

Space Law, Secularism, and the Survival of Humankind “Essence”

by Dr. George S. Robinson

Many domestic and international law practitioners have a tendency to fail or be unwilling to understand the foundations and implications of Natural Law Theory,¹ its expression in a variety of societally parochial jurisprudential concepts, and the implementation of those concepts, through reliance on parochial legal positivisms, that is, implementing rules. In most situations, cultures within societies, within civilizations, etc., simply do not understand and accept, or work with, those dictates for genetic coding survival and evolutionary perpetuation.

Homo sapiens sapiens, or modern humans, like all carbon-based life forms as we presently understand the empirical dictates of “life,” stand on the shoulders of the first manifestations of life characteristics or properties and then upon the shoulders of that simplest of life forms... single cell descendants. As is true of all life, humans and humankind (i.e., transhumans and biotechnologically integrated post-humans)² must grow, adjust, mutate and adjust, replicate, and migrate and adjust without end in order to survive... or fail in adjustment and become extinct.

The ability to migrate successfully to more survival-compatible environments is an inflexible biological dictate. Migration assumes many forms and is manifest in endless contexts. There is a great tendency for most policy-makers, legislators, and lawyers implementing those policies and laws to raise modern humans all too frequently substantially above their biological origins... their biochemical foundations. For *Homo sapiens sapiens* and its transhuman/post-human descendants, space migration has become an impending critical dictate for survival, not only of the physical embodiment of the specieskind, but for what humans in currently understandable empirical ignorance refer to as “human essence” or “human nature.”³

¹ For purposes of the instant discussion, Natural Law Theory, or *jus natural*, may be defined as denoting a system of rules and principles for the guidelines of human conduct... found to grow out of and conform to [his/her/its] *nature*, meaning by that word [his/her/its] whole mental, moral, and physical constitution. The operative word here is “nature.” The definition of Natural Law and the underlying theory changes almost daily with the empirical and quantifiable results of human physiology and morphology dictates. See Black’s Law Dictionary, 4th ed., 1171.

² For a more in-depth discussion of transhumans and post-humans, particularly in the context of application of potentially disparate legal regimes, see G. Robinson, “The Search for Biogenesis and the Lurch Toward Space Law Secularism,” in *Annals of Air and Space Law*, Vol. XXXIV (Montreal, QC: McGill University Press, 2009), 645-712; G. Robinson and R. Lauria, “Legal Aspects and Accountability of Cyberpresence: A Void in Space Law/Astrolaw Jurisprudence,” in *Annals of Air and Space Law*, Vol. XXVIII (Montreal, QC: McGill University Press, 2003), 311-26.

³ There seem to be endless interpretations and variations of what constitutes “human nature,” e.g., “the psychological and social qualities that characterize humankind, especially in contrast with other living things.” Human nature also has been defined as “a collection of epigenetic rules: the genetic patterns of mental development.” These and other definitions only reflect the overarching disagreement among professionals and among members of the lay public as to just what constitutes the “nature” of *Homo*

Recently, an organization started by the U.S. National Aeronautics and Space Administration, entitled the Space Propulsion Synergy Team (SPST) and consisting of top professionals in a number of space program/project related disciplines and subdisciplines, drafted and published a White Paper that was distributed to Congress and then the public at large. It was entitled “The Justification for Human Space Development and Habitation beyond Low Earth Orbit: An Invitation for an Open National and Global Dialogue.” This position paper addressed the critically motivating factors for human space migration: survival of the human species. Unfortunately, species survival was tied in a limiting fashion to restoration/maintenance of the U.S. leadership in space exploration, migration, and settlement. According to this organization, *humankind* is losing extremely valuable time critical for planning and executing habitation beyond low Earth orbit “as Earth becomes ever less capable of supporting human population growth.”⁴

In the context of real time, the White Paper asserts that “[t]he present country’s leadership has not provided adequately for a compelling long-term objective with a workable, affordable roadmap—one that is needed to enlist the support of the American people.”⁵ While the American public’s support is needed at this point in time, the objective of reasonable steps to ensure the survival of *Homo sapiens sapiens* and its biotechnologically-integrated descendants first must be a *global* objective... and then a *transglobal* objective. A global objective would require a somewhat unique form of organizational planning as well as truly innovative fiscal and technological concepts. It also requires significant ongoing research and development relevant to what constitutes the *essence* or *nature* of the human species (terms that are usually flagged with “spiritual” terminology that gives a somewhat ethereal sense to “the whole seeming to be greater than the sum of its parts”), and where that *essence* can and must be embodied in those currently evolving transhuman and post human descendants.

