### Intelligent Design, Evolution and Creationism

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The theory of Intelligent Design has sparked a fresh scientific debate over how the world has come to exist. Darwin's theory of evolution of species by random, natural selection is being challenged by the proponents of a new scientific theroy - the theory of Intelligent Design which asserts that the physical world and all the species are designed intelligently and are not the result of any random combinations. Moreover, there is a third category of thinkers who go much farther and assert that the world not only has an intelligent design, but also it is created by an intelligent designer. This debate is largely confined to the US, and to some extent to Europe. In India, there is no explicit echo of this new theory. According to many westerners, the Indian, philosophy of creationism, enshrined in the ancient Indian scriptures like the Vedas, the Puranas, the Upanishads and the Brahman scriptures, is identical in many respects to modern scientific theories about the cosmos. This article attempts to put forth some facts about this new debate.

The theory of Intelligent Design has triggered a fresh world - wide debate on whether the world has evolved out of random or natural selection of traits or has been intelligently designed to have a specified blend of traits. Philosophers, intellectuals and the scientific community now appear to be divided into three discrete camps on this issue. The first group, having an overwhelming majority among the scientific community, claims that the world, the matter and the life (all species of plants and animals) have evolved out of natural selection of attributes in a random manner. Darwin's theory of evolution of living species out of random or natural selection is also part of it. According to them, everything has evolved out of a random and unplanned phenomenon which is all accidental or circumstantial. The second group of scientists propound that the features found in all the living beings, cosmos and matter have a purposeful and intelligent cause and there is a pre-designed or specifically planned intelligence in every living species, matter and cosmos. Thus, according to them, the world is intelligently designed. The third group of intellectuals says that besides there being a pre-designed intelligence in the world, the world has been intelligently designed by a designer or creator i.e. Almighty God. The members of the first group are called evolutionists who say there is no such intelligent design, but everything has evolved by random selection and combination of traits from nature. The second group says that the world has a predetermined intelligent design in everything. However, they assert that it cannot be established whether there is a designer behind the world or not. The third group says that there is an intelligent design in the world and there is a designer behind this intelligent design. Almighty God or the super force is that designer and everything is created intelligently with a purposefully specified intelligence in the design. Without a designer, an intelligent design cannot take shape. The members of the third group are called creationists. A fierce debate is going on in the US and Europe between **Evolutionists and Intelligent Design proponents** as well as between Evolutionists and Creationists.

# Intelligent Design Theory Differs from Darwin's Theory of Evolution through Random Selection

Intelligent Design theory propounds that the matter, the various forms of life, and the cosmic world have been created by a designing intelligence. This theory also intends to demonstrate that living organisms were created more or less in their present forms by an "intelligent designer." Intelligent Design theory was formulated in the 1990 in the United States as an explicit refutation of the Darwinian theory of biological evolution. Building the premise for an argument from DESIGN, the proponents of intelligent design assert that the functional parts and systems of all the living organisms are "irreducibly complex" in the sense that none of their

component parts can be removed without causing the whole system to cease functioning or collapse. From this premise they inferred that no such system could have come about through the gradual alteration of functioning precursor systems by means of random mutation and NATURAL SELECTION, as the standard evolutionary believers claim; therefore, living organisms must have been created all at once by an intelligent designer. This designer, according to theologists, is God. The theory of Intelligent Design holds that the features of the universe and of living things can be best explained by an intelligently designed and planned cause and not by an undirected process such as natural selection.

# Creationism Asserts That in addition to an Intelligent Design, There its a Creator or Superforce

The theory of Creationism is simply an extension of the Intelligent Design theory which, besides asserting for an intelligent design in the physical world and living species, talks of a designer who has created them. So, it is a theistic extension of the Intelligent Design which vouches for a creator. Thus, it believes that matter, the various forms of life, and the world having a specifically planned and intelligent design were designed or created by a designer or creator i.e. God. Scientific creationists believe that a creator made all that exists. Creationism became the object of renewed interest even among holders of religious faith, following the wide dissemination of the theory of biological evolution, first systematically propounded by Charles Darwin in On the Origin of Species (1859). In the early 20th century, some U.S. states banned the teaching of evolution, which led to the Scopes Trial. In the late 20th century many

creationists advocated a view known as intelligent design, which was essentially a scientific modern version of the argument from design for the existence of God.

#### Three Major Arguments Commonly Advanced in Support of Intelligent Design Theory

The proponents of Intelligent Design theory, besides advancing several other reasons in favour of their theory, advance three major arguments in favour of an intelligent design. They say that the irreducible complexity, purposefully specific with a fine tune in everything proves an intelligent design. These three arguments are:

(1) Irreducible Complexity in the Cosmos as well as in All Living Beings: There is an ultimate complexity in everything from galaxies to smallest organs of living species, and these systems are bound to collapse on elimination of a single component of the system. This indicates that the complexity in each of them is planned or intelligently designed. The concept of irreducible complexity was advanced by the biochemist, Michael Behe in his 1996 book, Darwin's Black Box. Behe defines it as "a single system which is composed of several well-matched interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning." He used the analogy of a mousetrap to illustrate this concept. He explained that a mousetrap consists of several interacting parts - the base, the catch, the spring and the hammer- all of which must be in place for the mousetrap to work. Removal of any one piece destroys the function of the mousetrap to trap a mouse. Intelligent Design proponents argue that natural selection cannot create irreducibly complex systems, because the selectable function or component is present only when all parts are preplanned and then assembled. From amoeba to an elephant, from the eye of a cockroach to the eye of a human being, every where there is an irreducible complexity.

Irreducible complexity remains a popular argument among advocates of Intelligent Design.

