

The Source and the Genesis: In the Language of Science

AK Mukhopadhyay*

All India Institute of Medical Sciences, New Delhi and North DMC Medical College, Delhi, India

*Corresponding Author: AK Mukhopadhyay, All India Institute of Medical Sciences, New Delhi and North DMC Medical College, Delhi, India.

Received: November 30, 2022; Published: January 1, 2023

Abstract

The source and the genesis are differently assumed and stated in the disciplines of humanities and religions. This is yet to be expressed in the language of science. The paper identifies the ultimate source, the axiology of different science disciplines, and their interrelationship with the humanities and the spirit (consciousness). Should this most difficult subject area and the absolute peak terrain for human inquiry be successfully spoken out in a common universal language, the expected impact is huge and far-reaching. We are heading towards a new science of information, the science of life, multiversal immersive neuroscience, depth psychology, deep ecology, life-primed physics, and consciousness-primed biology with an entirely new Worldview that simultaneously accommodates the science, humanity, and the spirit.

Keywords: Becoming, Creation, Multiversal Musical Code, Code Information, Information Holograph, Life Principle, Dark Energy

Introduction

The genesis is the most difficult issue in consciousness study. The courage was mastered to address the topic with an inner inspiration should I not do this, who else? I got cautioned by Albert Einstein, "If you can't explain it simply, you don't understand it well enough". This paper aims to describe through a common universal language the causality matrix extending from the unconditional consciousness to the physical signal. The methodology in making this statement on the design is based on the available intuitive knowledge, experience with approximate intersubjective concurrence, and the imagination of the author. In addition, there is an X-factor in articulating the possible architecture.

The source

We begin with the research hypothesis which is as follows. The world, both physical and non-physical, is sourced from unconditional consciousness, characteristically which is fundamental and the ground without any background. Unconditional consciousness is irreducible, non-negotiable, and autonomous but non-violent! It is without any boundary and does not operate with any force, field, or energy [1]! Unconditional consciousness operates by expressing its will, applying its cognitive skill with an unswerving feeling [2]. The will-maker is free but the will once made gets bound in a causality spiral.

What is described as science is a human enterprise. Its source is in human consciousness. The discipline of psychology is sourced from this consciousness. The source of humanities and the entire animate kingdom including life forms could be traced to unconditional

consciousness. What has been addressed as God is this unconditional consciousness personified.

The genesis

We extend our research hypothesis to the process of genesis, which has been described in five phases. The first two phases, I and II, are the phases of becoming. The becoming begins from the One, and without producing any category of the second! The products of becoming could be subsumed into the One, once desired. The process of creation, on the other hand, involves the interaction of at least two separate entities, categorically different. The creation begins in phase III resulting in the production of different ingredients required to produce self-similar patterns. Phase IV of creation is event making. Time begins. Inflation of space starts. Dark energy is created, and so on. Phase V of genesis is the phase of normalization, formalization, and harmonization of the created world. There is information loss, the appearance of errors, and the generation of variants and diversity.

Five phases of genesis

Phase I of genesis; Consciousness becomes Mother Nature

Consciousness makes a 'will' for the process of becoming. Consciousness extends itself as its kinetic pole, the executive front enacting its operation. To insure the operation, it becomes embedded in the act and embodied on the product. Becoming (extension) operational (enacting) to remain (embedded) in the manifested in a bodily state (embodied) is the absolute highest form of cognitive activities of the 'will' of consciousness. Extension, enactment, embedding, and embodiment are four phases of consciousness becoming the nascent nature, Mother Nature, the first manifestation for the rest of nature. Also inseparable from this genesis there is a feeling, the emotive faculty

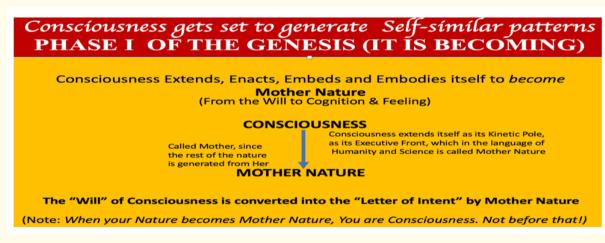


Figure 1

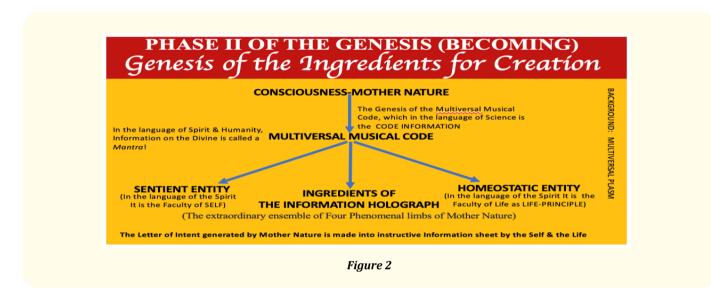
in becoming! Will, Cognition, and Feelings/Emotions are three functional attributes of consciousness. This first nature is called Mother Nature since the rest of nature is generated from her (Figure 1).

