

The Alphabet of Knowledge – ABC

Evolutionary Cosmology, Philosophy and Theory of Science, Theory of Mind

Intelligence

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References & Bibliography

Theory of Cosmos, John A. Economides, Athens 2010, Greek

The Universe of Interactions, Athens 2012, English

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The Alphabet of Knowledge

Energy and Dynamics

The Scalar Properties of Energy

Variation, Dimension, Mass, Motion, Information and Interaction

Evolutionary Cosmology, Philosophy and Theory of Science, Theory of Mind

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Intelligence

Evolutionary Cosmology studies recurring patterns, models and motifs across the stages of evolution, inorganic, organic, biological and human, including technical. Evolution probabilities and programs, follow these patterns, models and motifs. The standards drawn from the study and research in Evolutionary Cosmology, reach deep into the universal and existential premises / realities and properties / potentialities of being. Accordingly, these standards reach deep into the foundations of Philosophy and Theory of Science.

Energy and its dynamic properties like, limitation, variation, dimension, mass, motion and information, are central and recurring themes in evolution. Derivatives of such themes and conceptions and specifically of dimension and information are energy dynamics, like moment and momentum, density and definition, quantum and physical states, their interchanges and sequential formulations. More specific configurations are space and time, power and force, interaction and reproduction, relation, organization and condition, structure and form, system and function, transformation and evolution.

These dynamic energy standards provide the framework of universal information, of the human conception and comprehension and so of cognition and knowledge. No less importantly these standards provide the framework of information, contemplation and communication.

In Evolutionary Cosmology, in Theory and Philosophy of Science and specifically in Theory of Mind, logic and psychology are biological and moreover neurological (biochemical and electrochemical) mental functions and cognitive conceptions.

In human neurology, the central nervous system and especially the brain, organizes and programs the physical bodily functions of the human organism. Furthermore, the brain specifically controls motion, through sensory / motor biochemical, biological, neurological and neuro – kinetic interchanges. The configurations of such interchanges and the corresponding neurological functions are specifically interactive (relational and metabolic), reproductive (organizational, replicating and representative) and transformative (conditional).

Intelligence is the exceptional mental function which developed in human bipedal evolution from the neurological control of the (3-dimensional) motion of the (free) hands.

Energy dynamics and derivative conditions are configured in the interchanges between the quantum (approximate and probable) and the physical (accurate and programmed), states of energy.

- In high density and low energy (physical) states, definition is high.
- In low density and high energy (quantum) states, definition is low.

These interchanges run during the current present as between,

- Future driven, fluid and uncertain, extended in wave fluctuations, states of immaterial (unstructured) dimensional mass which are relational and interactive
- Past driven, fixed and certain, contracted in particle circulations and cyclicalities, states of material (structured) dimensional mass, which are organizational and recurring, replicating and reproductive

Put simply, intelligence is what we do next (in motion, dimension and information). Also what we think and feel about it. Complex mental processes of thoughts, like in mathematics, and emotions, like in quantum mechanics, facilitate (physical and probable) calculation for the (effects) of the human control of motion. As mentioned, extension of the control of motion, is the management and control of interaction (relation), reproduction (organization) and condition (transformation).

The extent to which intelligence manages and controls interactivity and reproductivity, corresponds to the level of relational integrity, autonomy and independence of human entities. These entity features are relative to the aforementioned dynamics of energy, properties and premises, principles and practices. Accordingly human beings are integral parts of the energy

driven, dynamics of dimension, of the universal and celestial mass, of the condition of the planet and of the natural and technical (and artificial) environment and above all of evolution. Their independence, integrity and autonomy depends on the relations (extrovert), organizations (introvert) and (transformative) conditions, which they develop.

As mentioned, these existential entity features, depend on the biological and especially the neurological (rational and emotional) management of energy, the administration (and control) of motion, the (relational) instrumentation, the (organizational) exploitation of interaction and the evolutionary (transformational) condition. Thus rational organization and emotional condition, largely depend on relational interaction. This interaction is sensory – motor and is always, information based. In human, meaning also in social, environments and conditions, this relation is also communication based.

The evolutionary origin, the universal relation (interaction and integration, individuality and integrity), the commonality of standard features across the evolution stages, the direct recourse to the fundamentals and the derivative dive to spiritual intelligence (ever present and integral in energy dynamics), display and explain the awesome, human facility in the simple conception and comprehension of information and in the overwhelming communication of the energy fundamentals. Spiritual intelligence develops from the spectacular association of the human being with the divine energy, power and force of the dimensional origin. Finally, from the instant consolidation of evolution and implosion of dimension i.e. of the common natural, technical and divine heritage, which this spiritual conception, comprehension and literal humiliation of the personality of the mind and of the sacred individuality of the body, specifically refers to.

