

Human Futures: An Eternal Play

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*“What I am suggesting is that the evolutionary epic is probably the best myth we will ever have. It can be **adjusted** until it comes as close to truth as the human mind is constructed to judge the truth.”*

Edward O. Wilson¹ (1978)

“Although with this phrase, I refer in general to the account of our emergence out of the fireball and into galaxies and stars and earth’s life, I also think of the cosmic story as something that has not yet emerged.. so too with our moment we have nothing compared to the massive accumulation of hate, fear, arrogance that the inter-continental ballistic missiles, the third world debt and the chemical toxins represent. But we are in the midst of a revelatory experience of the universe that must be compared in magnitude with those of the great religious revelations. And we need only to wander about telling this new story to ignite a transformation of humanity.”

Brian Swimme²

Current Frameworks

The consideration of humanity’s future in one thousand-year time frames can be a daunting task. There are no precedents, frameworks or structures available that can be utilized. There are, of course, many treatises available that study the past covering some or all of human civilization over, either some, or all periods of time, covering some or all aspects of human civilization. There are also those who have articulated the grand all encompassing patterns. Nonetheless, in the final analysis they are at

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best incomplete and more importantly reflective of worldviews, mindsets, ideologies. The human story, the Earth's story however is all that and more. There are three broad frameworks which have until now attempted to encompass the cosmic and human story with implications for the past, present and the future: *The Evolutionary*; *The Divine Creation*; *The Anthropocentric*.

The Evolutionary Framework: This framework of conventional evolutionary theory has been used to encompass the totality of the cosmos in terms of time and more important in terms of a process that is more complete than any other with perhaps the exception of the idea of divine creation. This conventional notion of evolution described as "a tinkerer who during millions of years has slowly modified his products, touching, retouching, cutting, lengthening, using all opportunities to transform and create."³ It should be noted though that this framework is itself evolving and is now much expanded and inclusive of several new elements. This extended framework of evolution will be described in detail later.

The Divine Creation Framework: This framework to think about the past, present and the future is steadily losing its appeal and there are many reasons. "It will soon be impossible for an intelligent educated man or woman to believe in a God as it is now to believe that the earth is flat, that flies can be spontaneously generated that disease is divine punishment or that death is always due to witchcraft. Gods will doubtless survive, sometimes under the protection of the vested interests, or in the shelter of lazy minds or as puppets used by politicians, or as refuge for unhappy and ignorant souls. But the God type will have ceased to be dominant in mans ideological evolution."⁴ In so far as we are interested in considering human futures or more apropos human destiny, the religions of the world, some two hundred of them, by last estimation, have been competing for establishing primacy of their brand of the human story, past present and future with little or no success. They are themselves locked in an unprecedented evolutionary struggle for survival, pitted one against the other. For the first time in human history, with geographic and communication barriers being dismantled they are interacting with each other on an unprecedented scale. A war of attrition is what is likely with each ending up spent as knowledge and the accumulation of it through science will erode most, if not all of their content with perhaps the exception of a theology about the "first cause" that brought the cosmos into existence and science will never completely explain." As science proceeds to dismantle ancient mythic stories one by one, theology retreats to the final redoubt from

which it can never be driven. This is the idea of God in the creation myth. God remains a viable hypothesis as the prime mover, however undefinable and untestable that conception may be.”⁵⁵

The Anthropocentric Framework: This framework gives preeminence to humans and human agency. This by far has dominated the civilizational stage for the last 2000 years and is largely an outgrowth of the Divine Creation Myths of the Judaeo-Christian traditions, but now has a life of its own in a secular cocoon. This framework dominates the current stage in human affairs. Combined with science, it is squarely positioned in the convictions of progress, control, direction, objectives, and vision as it pertains to almost any issue. It is inclusive of utopian ideas and systems such as Communism, Capitalism, Democracy, Egalitarianism, and so on. It squarely places the problems and opportunities with regard to the future at humanity’s doorstep and too the capabilities to solve any problem or achieve any future. This approach is variously characterized as secular humanism, scientific humanism, and so on, with appropriate and presumably satisfactory modifications to the original and unadulterated versions of both Divine Creation and Natural Evolution. The champions and stalwarts for this have been many in the past and so too today. Here is a sampling:

“To us in our brief span of life falls the honor and good fortune of coinciding with a critical change of the noosphere. In these confused and restless zones, in which the present blends with future in a world of upheaval, we stand face to face with all the grandeur, the unprecedented grandeur of the phenomenon of man.”⁵⁶ Barbara Marx Hubbard defines it by saying “what we are seeking is a world view that will call forth our creative action and direct our immense powers toward life-oriented and evolutionary purposes. That guiding worldview is, I believe, conscious evolution.”⁵⁷