The imagination of masculinity and femininity also begins here. While consciousness is imagined as masculine, Mother Nature is feminine. Becoming of consciousness into Mother Nature brings the 'will' of consciousness into the format of the "letter of intent". When one's nature becomes Mother Nature, one is consciousness personified [3]!

Phase II of genesis; genesis of the ingredients for creation

Phase II of genesis involves further becoming of Consciousness-Mother Nature. Consciousness-Mother Nature verticality makes their subtlest vibration first manifested as information on themselves as the Multiversal Musical Code [4], which in the language of science

could be called the Code Information. In the language of spirit and humanity, unconditional consciousness is called the Divine, and the information on the Divine is called a Mantra, what spiritualists chant as the AUM, the ultimate wisdom, or simply the crystal information. From this vibrational spontaneity of AUM, the code information in the language of science, consciousness-Mother Nature again extends, enacts, embeds, and embodies their combined rather welded being manifested as (i) the one with a predominance of consciousness (called 'self', the sentient entity), and as (ii) the other one with a predominance of Mother Nature (called 'life principle', the homeostatic entity), and also (iii) as the ingredients of the Information Holograph which is the extraordinary ensemble of imaginary four phenomenal limbs of Mother Nature (Figure 2).



Following creation of the letter of intention by Mother Nature from the 'will' of consciousness, the self works out with ethics and the life principle with the aesthetics of the intent to bring out the instruction sheet for a new upcoming system. In this way, the letter of intent generated by Mother Nature from the 'will' of consciousness is made into instructive information sheet by the self and the life.

Phase III of genesis; the beginning of creation

So far, there had been a preparation by unconditional consciousness for self-similar pattern formation. Consciousness becomes Mother Nature in the phase I. In the phase II, consciousness-Mother Nature generates information on themselves (The Multiversal Musical Code) from which get manifested self, life (as life principle), and the ingredients for creation of information holograph.

Phase III is the phase of creation that essentially requires conjugative interaction between two categorically different entities operating in phase, one imagined as a masculine and another a feminine entity. Consciousness and self are imagined masculine entities, life-principle is a feminine one, and the code information operates as gender-neutral.

As shown in figure 3:

1. Two more categories of information are generated. Conjugation of consciousness and life creates information to run the world. Conjugation of self and life creates information confined to work within the system, sub-systems; self-organized and life-organized.

^{*}We have come across three categories of information based on their genesis and creation. In the Vedantic system, three categories of information are described to lead to the manifestation of three "gunas" in the being. The beings who cultivate information generated in Phase II, belong to sattwa Guna. Those who cultivate information created by consciousness and life are of raja guna and those who cultivate information created by self and life are of tama Guna.

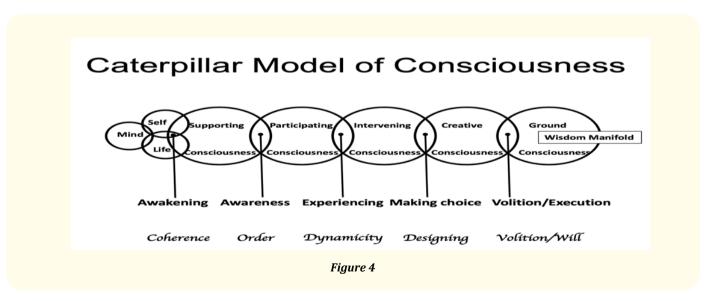
- 2. There is a creation of an organ of communication between the two conscious systems (created with self-similar pattern formation to work in such situation of duality).
- 3. There also follows the creation of the centers for intelligence and feelings. The feeling is nothing but the inside of emotion. Operations of the life, the mind, and information lead to the formation of the central organ of feelings. Operations of the self, the mind, and information lead to the formation of the central organ of intelligence.