This conscience and cognition arrive with education and experience, across universal, natural and human (technical) evolution and specifically through philosophy, science, academic discipline and the works of life, from mathematics, theoretical physics, quantum mechanics, chemistry, biology and neurology, through to history, philosophy, psychology, culture, civilisation, business, arts, sports and athletics.

Regarding psychology and returning to neurology, the control of motion and the derivative mental information process, is interchangeably reflexive and reflective.

- Reflexive, therefore emotional and psychological, faster, approximate, probable (quantum and potential), less structured, relational and lower defined and resolved.
- Reflective, therefore rational and logical, slower, accurate, programmed (physical and real), more structured, organisational and higher defined and resolved.

Thus, the neurological sensory – motor control of motion develops and engages emotional psychology and rational logic, with particular features like, perception, interpretation, conception, comprehension, cognition, consciousness, contemplation, communication, abstract thought, memory, imagination and intuitive feeling. Also with self-awareness, learning, emotional knowledge, reasoning, planning, creativity, critical thinking, and problem-solving. For this reason intelligence is also described as the ability to perceive or infer information; and to retain it as

knowledge to be applied to adjusting and adaptive behaviors within an environment or context. Above all however intelligence is management and administration of energy, the instrumentation of power and interaction (force) and the utility of motion, information and dimension.

Put simply, intelligence is what we do next (in motion and dimension). Complex mental processes of thoughts, like in mathematics (program) and quantum mechanics (probability), facilitate estimation and calculation of risk and reward for the human control of motion and management of interaction and information. Then, utility, exploitation and instrumentation, are catalytic multipliers of power and facilitators of the management of energy and the delivery of force (interaction).

The control of motion extends to the control of interaction (relational) and reproduction (organizational) and jointly in the development and evolution of the human condition, including social, political, cultural, moral, legal, economic, ecological and technological.

It follows from the preceding recitals that the criteria for intelligence are first existential and then real and potential, ethical and aesthetic and right, economic, ecological and technological.

The deployment of power and the delivery of force in the management and administration of energy and the perception of information and control of motion, are described, as mentioned, in mathematics, theoretical and classical physics, quantum mechanics (in quantitative terms of function and system) and in information and communication linguistics (in qualitative terms of form and structure).

Accordingly, the relativity of variation, resolution, definition and dimension and specifically of the interchange of quantum and physical states and conditions, debunks the discrimination in the power of intelligence between the genders (sexual) and the races (racial), on profound evolutionary grounds.

- Gender, because this biological evolution is so deep and constructive (counting billions years of interactive and reproductive evolution) and for genetic reason.
- Race, because this physiological evolution is too shallow and superficial (counting few thousands of years of climatic adaptation) and for natural purpose.

Neither is neurological. In addition, intelligence is relative and versa and vice versa to dimension (time) and evolution. This means that distance from the source and origin of energy (i.e. power), is not gradient or scale of static organizational, hereditary or genetic intelligence, and, mind you, not intelligent by definition.

Relation, interaction, motion and information are material, formative and structural, functional and systematic, in the dynamic exchange and exercise of natural, technical and environmental intelligence (information and communication), programmed and probable. At the human predicament of evolution, intelligence develops at the level of cognition by education (in principle) and experience (in practice). Relation is quantitative. Organization is qualitative. As

mentioned, intelligence, is interactive (metabolic and transformative) and reproductive (replicating and evolutionary) and interchanging, this meaning variable and sequential.

Therefore at the level of human evolution, the criterion of intelligence is economic, ecological and technological, before social, cultural, moral or legal and because of this.

In the man – machine relation, technical devices, manual or automatic, including IT systems, programs and applications, are instrumental and utilitarian.

Reference to natural and technical evolution is essential and fundamental in intelligence models, programs and applications, whether natural, technical, artificial or generative.

The ethics of the so called, artificial intelligence, large language models, data generative search engines and other such devices, programs and applications, are likewise and predominantly commercial and technological, well before legal and moral, ecological and economic.

Finally, intelligence depends also in the conceptual, intellectual, social and cultural operating system, which mentality, information and communication, run on.

Like this one.

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