialis* in order to help deal with these and future unexpected and untested legal phenomenon.

This kind of extension has occurred before. The communication satellite industry regularly utilizes American governance resources. It has matured into a subculture that has legal significance.[27] This new submission of space law may have no better legal basis than the fact that it exists by consensus and it works for those concerned. Astro

law, incorporating the five space treaties, metalaw, and one-thousand years of common law should have its day in court too.

Conclusion

For these reasons it is asserted that astro law become the new common law of space.

REFERENCES

1. The five space treaties are: (1) The Treaty on Principles Governing the Activities of States in the Exploration and Uses of Outer Space, including the Moon and Other Celestial Bodies, also known as "The Outer Space Treaty of 1967"; (2) Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space, also known as "The Rescue and Return Treaty of 1968"; (3) The Convention on International Liability for Damage Caused by Space Objects, also known as "The Liability Treaty of 1972"; (4) The Convention on Registration of Objects Launched into Outer Space, also known as "The Registration Treaty of 1975"; and (5) The Treaty Governing the Activities of States on the Moon and Other Celestial Bodies, also known as the "Moon Treaty of 1979."

2. United Nations General Assembly (UNGA) resolutions of importance may include one non-resolution on December 9, 1994, when UNGA decided to not take action to amend the Moon Treaty of 1979, despite a clause therein anticipating amendments, and despite the unpopularity of the treaty among spacefaring nations.

3. The UN Committee on Peaceful Uses of Outer Space acts in an official manner when all 51 represented States reach unanimous consensus. However, published dicta is useful in interpreting its five treaties as adopted previously.

4. The European Space Agency (ESA) and various regional communication satellite organizations are noteworthy products of such authority.

5. The Outer Space Treaty of 1967, Article II, ". . . Outer Space, including the Moon and Other Celestial Bodies, are not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

6. UNGA Resolution 1721-16 (1961).

7. E. Fasan, "Dominium Lunae, Properietas Lunas," IISL 96.1.01, Beijing, 1996, surveying the literature and finding only varying degrees of non-appropriation opined upon and concluding: *"It would be detrimental for all mankind if due to unclear legal situation the hiatus in expeditions to the Moon and other celestial bodies would be extended too long. And it would be illogical to protect natural resources on the Moon more strictly than those on Earth."*

8. "The Common Heritage of Mankind" is introduced in The Moon Treaty. Also see, Article II, p. 2, which recites, *". . . Neither the surface nor the subsurface of the Moon, nor any part thereof or natural resources in place, shall become property of any State, international governmental or non-governmental organization, national organization or non-governmental entity, or of any natural person."*

9. UN Agreement on the Law of the Sea, 1982.

10. S. Gorove, "Space Law in the Global Community," *Journal of Space Law,* 1995, Vol. 44, p. 201.

11. See, for example, Gorove, *Journal of Space Law*, 1995, the UNCOPUOS general counsel, Dembling, former counsel for NASA, is reported as clarifying that benefits derived from space resource manufacture follow into the finished product. Therefore, if a lunar habitat consist half of regolith cement and half of earth imported materials, then benefit sharing will attach to half of the structure, its uses, and the rents derived.

12. G.H. Stine and P.M. Stems and L.I. Tennen, "Preliminary Jurisprudential Observations Concerning Property Rights on the Moon and Other Celestial Bodies in the Commercial Space Age," IAF, IISL-96-IISL.1.08, Beijing, 1996, p. 5.

13. Aristotle's principle that society is an image of the individual writ larger will not apply to outer space unless and until that venue is permitted to grow its own head, a governance structure rather than a void. United Societies in Space, Inc., and others seek such a solution and the *Space Governance Journal* records that mission.

14. Nathan Goldman, *American Space Law: International and Domestic*, (2nd ed.) Univelt, San Diego, CA, 1996, Chap. 10.

15. G.S. Robinson and H. White, *Envoys of Mankind,* Smithsonian Institution Press, Washington, DC, 1985, Appendix I.

16. D.J. O'Donnell and P.R. Harris, "Metanation and Other Words," IAF, IAA-96-IAA.5.1.05, Beijing, 1996, p. 8, "Lex Communis Spatialis."

17. 48 U.S. C. 1463 extending common law from America to its territories.

18. J. Holmes, *The Common Law*

19. D.J. O'Donnell, "Commercialization by Evolution in the Jurisdiction of Outer Space," IAF, IAA-96-IAA.1.4.04, Beijing, 1996.

20. Outer Space Treaty, 1967, Article I.

21. D.J. O'Donnell, "Metaspace: A Design for Governance in Outer Space," *Space Governance Journal,* June 1994, p. 5.

22. Registration Treaty, 1975.

23. Outer Space Treaty, 1967, Article VIII.

24. E. Fasan, "Human Settlements on Planets: New Stations or New Nations," *Journal of Space Law,* Vol. 22, 1994, p. 47.

25. D.J. O'Donnell, "Benefit Sharing: The Municipal Model," IAF, IISL-96-IISL.3.09, Beijing, 1996, p. 4.

26. Bogota Convention, 1972.

27. Martine Rothblatt, "Lex Americana," *Journal of Space Law*, Vol. 23:2, 1995, p. 123.