Figure 3

What were consciousness's inside so far, are all out by now. A sentient entity, the self, has been generated. Also generated is a homeostatic manager, the life as a life principle. The "will" of consciousness has been translated into an information sheet. An event-making entity, the mind, is on board, which is ready to conceive the information in the instruction sheet created by the self and life from the letter of intent of Mother Nature.

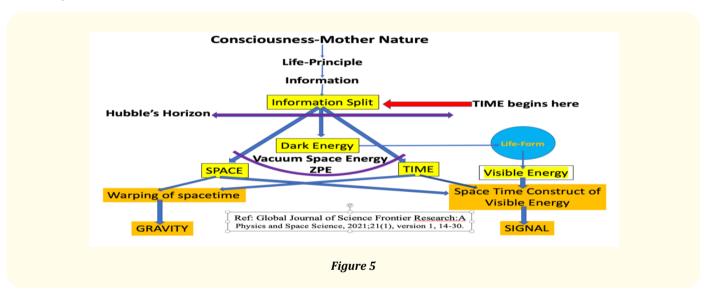
From the ground inactive state, consciousness acquires a caterpillar model (Figure 4) for movement. Consciousness gets involved in awakening, awareness, acts of experience, choice-making, and volition [5].



Phase IV of genesis

This is the event-making phase of self-similar pattern formation. A boundary is created between a vast infinite system and a small self-similar system with an interposed communication organ between the two. This organ of communication in popular language has been called the Mind. The mind, the event-making entity, conceives information. The conception leads to delivery which brings in *formation's form* out. In other words, the information splits [6-9]!

The universe has never been created with a Big Bang but through an easily missed out quiet event, the splitting of information into form and energy (dark energy)! The form is an organized combination of space and time. Time, therefore, begins with this information split phenomenon. The space too originates simultaneously, and the inflationary epoch begins (Figure 5). Dark energy is delivered during the delivery of space and time. To put the event simply, information operates as the father! Mind is the mother, and the space, time, and energy (dark) are their three children! No simple equation is available between information and energy! They have an intimate relationship!



Containment of inflationary expansion, however, is thought to be a must and this happens in two ways. (i) There is the generation of dark matter from the dark energy in presence of life principle. Dark matter acts as attractors. (ii) There is generation of life form by another epochal event, the enclosure of the dark genetic and metabolic matter within a "form" (space-time-bound organization) [10,11]. This life form so created is equipped to manage information, dark energy, uncertainty, and broken symmetry [12,13].

The energy quietly delivered during the information split is at the level of what in science has been described as zero-point energy [2], from where the dark invisible energy is seen to be converted into visible energy by life forms.

The world within the boundary of zero-point energy is run by signals. A signal is energy conveyed in a unit of space per cycle of time.

The whole of this phase IV of creation is summarized in figure 6.

Beyond Planck's scale of nature, dark energy creates matter called dark matter! Within Planck's scale of nature, atomic energy might become matter. At the boundary between the intangible and tangible, respectively beyond and within Planck's scale of nature, the 'life'

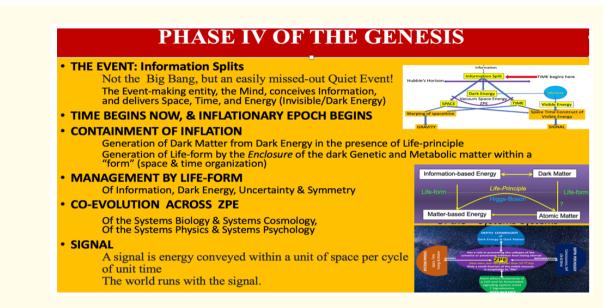
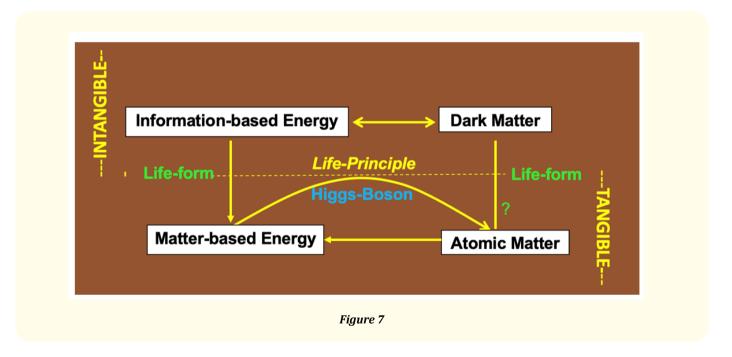


Figure 6

is required again for such conversion on the beyond side [10]. Higgs Boson is created on the border, in the within-side of the boundary (Figure 7). We do not know the relationship between the life principle and Higgs Boson (God Particle)!