As we stand in the present with multiple panoramic views of the past and on the threshold of a new millennial future, what do we make of it all? The present does indeed represent a critical juncture. In a civilizational sense, we seem to be at the crossroads of many interacting opposites. The frameworks discussed above, all seem to have relevance and yet all appear to be in need of profound modifications. This is manifest everywhere and the problems are many. In the fields of Governance, in Cultural and Religious systems, in Science and Technology, in the area of population, resources, the environment and in respect of the very meaning of what it means to be human. All this should raise enough doubt in our minds about

the anthropocentric framework and reconcile to a lesser role for human agency.

The New Framework

A new framework for considering the long term future is akin to developing what John Barrow calls "new algorithmic compressions."⁸ An algorithmic compression that admits to the idea of progress in the strict evolutionary sense "as a noxious culturally embedded, untestable, non-operational idea that that must be replaced if we wish to understand the pattern of history,"⁹ and yet allows for human intervention in evolution because we already are and must continue to do so. "A kind of intensive evolution articulated by Prof. Laszlo. "I am suggesting there is a possibility for continuing the evolutionary adventure of humanity which is not the extensive mode (conquest, colonization, consumption) assumption. Instead it is building on a tremendous momentum, which is already occurring in our lives during this present lifetime of ours and continues to gain momentum, and thus is becoming ever stronger. That is a kind of evolution which is not centered toward extensive conquest, colonization and consumption, but communication connection and comprehension."¹⁰

This new framework has three significant components to it. These are: A. Extended Evolution; B. Gaia; C. Self Organization.

One might argue about whether it is really a new framework. There is plenty of evidence to show that earlier non-western intuitions had a good grasp of the same and "it is not that the eastern approach was misguided, it was simply premature."¹¹ These new "old" intuitions have not received wide acclaim from the scientific world but there are inklings that with more and more being understood, the validation of these major concepts is most likely a question of not "if" but "when". The following is a brief description of these components.

(A)*Extended Evolution*. Evolution and the understanding of it has been changing over the years since Darwin. Modification through Descent, survival and adaptation have remained the cornerstones but is also now inclusive of "bricolage", stasis, punctuation, altruism, cooperation, memetics, directed evolution and so on, such that not any of them explain anything completely but together they form a more coherent paradigm for comprehension. "Enough is known, enough is suggestive to give a hint that Monod and Teilhard may both be right and that Dawkins and Lovelock too, may have a finger on the pulse of the universe."¹² A brief

description of the key new elements of the concept of extended evolution are in order.

- i. *System*. This framework views humanity and Earth as major constituents of a hierarchical system comprised of sub systems and sub systems that are interacting continuously , both vertically and horizontally.
- ii. *Control*. An underlying principle of such a system is that “No part of an internally interactive system can have unilateral control over the remainder of any other part.”¹³
- iii. *Symbiosis*. “Symbiosis has shaped the features of many an organism, and represents the union of two or more organisms yielding what is in essence a new organism.”¹⁴
- iv. *Stability*. The tendency in evolution has been to establish stratified stability. “The stratification of stability is fundamental in living systems, and it explains why evolution has a consistent direction in time.”¹⁵ Meaning it never regresses.
- v. *Punctuated Equilibrium*. The possibilities of viewing evolution and more in terms of punctuated equilibrium is yet another aspect in this new inventory of understanding. “In its barest essentials punctuated equilibria is stasis interrupted by brief bursts of evolutionary change.”¹⁶
- vi. *Non-Linearity*. It has been very convenient and comfortable to use linearity, locality and immediate cause and effect as the fundamental assumptions in pursuing reductionist science to date, explaining the remaining unexplainable as “chance”. Barrow asserts that in modern terms, the western perspective has regarded nature as linear phenomenon in which what happens at a given place and time is determined exclusively by what has occurred in nearby places immediately before hand. The holistic view assumed nature to be non-linear so that non-local influences predominate and interact with one another to form a complicated whole.