Significant time has been required for those individuals and organizations involved in the engineering and scientific research disciplines, particularly those relevant to all aspects of space exploration, migration, and settlement both in low Earth orbit and on neighboring planets (such as those envisaged for Earth’s moon, Mars, and the like), to accept that their efforts in basic and applied research have been flowing from the requisite for *humankind* migration and survival off-Earth. It is clear that prominent individuals who normally are not inclined to vague speculations have now accepted

sapiens sapiens and perhaps less-developed hominids on the bush of evolution. The “essence” of being human is every bit as ephemeral as human nature, ranging from the scent characteristics of perfumes to the intrinsic “spiritual” properties of being human that serve to distinguish and identify that species... frequently erroneously so. As with all definitions, in order to be useful, words and phrases must always be defined and assessed in the specific contexts in which they appear.

⁴ For a published version of the “White Paper” as it appears in the journal *Space and Evolution*, see online www.eaglehill.us/spaevo. The quotation is from page 1. The Space and Propulsion Synergy Team was created by NASA in 1991 and consists of national propulsion multidiscipline experts (research and technology, concept and design development, testing and operations, and program management) with extensive experienced contractors, government, and academic experts assembled to “bridge the communications gap” between technology developers and users [spacepropulsion.us].

⁵ Ibid.

publicly that the role of human activities in all societies and civilizations must be directed toward survival of the human species off-Earth. In fact, the first and most prominent reason offered by the SPST in its White Paper is survival of the human species:

Space exploration is critical and necessary for the survival of the human species *and should be a global undertaking*. Earth has limited resources to support life as we know it. This, along with ever-increasing internal global threats, as well as possible external threats, conceivably could make Earth largely uninhabitable in the foreseeable future. Therefore, Space development and human habitation beyond low Earth orbit are needed urgently to extend life beyond the bonds of Earth. A few compelling issues are: 1) cooperation on a global level is essential; 2) by cooperating, we will learn to work together in peace for humankind; and 3) by opening the Space frontier and its vast resources to sustain us, it will help us optimize diminishing resources on Earth, and, thus, help reduce world conflicts and possibly global wars.⁶

Despite the rather ephemeral views expressed in items 2) and 3), perhaps motivated to satisfy the generally limited vision of the public at large, this organization consisting primarily of empirically-oriented professionals has recognized the critically imminent need for space migration by *humankind*. They see this as providing reasonable assurance of a broader survival potential for the human species and its genome, which embodies an “essence.” It provides for the next step opportunity in the ongoing odyssey of determining the what, why, and possibly “who” of Creation.

To implement the next step in assuring the odyssey of human space migration for *specieskind* survival, attention really must be turned to the design and implementation of a unique form of institutionalizing the necessary migration to and settlement of near and deep space by *humankind*. Query: Should/must it be undertaken by governments, domestic and/or public international organizations, or perhaps by domestic and/or international private sector initiatives and entities? The latter have always been a significant factor in organized human migration... from the earliest of times out of Africa, through the early days of European imperialism, to the present era of economic and military imperialism manifest by countries from all points of the globe.

While President Barrack Obama’s first term space policy made it clear that the U.S. space program from a practical perspective would have to rely almost solely on international cooperation for major and costly programs, the pursuit of which has been conducted very successfully over the past 40 or so years, it did not foreclose a “global” potential for extraordinarily expensive space undertakings... perhaps such as that with the underlying philosophic construct of species survival. That, contrary to the hopes set forth in the White Paper, would relinquish much of the traditional leadership characteristics manifest by the American space program; at least the *traditional* forms of such leadership. A creatively unique organizational infrastructure for a truly global undertaking may well be required to ensure an acceptable measure of U.S. control and

⁶ Ibid.

direction. This certainly would be true of the next step required to ensure an ongoing effort that would be embodied in a *transglobal* entity... an off-Earth or cyberspace entity, perhaps just a little like the motivation for, and formulation of, an off-shore corporation.