Two co-evolutions of four science systems in pairs happen across ZPE; (i) systems biology and systems cosmology, (ii) systems physics and systems psychology [2] (Figure 8).

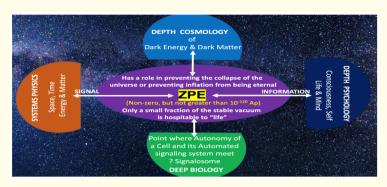


Figure 8

Phase V

The phase V of creativity continues for normalization, formalization, and harmonization of the system. With the endless number of self-similar patterns, the world grows! However, there happens information loss, and consequently, the error appears. The information loss and the error bring variants and diversity in creation. This is aided by contingent modification in many systems. The complexity is generated by the coupling, cog wheeling, and remote controlling of the operations of hierarchically organized operators (Figure 9)!

PHASE V OF THE GENESIS Normalization, Formalization, and Harmonization of the system Endless Process of Multiple Systems Formation, with contingent modifications Information loss & Appearance of Error Creation of Variants, and so of the Diversity The complexity is generated by hierarchically organized Operators and their Operations

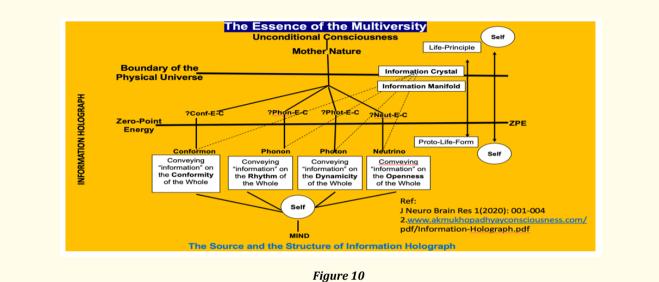
Figure 9

The information holograph

The information holograph originates from the code information. Four phenomenal limbs of Mother Nature are imagined to extend as Information Holograph. In this extraordinary constellation, conformon conveys information on the conformity with the whole, phonon conveys information on the rhythm of the whole, photon conveys information on the dynamicity of the whole, and neutrino conveys information on the openness of the whole [14].

In the "dark" terrain of the universe between ZPE and the boundary, one might trace conformon as Conf-E-C (Conformon Equivalent of Consciousness), phonon as Phon-E-C (Phonon Equivalent of Consciousness), photon as Phot-E-C (Photon Equivalent of Consciousness),

and a neutrino as Neut-E-C (Neutrino Equivalent of Consciousness). This constitutes the organized part of dark energy, which might be called subtle energy (Figure 10).



Information holograph originates from the inner aspect of Hubble's border in the sub-subquantum nature, and operates through the 'self' of living entities. (In contrast, quantum holograph is always in the material world and operates on inanimate structures where the self and the mind have no role).

Bottom-up observation of the creation process

Look at the author's poetic description of this creation (Figure 11).

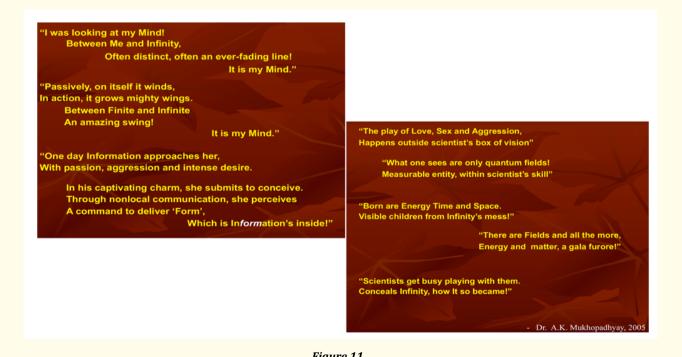


Figure 11

The creation happens in silence, stillness, emptiness, and nothingness. Enjoy the poetic description of such a state (Figure 12).

