

Timeless Cosmic Design: Brain is no match to the complexity of the universe

Anup Rej

It is often said that human brain is the most complex object that exists in the universe. This statement is based on our knowledge of observations of the objects existing in the universe. Such knowledge is often grounded on partial information that reaches the human brains through perceptive filters which define the sensory apparatuses of the homo-sapiens. Once this limitations of the sensory apparatuses can be overcome by ingenious means by using computer technology and human beings can access deeper multilayered information from reality, without being limited by the perceptive capabilities, the brain is no match to the complexity that exists in the universe.

Non-locality and entanglement

Everything in the universe are entangled with everything else in an unfathomable way starting from objects of billions of light years in sizes to the tiniest forms which exist in the cosmos. Through this complex entanglement the universe organizes the micro-structures in the similar way as the macro-structures. Every state of evolution of the macro-structure has instantaneous implications on the evolution of the micro-structures embodied inside the whole. The universe acts as a organic body possessing an intelligence that sends instantaneous information to every parts in order to instruct the micro-structures how they should co-ordinate its actions with everything else in harmony with what happens globally .This message is transmitted to all, in a spooky instantaneous action-at-a-distance. Such non-local action-at-a distance is a phenomenon one can observe in the realm of the quanta, which is well known to the quantum physicists. The entire universe operates in the similar way.

Timeless design

The infinitely complex entanglement that transmits information non-locally to the whole body of the universe is not a chaotic mess made by random tangling of innumerable things interlinked with each other. Behind the immense complexity there exists an intelligent design. This design is not any usual geometric object. Instead it is a fractal geometric object which embeds its own image in the smaller parts which are assembled to make the whole design. The smaller parts in turn are made of similar design in even smaller scales. When this embodiment of the design in smaller and smaller scales continues in hierarchically descending scales the fractal geometric object looks extremely complex after undergoing self-similar stacking up of the design in smaller and smaller parts a few times. The universe, where things are being born through violent agitation and die creating turmoil in the surrounding world, is nothing but a profound manifestation of order based on a self-embedded timeless design.

Indeterminism within determinism and vice versa

The things flow in the universe to maintain this eternal design. Every individual, which passes through the design, is itself a package of smaller elements that carries the design in itself. While one follows the destiny of an individual object in a particular scale of reality one cannot know how its constituents, which make the package that one observes as a whole, will move individually in their own reality at given moments of time . While one observes the world in a particular scale of one's choice, the reality of the underlying world that constitutes the parts of the object remains diffused. Though one may make the world deterministic in one level by one's choice of measurement, the deeper underlying reality may remain indeterministic. Though the fates of the individual constituents that make the whole remains indeterministic, the timeless design, through which all must pass,

builds the frame of a newer level of determinism in the next level. Thus, in that sense, the fates of things are "determined" in the realm of the diffused "reality" too. One may invent ways to observationally follow the reality of the constituents in the deeper level like what one does in the upper level. This will in turn bring indeterminism in the next level that lies even deeper. However, the cosmic design remains the same in all levels of reality whether observed, or unobserved. This fractal geometric nature of reality acts as the hidden force that generates determinism and indeterminism according to the observation made to investigate reality at a certain level.

For example, by observing the deterministic path that the galaxies follow, as they evolve from young to old age, it is not possible to know when and where a solar system will form amidst chaotically (apparently) streaming gases churning within it. Once one has observed a solar system in a galaxy one can follow the deterministic paths that the planets may follow around the star. However, one will not be able to know when and where and in which planet a hurricane weather of particular strength will appear, or when the coronal wind from the star will hit and change the ionospheres around a particular planet. Once one observes the solar wind striking the ionosphere and follows its passage through Earth's atmosphere one will not be able to know which wavelengths of radio communications used by the humans will be affected at a particular time and place. Once one observes the radio communication at a particular wavelength being affected at a particular city and particular moment of time one will not know who are the persons listening to the radio at that wavelength at that time and place and prone to be upset. Once one observes a person being affected and upset, one will not know what kind of neural activities were going on in that person's brain at that moment he/she got upset. By making a PET scan of the brain if one observes that millions of neurons started firing in different parts of the brain as he/she got upset, one won't know the roles of the individual neurons and synapses in this mess. One can pursue this down to the quantum level of the ion transports and transmissions through neurons and synapses. But at no stage one will find a deterministic reality of the world, which is beyond the level of reality one has chosen to observe.

Brain is no match to the complexity of the universe

In the lecture "Timeless Cosmic Design: Non-locality and entanglement" presented in my website (<http://cosmology.in/universe/newview.htm>) I have discussed my discovery of the cosmic design in the heart of the nucleus of a galaxy known as Cartwheel galaxy and shown how similar pattern repeats in smaller and smaller scales. As I have presented in an earlier lecture about the evolution of galaxies, the central element of all creations is a three-armed spiral structure. This spiral is the source of ejections from the centre which generate the dynamics of creation. In the present lecture I have explained how the spiral brings forth the universal dynamics of ejections with the mediation of the Cosmic Design, which bears a perfect order in channeling streams in and out of the centrally situated spiral. The fractal geometric elements which lie at the basis of the Cosmic Design are formed by enormously complex entanglement of streams. These complexities are stacked in scale after scales. I have shown that the complexity of the neural network of our brain cannot be a match to the complexity of the network that exists in the universe.

Oslo, 11 November 2008