(B) *Gaia*. With increasing concerns about Governance, Global Ethics, The future of Science and Technology in respect of defining what it means to be Human, the nagging questions of population and sustainability, the extinction of bio-diversity, an over-arching realization is dawning on us, even as it has always been there in our deep mythic past. The realization of Earth as “Mother Goddess”, Gaia. While in earlier times it might have

been divination or intuition, it is now emerging as a reality, though not a scientific fact beyond a reasonable doubt. This too appears to be a case of not if, but when. Gaia is the biggest complex adaptive system. "What does it mean to say that the Earth is one living organism? A single organism is a structure in which the various parts are interconnected or functionally integrated so that failure at one part may cause the rest of the structure to die too."¹⁷

(C) *Self Organizing Criticality*. By far the most important concept to have emerged is that of "self organizing criticality." If there is one operant **process** that captures the movement in time, the interrelationships of things, the pathways of evolution, allows for human agency and intervention, and yet disallows the notion of absolute control by humans over their evolution, and further, it does not stand in opposition to different epistemologies, even as it allows for the impossibility of complete knowledge, it is the idea of "self organizing criticality."

A word of warning is essential at this point. It should be noted that the pioneers of this concept do not attribute the all encompassing applicability to this concept that the author does.

What is Self Organizing Criticality? "The term Self Organizing Criticality has been used by physicist Per Bak and others in studying physical systems such as sand piles, having certain characteristics in common. These systems are observed to evolve out of an initial state (addition of sand to a pile) accompanied by discrete events which change the configuration of the system. (avalanches of varying quantity of sand) finally reaching a critical state where a balance has been reached and the dynamic events redistributing energy through the system. (avalanches carrying gravitational energy away from sand added to the edge of the pile) become stable in a statistical sense over time."¹⁸

It is, in this authors view, Self Organizing Criticality as a process that offers meaning and purpose to human activity within the larger context of being a participant, a variable in Gaia. The Earth as organism; It has a sense of eternity to it. A pile of sand is the net totality of humans and human civilization on the planet and inclusive of it. It is the equivalent of a document or a time capsule of the planet and our traverse on it. We are the grains of sand being added or subtracted from the pile, not only in the physical sense but also in the metaphoric sense, our ideas and our actions. We affect the future, each one of us, good bad or indifferent. These actions achieve connectedness and accumulate to cause effects over time, in

turn affecting the pile itself. The essence of this is best captured by James Burke in his important work, *Connections*. "In some way each one of us affects the course of history. Because of the extraordinarily serendipitous way change happens, something you do during the course of today may eventually change the world."¹⁹

The Future as Process: An Outline

The foregoing has been an attempt to set the stage for describing an approach to studying the future. An approach therefore that is cognizant of the evolutionary perspective, acknowledges the notion of Gaia and accepts Self Organizing Criticality as the operant process. The perfect metaphor for the methodology is the sand pile and the addition of grains to it. It is an on going event.

What is being described as an approach to the future is actually the facilitation of a process that a) enables participation by all those who actually affect and create the future and b) increases and diffuses knowledge on issues concerning the long-term future of humanity, so as to enable informed involvement; c) requires that the knowledge and the information that is generated is not organized in the sense of providing preferred or desirable interpretations, summaries, or abstracts. Rather it is to present, as is, with all of the inherent polarities and, d) allows the recipients of such information to decide to extract whatever meaning and substance they wish. The knowledge and the information is in the raw.

An important premise in this approach is that "the ease with which information can be spread is critical to the rate at which change occurs."¹⁹ Whichever alternative we choose, "the key to success will be in the use of what is undoubtedly the vital commodity of the future, information."²⁰ A second important premise in this approach is that "there is a point at which if only one more person tunes into a new awareness, a field is strengthened, so that, this awareness reaches almost everyone."²¹

To the practitioners of "futures studies" this would be an entirely unsatisfactory approach. However, it is unlikely that any methodology can or will completely contain all that will be needed to meaningfully study something so immense as humanity's long-term future! The consolation lies in the fact that the field of futures studies, with its structured and rigorous approaches, will stay that way and proceed, in that such studies are also meaningful and become needed inputs to the pro-

cess of self-organizing criticality. The approaches are not mutually exclusive. The latter becomes subsumed by the former.

The process for a study of the long-term future of humanity then, is akin to a "play" that takes place on a continuous basis, forever, with continuously changing plots and themes appropriate for that time as determined by the players, and the larger audience of humanity. In essence, this is a play that never ends, and therefore a future that no one will ever see.

There is comfort and satisfaction in knowing there is a play, we do play a part, and thus our actions make a difference. This is indeed a worthless process if we remain obsessed with our centrality to Gaia, but completely meaningful if we let go of that illusion, and return to our true identities as nothing more than grains of sand.

The Foundation For the Future, in its approach to the long-term future, in its Humanity 3000 series of seminars and symposia, mirrors the thinking and process described. It is the telling and retelling of the cosmic story.

Notes

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