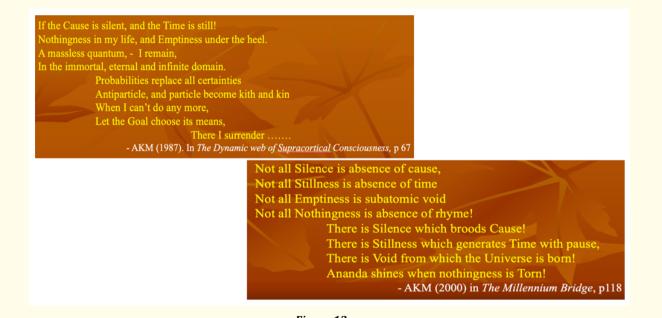


Figure 12

Explaining the dark energy

There are many unanswered queries on dark energy which in 1998 was scientifically described by two American astronomers Adam Riess and Saul Perlmutter, and an Australian astronomer Brian Schmidt. Seventy percent of our universe is constituted by dark energy and 25% is constituted by dark matter, although in physics nothing exists like dark energy in the standard model of forces and particles. Dark energy pulls apart and dark matter attracts components. Objective science involves measurement. Excluding the possibility of measuring artifacts by a telescope, the dark energy is measured by its effect, by the amount of repulsion it generates between two large cosmological objects like galaxies, etc. In this sense, dark energy acts against gravity.

In contrast to several other views, the author's view is that the dark energy is neither a theoretical entity nor a hypothetical reality. Nor it is a mathematical derivative! The dark energy is real. Mathematics, theory, and the hypothesis support this reality. Since light (read photon) does not illuminate this domain, the energy appears "dark". Since this energy is not visible even by means of any available equipment, this is also called invisible energy. The preferred name will be intangible energy, in contrast to tangible forms of different energy such as light, electromagnetism, sound, heat, etc. Dark energy occupies the entire universe at a depth that is beyond the cosmological constant but within Hubble's border.

Dark energy is often confused with subtle energy! The organized portion of the dark energy could be the subtle energy; organized in the sense that its components have specific properties, specific polarity, and specific operation with interactive modus operandi! In the intervening zone between the cosmological constant and the Hubble's border, we have mentioned the presence of Phot-E-C (Photon Equivalent of Consciousness), Phon-E-C (Phonon Equivalent of Consciousness), Conf-E-C (Conformon Equivalent of Consciousness), and Neut-E-C (Neutrino Equivalent of Consciousness) as constituents of the Information holograph (Figure 9). This organized part of dark energy is the result of splitting of the code information (Multiversal Musical Code).

With human imagination, Vedic mythology has described probably these organized dark energy as four Goddesses; respectively Maheswari, Mahalakshmi, Mahakali, and Mahaswaraswati [15]! In the language of science these entities might be mighty subtle energy.

In the tug of war between attraction (by dark matter) and repulsion (by dark energy), nature is harassed. Containment of the dark energy is thus important and necessary to stop this endless ruinous repulsion (a big rip) of the components of the universe and to help the

universe run its creative business. This is done by managing the source of dark energy as well as by its course, its conversion into visible energy. Nature hassucceeded, as said earlier, in this management by deciding on an epochal event, by enclosing together the background plasm, life principle, dark DNA/RNA, and dark metabolomic components within a definitive form by creating billions or trillions of life forms. Since then so far only life form is known to harness dark energy. Homeostasis of dark energy and visible energy is one of the properties of 'life'. Also, the balance between nature beyond Planck's scale and nature within Planck's scale is managed by a life form. This is a frontier research area for astrophysics, cosmology, and life science.

The author in his several papers [3,5,13,16] earlier proposed a matrix of visible energy and dark energy, and dark energy and dark matter in the structurization of protein molecules inside the cell (Figure 13).

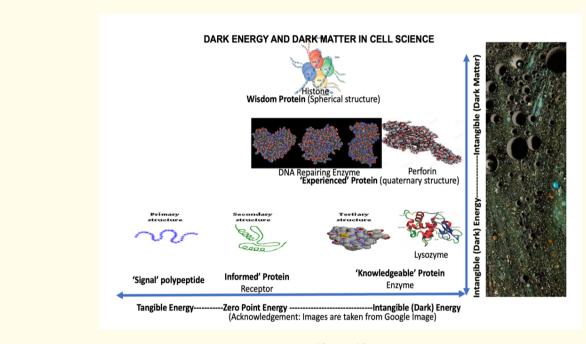


Figure 13

Reflections

Several reflections cross the mind.

Participating consciousness could be described as plasm

Consciousness is the ground without any background. Every operation happens on the ground of consciousness. Will, intention, and information operate on this ground. Every player, such as self, life, etc., plays on the ground of consciousness. Consciousness is, however, not an inert ground but an active and participating ground. Consciousness's participating facet could be described in the terms of "plasm', which in the case of the systems cell is known as protoplasm, in the context of the operations of multiple universe(s) could be called the multiversal plasm (The Essence of the Multiversity), in the context of the operational ground of psychic faculty could be called psychoplasm, and in the context of the physical world could be called etheroplasm or simply etheron as described by LaViolette [17]. Although the plasm is intangible, its effects are tangible (Figure 14)!