(2) Specified Complexity: The aforesaid complexity in every cosmic component and living beings is not random but deliberate, which indicates that it is planned or designed intelligently or purposefully. In 1986, Charles B. Thaxton, a physical chemist and creationist, used the term "specified complexity" while claiming that messages transmitted by DNA in the cell were specified by intelligence, which must have originated with an intelligent agent. The intelligent design concept of "specified complexity" was developed in the 1990s by a mathematician, philosopher, and theologian William A. Dembski. Dembski states that when something exhibits specified complexity (both complex and "specified," simultaneously), one can infer that it was produced by an intelligent cause (i.e., that it was designed) rather than being the result of natural and random processes. He argues that "a single letter of the alphabet is specific. A long sequence of random letters is complex but, without meaning, has no specificity. A Shakespearean sonnet is both complex, meaningful and specified. He states that details of living things can be similarly characterized, especially the "patterns" of molecular sequences in functional biological molecules such as DNA, which are specific and purposeful.

(3) Fine-tuned Universe: The believers of

Intelligent Design theory also argue that everything in the cosmos - from galaxies to a single atom and from whale to all microorganisms is so ideally fine tuned that it cannot work without this fine tuning adjustment and coordination. This fine tuning cannot be brought about without a purposeful intelligence. Intelligent Design proponents have also occasionally appealed to broader teleological arguments outside of biology, most notably an argument based on the fine-tuning of universal constants that make matter and life possible and which are argued not to be solely attributable to chance. These include the values of fundamental physical constants, the relative strength of nuclear forces, electromagnetism, and gravity between fundamental particles as well as the ratios of masses of such particles. An Intelligent Design proponent and a fellow of the Center for Science and Culture Guillermo Gonzalez argues that if any of these values were even slightly different, the universe would be dramatically different, making it impossible for many chemical elements and features of the Universe, such as galaxies, to form. Thus, the proponents argue that an intelligent designer of life was needed to ensure that the requisite features were present to achieve that particular outcome.

In this regard, theistic explanations, postulates and philosophies are also being proposed by various theologists. Christian and Islamic theological literature has also been created on the basis of creationism. Ancient Indian scriptures also have vast literature on creationism and creator, often similar to available scientific literature Swhich best explains the expanse, antiquity, and dynamics of the cosmos. Therefore, some references, though very preliminary, are being given hereunder to provide clues to the study of Intelligent Design in relation to the Intelligent cosmic conscience described in ancient Hindu scriptures like the Vedas, the Puranas, and the Upanishads etc. The inquisitive readers may further study in that direction too.

Creationism in Ancient Indian Scriptures: In ancient Hindu scriptures, Indian philosophy of Creationism explains the creation in terms of the expanse of cosmos and galaxies as infinite sarga i.e. Srishti Rachana. The Puranas refer to the process by which all species on earth, including humans, have "devolved" or come to exist from a high state of pure conscionsness or the Atma or Brahma. Hindu Puranic Creationist literature says that species of plants and animals as well as the cosmos are tangible forms adopted by pure and perpetual consciousness. The Hindu Creationist literature also asserts the antiquity of humans on earth, who are believed to have appeared fully formed probably as early as trillions of years ago or to say they are part of perpetual or eternal consciousness. According to Hindu Creationist literature, the universe is eternal and the galaxies after galaxies get created and destroyed in cyclical phases. Modern cosmology also talks of galaxies expanding over and across billions of light years which keep on getting created and eliminated in the cosmos, almost infinitely. Indian scriptures say 'neti'i.e. endlessness. They also assert that Almighty Super force pervades everything - be it an atom, a single celled organism or the entire cosmos to regulate every phenomenon with a perfect fine tune. Several modern science writers like Carl Sagan and Fritjof Capra have pointed out similarities between the latest scientific understanding of the universe and the Hindu concept of a "day and night of Brahma", The days and nights of Brahma describe how the universe is divinely created, and is not strictly evolutionary. According to the Hindu view, there is an ongoing cycle of birth, death, and rebirth of the universe. According to the Puranas, the four Yugas (Kali, Dwapar, Treta and Sat) consist of 4.32 million years and the 1000 cycles of such four Yugas make one day of Brahma, the Creator who lives for 100 years and he then is succeeded by another. Moreover, according to the Puranic literature, even galaxies keep on getting created and destroyed eternally. Therefore, according to Sagan, the ancient Hindu literature alone speaks that "the Cosmos itself undergoes an immense, indeed an infinite, number of deaths and rebirths. It is the only dharma in which time scales correspond to those of modern scientific cosmology. Its cycles run from our ordinary day and night to a day and night of Brahma, 8.64 billion years long, longer than the age of the Earth or the Sun and about half the time since the "Big Bang" (1985, p. 258). Likewise Capra, in his book The Tao of Physics, comments that "this idea of a periodically expanding and contracting

universe, which involves a scale of time and space of vast proportions, has arisen not only in modern cosmology, but also in ancient Indian mythology. Experiencing the universe as an organic and rhythmically moving cosmos, the Hindus were able to develop evolutionary cosmologies which come very close to our modern scientific models." (1991, p. 198). The International Society for Krishna Consciousness (ISKCON) has also refuted Charles Darwin's theory of evolution by natural selection or random selection of alternative traits, in the book Rethinking Darwin: A Vedic Study of Darwinism and Intelligent Design. Indeed, the ancient Indian scriptures like the 4 Vedas, 18 Puranas, 108 Upnishads, 6 Vedantas, 6 Darshans, and Smritis etc. are replete with scientific clues about the cosmic composition, which are, of late, being verified through ever newer discoveries and inventions and being interpreted afresh, with a scientific approach, especially in consultation with the a theory of Intelligent Design.