Space Philosophy: Conflict, Migration, Mutation, Adaptation, Evolution, and Circumventing Armageddon

By George S. Robinson

“Philosophy” offers a series of methodologies to examine fully the yet-to-be-empirically defined properties of existence, particularly as these unknowns impact behavior characteristics of *Homo sapiens sapiens*, of modern humans, both individually and collectively. Religions throughout human history are excellent examples of formulating transitory behavioral values of humankind to accommodate the empirically unknown at any given time. As noted by American biochemist, Isaac Asimov, “We create nothing ourselves, we simply discover deeper applications of natural laws and make use of them in the presence or absence of wisdom.” Ah, were there time and space for critical definitions, all within context, for an all too brief philosophical “musing.”

Clearly, there are numerous “philosophic perspectives” regarding why modern humans feel or believe they are compelled to move into, that is, migrate to and settle, off-Earth in near and ultimately deep space. The focus for the instant “musing” is on the current physical movement of representatives of humankind off-Earth; to explore, migrate, settle… explore, migrate, settle, *ad infinitum*; hopefully to continue the ever evolving odyssey of understanding and putting into an empirically-based personal and collective perspective the “What,” “Why,” and ultimately the “Who” of Creation.

But as noted, “philosophy” is a multifaceted discipline, that is, a methodology and, indeed, a series of methodologies to satisfy a multitude of interests, curiosities, and queries. One approach to identifying the nature, the role, of philosophy is to consider it a tool for seeking “wisdom or enlightenment.” Here, however, there is a clear contradiction in this rather popular definition, namely that the objective of *wisdom* must flow from *enlightenment*; but the former does not necessarily result from the latter.

Another traditional objective of philosophy as a discipline of inquiry, discovery, and assessment, is the enablement of meeting adversity with equanimity or balance and evenness of mind. In a more archaic sense, philosophy is considered the “father of all physical sciences.” Nevertheless, in a rather curious sense, philosophy has been considered to embrace the sciences and liberal arts, but “exclusive of medicine, law, and theology.”

Philosophy also has been defined as a discipline embracing as its core certain elements of logic, aesthetics, ethics, metaphysics, and epistemology. It is a universally recognized discipline, or seemingly unique methodology, involving the search for a

general understanding of *values* and *reality*, chiefly by speculative rather than observational means. But how can one be reasonably “speculative” without first developing at least some “fruits” of observation? These definitions, then, cover just about every amorphous facet of “space,” assuming that term refers to human activities “off-Earth” and their ultimate intended objectives.

Defining “space” is a bit more demanding and speculative than generally understood. Empty space, that is, interstitial space, is actually *something*. It is real enough to move, bend, and be moved about. Space is, in fact, the most abundant “thing.” It might be said rather quaintly that space makes sense of “something that is nothing,” since space becomes something in the form of energy without mass.

Sir Isaac Newton speculated that space is the framework in which all physical existence takes place. Put somewhat differently, Newton considered space to be a benchmark for all physical existence… all physical activity. But many decades later, Albert Einstein presented the philosophic community with a space theory update, that is, space and time form a unity concept. He characterized space-time, or “spacetime” to emphasize the interwoven inseparability, much like the stretching and bending of fabric in response to a form of energy he referred to as gravity. And spacetime, as a theory or expression of reality, opens up an entirely new way of looking at and thinking about the universe(s).

Nevertheless, even if the underlying philosophic construct or methodology is seeking “wisdom,” the concept and articulation of “wisdom” is still empirically premised; just not yet known in that capacity beyond decisions based upon the genome/genetic code and gene sequencing survival imperative of an individual biotic specimen, a society, civilization, or an entire species. Certainly, subhuman simians and certain of the cetaceans, for example, manifest characteristics of “wisdom” in various aspects of decision-making… a kind of segue nexus between and among relatively current humankind members, past and present, on the bush of evolution.

When using a philosophic methodology to try to understand the interactive roles of humankind and outer space, it is essential to keep in mind that *Homo sapiens sapiens* is an integral… but not necessarily the most critical… component in the overall scheme of evolution, that is, an interactive biological and biotechnological agent in the entire planetary biosphere of Earth. But the species is just a component, and a transitory one at that. No species has yet lived forever… yet.

We tend too often in analyzing and assessing human nature, essence, and soul, to raise ourselves perhaps much too far above our biochemical and biophysical origins and underpinnings that give direction to our behavioral dictates. And, interestingly, when

humans, like any other form of animal or plant life, artificially inseminate specimens to create new species or subspecies for a variety of reasons, often in a fashion to perpetuate and "evolve" further the new species or subspecies, it is difficult to determine whether humans are creating and perpetuating non-natural genetic codings, or whether the original non-human specimen is using *Homo sapiens sapiens* to perpetuate new survival-oriented genetic characteristics of the object specimen. The extent of the interactive nature and interdependence of all life forms truly *is* extraordinarily complex.