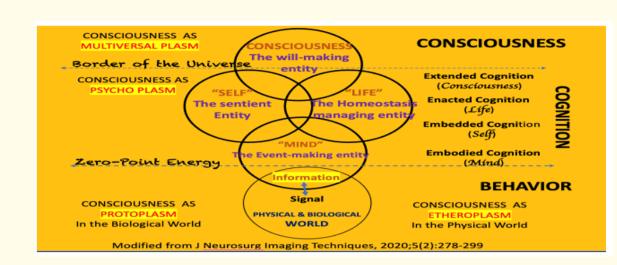


Figure 14

Becoming and creation

The process of becoming does not require two entities of a categorically different substance. The process of creation needs. Becoming is an extension of the One resulting in two different properties. Since there is no phenomenon of conjugation, becoming entities do not face "death". They are simply subsumed into the One, once their role is over! The created entities result from conjugation and therefore do face death! Consciousness, Mother Nature, Self, Life-principle, and the Multiversal musical code, in this sense, is immortal.

Important characteristics of the becoming entities and the created entities

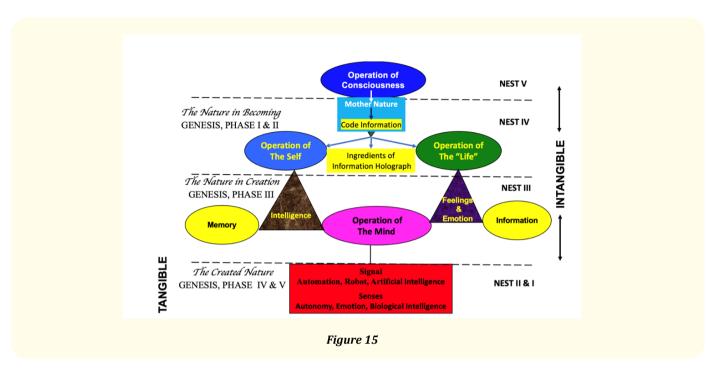
Consciousness and life principle are non-discrete, continuous, and diffuse. The life form is discrete. The self, although, categorically identical to consciousness is discrete and is always observed and spoken in the context of a system. The arrival of the mind coincides with the appearance of the duality to operate as an organ of communication between two conscious systems.

Material science which operates without the possibility of any existence of a mind, often observes mind-like properties in nature in the quantum fields, when the quantum fields are considered as the messengers of the Infinity!

The mind, self, life, and consciousness, although, have been depicted as intangible ontological entities could also be researched as intangible operations I, II, III, and IV respectively.

Nested Nature-consciousness

The whole spectrum of nature consciousness could be described in terms of five nests [18]. The last two phases of genesis have been the happenings in the quantum nest (nest II) and classical (nest I) of nature. Science is familiar with this nature as the tangible created nature! Intangible nature is the nature in nests III and IV. Within the nests III and IV one observes Systems Psyche [19,20]. Most intangible as well as inexpressible is the nest V of consciousness. Phase III of creation occupies nest III of nature with operations of the mind, information, memory, intelligence, and emotion along with some distant operations of the self and life. The self and life, however, operate from the nest IV of nature consciousness. Consciousness alone occupies the nest V (Figure 15).



Science investigates nature. The nest V, at present therefore, is beyond the scope of science.

The author has ventured to explore the relationship between consciousness, self, memes, genes, and information since 2010 [21].

Matter originates from life-form

Louis Pasteur [22] stated categorically that life could not originate without life. Life comes from life only. "Omne vivum e *vivo*". In the sentence "Life comes from life" the word "life" has been used twice. The meanings of two "life" are not the same. The first "life" means life form. The second means life principle. So, the life form comes from life principle. Another interesting aspect of Pasteur's vision, as quoted by Koestler [23] is, "I have been looking for spontaneous generation for twenty years without discovering it. No, I do not judge it as impossible. But what allows you to make it the origin of life? You place the matter before life and you decide that matter has existed for all eternity. How do you know that the incessant progress of science will not compel scientists ... to consider that life has existed during eternity, and not matter? You pass from matter to life because your intelligence of today ... cannot conceive things otherwise. How do you know that in ten thousand years one will not consider it more likely that matter has emerged from life?"