This discussion has come to the point of *suggesting* the form and substance such a *transglobal* undertaking might well be required to assume... one that could fend off successfully the usual geopolitical constraint manifest in the international community on Earth. Again, as concluded by the SPST in its White Paper, albeit in a rather nationalistic and parochial fashion, “[e]conomic growth resulting from developing Space transportation systems and the exploitation of resources in Space that are needed for exploration [i.e., the initial stages of biological migration] and habitation [successful biological/biochemical adjustment to a more favorable survival oriented location] off Earth will lead to commercializing Space and globally provide countless critically-needed jobs.”⁷

While creating a *transglobal* entity to enhance perpetuation opportunities for humans and their descendants may be a hard political sell to those who must remain on Earth and initially fund the undertaking, the ever-diminishing time available to ensure survival of humans and their descendants, indeed, their “offspring,” should be a significantly suasive factor in pursuing the effort. If there are certain segments of global societies and/or civilizations still functioning on the basis of some “rule of law,” it might be a little easier to enlist the passiveness, if not support, of the stay-at-home public. Principles of law are like all levels of energy-reflecting organized information at all levels of complexity, from the smallest theorized unit on the Planck Scale⁸ to the mind-bending complexity of the universe(s) and, indeed, of all existence, itself.

Jurisprudential concepts and implementing positive laws are neurophysiological manifestations of whole body genome and genetic coding perpetuation by individuals of a given society or civilization(s) in competition for resources that are likely to enhance the potential for these individuals, societies, and civilizations being able to perpetuate themselves. But if this collection of individuals and societies, etc., even though all have certain morphological and physiological disparities resulting from comparatively unique ecological and survival oriented “bio-cultural” drivers, determine on a global basis that the shared genome must migrate off Earth for purposes of enhancing the chances of specieskind survival and that of its biotechnologically integrated descendants as guardians of what is called the human “essence,” then a global organizational entity necessary to perpetuate this space migration is critical to that survival in the long term. This, too, may well be a temporary step since the technology now allows for the incipient stages of formulating a *transglobal* implementing organization in cyberspace that could well be free from ongoing geopolitical impositions continuing to be conducted on Earth for purposes of enhancing the survivability of “Earth-sitting” societies and civilizations.

⁷ Ibid., 2.

⁸ For working definitions of the Planck Scale in the context of particle physics and physical cosmology, see en.wikipedia.org/wiki/Planck_Scale.

The next step for policy-makers, jurists, and practicing lawyers in the realms of public and private international law, as well as more parochial domestic law, is to begin to formulate and articulate a carefully defined objective and implementing infrastructure for such a cyberspace entity; perhaps a *transglobal* private entrepreneurial organization with quasi-sovereign authority offering private citizenship to investors and conducting its business management practices totally in cyberspace.

Reliance on *international* cooperation/collaboration for ongoing space migration programs and implementing projects is no longer sufficient. The next step is structuring a global entity to perpetuate the migratory and off-Earth settlement efforts for *species survival* and then to begin to formulate a non-public governmental cyberspace entity and implementing infrastructure focused clearly and solely on species survival; survival of *humankind* and its essence and the evolving essence of its descendants. Tinkering with the 1967 Outer Space Treaty solely for geopolitical posturing in an ever-changing global economy and what constitutes national and also parochial defense alliance interests is not acceptable given the critically impending threats to the human population dynamics and the very existence of the species in an Earth constrained environment.

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About the Author: Dr. George S. Robinson, III is one of the most distinguished Space Law experts in the world. His book, book chapter and professional article publications – over 100 – are found throughout the aerospace and Space literature and continue in 2013. He served as International Relations Specialist for NASA, legal counsel to the FAA, and legal counsel at the Smithsonian Institution in Washington, DC. He serves on numerous Boards of Directors for science research. Dr. Robinson was a strong supporter of the Aerospace Technology Working Group that was the forum from which Kepler Space Institute and University emerged.



Editor's Notes: It has been a privilege to know, and work with, Dr. Robinson over the past ten years. He has been a professional Space Law contributor to the major Space Organizations and leadership. He was an author in the first issue of the Journal of Space Philosophy, Fall 2012, and repeats here his message to global leadership linking the future of Space to humanity's survival. *Bob Krone, PhD.*