The extent of complexity in the animal kingdom becomes even more challenging, particularly in the context of saving endangered and threatened species… even in the hominid world. A good example might be the extant resurrection of the genetic coding of *Homo neanderthalensis*… or *Homo sapiens neanderthalensis*, since recent DNA studies at the Max Planck Institute indicate a certain sharing of genetic coding through cross-breeding. In other words, who or what species is really manipulating the design engineering of whom or what for survival purposes? Who or what is pushing the evolution of humankind into transhumans and, say, post humans of quasi-artificial intelligence *in extremis* for survival in space… off-Earth? And is the effort intended to help ensure continuing the sentient odyssey of discovering and understanding the empirical foundations of Creation and, perhaps, the Creator?

Lest the jurisprudence and implementing positive laws be overlooked as critically significant components of evolution, it must be kept in mind, also, that "the law" is transitory and empirically premised. In other words, "law" may be considered experimental articulations seeking the most effective way to perpetuate and evolve cultures in societies of modern humans into a more adaptable species for a changing environment or ecotone; for survival both on Earth and in space through the critical biological dictates of migration and interdependent survival adjustment activity.

Despite ongoing speculation in certain arenas of scientific inquiry, whatever aspect of various philosophic methodologies is adopted in assessing the critical component of humankind's survival through migration off-Earth, evolution must be defined in part and very simplistically as the constant cycling and re-cycling of atoms and their subatomic components, that is, energy in the form of organized information… right down to the smallest theoretical unit of energy on the Planck scale. So, philosophy, not unreasonably, may be characterized as a methodology of inquiry serving as the nexus between scientific empiricism and what constitutes human nature, essence, or soul.

It is up to each individual within the limits of his/her/its physical capacities… and it also is up to the societies in which the individual resides… to define and determine the objective and purpose of human nature beyond some amorphous concept of curiosity

relied upon to justify many space programs and projects. In this respect, “curiosity” is a manifestation of “research” driving or determining the need or motivation for migration. It is more than basic research, that is, the seeking of knowledge *solely* for the sake of knowledge. It is *directed* research that relies on the fruits of basic research.

As previously noted, philosophy and its many ephemeral definitions constitute a series of methodologies often serving different purposes and/or objectives for “musing” about the nature or essence of humans. In order to be an effective methodology, it cannot disfranchise any empirically derived aspect of *all* data from scientific methodology, that is, basic and directed or applied research data. Also as previously alluded to, “humanism,” reflected in ever-evolving religions, is the constantly transitioning substitute for ignorance in the absence of empirical or quantifiable components of human nature, and existence, and, indeed, of all creation. It can be viewed or thought of as organized traits of “faith” in a rationale for Creation.

Despite ongoing speculation in certain areas of the scientific community, it is still reasonable in the instant discussion to assert that no particles of matter or other forms of energy reflecting organized information have been created or destroyed since the beginning of all Creation. There has been, and continues to be, a pattern of creation and re-creation of existing energy and matter. In this context, and at some point in the future of *Homo sapiens sapiens,* it will be possible to garner a fairly complete understanding of how some of the protohominid predecessors of humans survived and also why and how some of them became extinct. In the process of reaching this understanding, a result of philosophic inquiry and assessment, more will be learned about the genesis of *Homo sapiens sapiens* and, hopefully, its future in order to prepare more effectively and rationally the species and its biotechnological descendants or envoys for the next step in their survival, or the survival of their evolving essence and unique nature in outer space.

Philosophical “musings”… questioning and assessing *what is* in a given context, *what ought to be*, and what more likely *will be*… will result in a fair grasp of the whether, what, how, and why of humankind’s evolution and the likelihood of human*kind* essence survival… or extinction. Nothing is forever… except, perhaps, if “what is” is recognized and accepted at the outset of humankind’s ongoing evolution, perhaps mutation, corresponding adaptation, and ongoing survival, as the continuing reliance on the “philosophical” methodology in use while searching for the *what* and *why* of Creation.

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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 2012. 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. He provided the Publication Agreement for Authors of this Journal of Space Philosophy.

Editor's Note: I have had the privilege of knowing, working with and learning from Dr. Robinson for two decades. He is a national treasure for both knowledge of the Law and for creative thinking about the legal and philosophical needs for humans as they move off-world. It's an honor to have him contributing to the first issue of our Journal of Space Philosophy. *Bob Krone, PhD.*