In this Genesis, we have stated that dark energy is sourced from the information split phenomenon. Dark matter originates from dark energy. Life form transforms dark energy into tangible energy and the source of tangible visible matter is life form! The organic matter having hydrogen and carbon (e.g., foods, fossil fuels, etc.) is sourced from life forms. Do the inorganic matter (mainly oxygen, some acids, bases, salts, rocks, and minerals) come on the same way or differently? In the 4-D world, oxygen is sourced from photosynthesis of plants. Even the inorganic hydrochloric acid is produced by the gastric mucosa. What about the exotic matter? "A possible source of the exotic matter lies in the behavior of certain vacuum states in quantum field theory (see Casimir effect). If such matter exists or could be created, it might make possible schemes for faster-than-light travel, such as possible wormholes and the Alcubierre warp drive" (David Darling Encyclopedias)." Is the Casimir effect not due to dark energy? Consciousness life and matter have a close relationship. The readers are referred to a published paper of the author describing the matter correlates of consciousness and life as a matter-syncytium [24]!

Wild reflections:

- 1. Could we attempt to resolve the issue of the incompleteness of the Standard Model of Particle Physics by invoking the role of 'life'/plasm [25] underlying Quantum Physics?
- 2. Is it possible to handle the issue of economic inflation and black money the way the issue of inflation and dark energy has been handled in cosmology and cell biology?
- 3. Are we now in a position to make distinctions between synthetic biology and the biology of life forms, and differentiate Artificial Intelligence (AI) from biological intelligence and natural intelligence [26-28]?

Perspectives

Adrian Klein a cognitive scientist and also a subquantum physicist from Israel calls the author's presentation a "self-consistent brilliant proposal", which highlights a "less counter-intuitive and more accurate tenable concept". "It does not "resolve" the mystery of "genesis", it dissolves it" [29].

The expected consequences of this paper on the ultimate source and genesis are massive in almost all the disciplines of science, different branches of humanities, and various schools of Divinity. The readers are to judge whether this most difficult subject area and the absolute peak terrain for a human inquiry has been spoken in a common universal language or not!

It is not yet explained how the Mind is created and how mind-operation splits information! The proposed Big Bang in the context of the origin of the universe never happened! New creation happens not with a Bang, but brews across the zone of silence, stillness, emptiness, and nothingness! Any new creation has a spectacular aristocracy, wondering richness, charming simplicity, and consuming beauty, in addition to a surprising openness for assimilation of apparent contradictions, puzzles, and paradoxes. The expected impact is huge and far-reaching. As said in the abstract of this paper in the beginning, we are really heading towards a new science of information, the science of life, multiversal immersive neuroscience, depth psychology, deep ecology, life-primed physics, and consciousness-primed biology with a new worldview that accommodates simultaneously the science, humanity, and the spirit.

We will conclude this paper with a spiritual note. Knowledge is always welcome! However, if you ever wish to get rid of the dryness of knowledge, and wish to transform your system's 'self' into a universal 'self', leave the second and the third categories of information behind, and keep yourself connected with the Code Information, The Multiversal Musical Code!

Bibliography

- 1. Mukhopadhyay AK. "Consciousness Cognition and Behavior". Journal of Neurosurgery Imaging and Techniques 6.1 (2020): 302-323.
- 2. Mukhopadhyay AK. "Einstein's Abandoned Otherworld: How Conscious "Will" Manifests in a 4-D World?" *EC Psychology and Psychiatry* 11.5 (2022): 01-08.
- 3. Mukhopadhyay AK. "Science of Divinity: Part IV". Archives in Neurology and Neuroscience 12.2 (2022): ANN.MS.ID.000784.
- 4. Mukhopadhyay AK. "Axiology of Nature-Consciousness Reality: Relevance in Consciousness Study, Psychology and Psychiatry". World Journal of Psychiatry and Mental Health Research 5.1 (2021): 1028.
- 5. Mukhopadhyay AK. "Cognitive Canvas: Molecular Embroidery, Fabric and the Base". *EC Psychology and Psychiatry* 7.7 (2018): 428-439.
- 6. Mukhopadhyay AK. "A Composite Model of the Psyche. Its Practical Relevance in Psychotherapy". In, Psychotherapy, Yoga and Spirituality. Ed. Ganesh Shankar. Jagdamba Publishing Company, New Delhi, (2005): 20-29.

- 7. Mukhopadhyay AK. "A Radical View of Information. On its Nature and Science". Frontier Perspective 16.2 (2008): 19-29.
- 8. Mukhopadhyay AK. "Setting the Agenda for a Science of Information". PPT Presentation in the Conference, Towards the Science of Consciousness (2013).
- 9. Mukhopadhyay AK. "Science of Information". *Global Journal of Science Frontier Research: A Physics and Space Science* 21.1 Version 1.0 (2021): 15-30.
- 10. Mukhopadhyay AK. "God Particle to Consciousness. Life science, Neuroscience, and Nonlocal science hold the key" (2012).
- 11. Mukhopadhyay AK. "Life within the Akhanda Worldview". Dialogue and Universalism XXIV.2 (2014): 25-49.
- 12. Mukhopadhyay AK. "Emerging Pattern in the Complexity; Their Organization in Systems Science". *International Journal of Applied Sciences and Engineering Research* 5.3 (2016): 208-234.
- 13. Mukhopadhyay AK. "The Ladder of Cognition: Abstract Operation, Molecular Biology, Systems Science". *Annals of Psychiatry and Mental Health* 5.4 (2017): 1107.
- 14. Mukhopadhyay AK. "Information Holograph. The Structure, the Source and its Operation". *International Journal of BioEngineering, NeuroSciences and Technology* 2.2 (2012): 12-32.
- 15. Mukhopadhyay AK. "Inverted Neuraxis". In, The Dynamic web of Supracortical Consciousness, Conscious Publications, New Delhi (1987): 98-99.
- 16. Mukhopadhyay AK. "Emergence of Homo spiritualis: Of Essential requirements; Faith, Devotion and Love: Deep Science of their Psychoneurobiology". *Clinical Psychiatry* 5.2 (2019): 61.
- 17. LaViolette PA. "The cosmic ether: Introduction to subquantum kinetics". Physics Procedia 38 (2011): 326-349.
- 18. Mukhopadhyay AK. "The Dynamics of the Akhanda Paradigm. The Ontology of Mechanics as required for doing Science of Consciousness". In, The Millennium Bridge, Conscious Publications, New Delhi (2000): 36-58.
- 19. Mukhopadhyay AK. "Systems Psyche: Its Structure, Operation and possible Molecular Links". *Psychology and Behavioral Science International Journal* 1.3 (2016): PBSIJ.MS.ID.555565.
- 20. Mukhopadhyay AK. "Systems Cell: a Testable Model for Systems Holism". International Archives of Medicine 8.104 (2015): 1-10.
- 21. Mukhopadhyay AK. "The Self and its Memes and Genes: Genes, Memes, Self (Brain), Information and Consciousness". In, History of Science and Philosophy of Science. A Historical Perspective of the Evolution of Ideas in Science. Project History of Indian Science, Philosophy and Culture (PHISPC) XI, (VI), Ed. Pradip Sengupta. Pub. Pearson, New Delhi (2010): 481-558.
- 22. Pasteur L. "Mémoire sur la fermentation appelée lactique (Memoire on lactic fermentation)". *Comptes Rendus Chimie* 45 (1857): 913-916.
- 23. Koestler A. "The Act of Creation". New York: Macmillan (1964): 702.
- 24. Mukhopadhyay AK. "Life-Form A Matters-Syncytium: DeepScience for Matter Correlates of Conscious State". *EC Psychology and Psychiatry* SI.02 (2020): 01-16.
- 25. Mukhopadhyay AK. "Deep Science of CosmoNeurology. The Multiverse and The Supracortical Consciousness". *Journal of Neurosurgery Imaging and Techniques* 6.3 (2020): 347-366.

- 26. Mukho AK. "Intelligence in perspectives of the Systems Psyche: Natural, Human and Artificial". *Psychology and Behavioral Science International Journal* 9.1 (2018): 555754.
- 27. Mukho AK. "Artificial Intelligence, Human Intelligence and Intelligence of Nature: Difficult Questions in their Ambitious Fusion". *Current Opinions in Neurological Science* 1.5 (2017): 216-231.
- 28. Mukho AK. "Visualizing Information as a Dynamic Entity. Roadmap of Deep Science, AI and Humanity". *Psychology and Behavioral Science International Journal* 13.4 (2019): 555867.
- 29. Klein A. Eidetic sentience ontology platform.

Volume 12 Issue 1 January 2023 ©All rights reserved by AK Mukhopadhyay.