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DOES ABRAHAM'S GOD CONFLICT WITH DARWIN'S GOD?:

A Complementary Reading in the Sciences of Creation and Evolution by Adding Nuances of Evolutionary Developmental Biology and the Hypothesis of Morphic Resonance

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DOES ABRAHAM'S GOD CONFLICT WITH DARWIN'S GOD?: A Complementary Reading in the Sciences of Creation and Evolution by Adding Nuances of Evolutionary Developmental Biology and the Hypothesis of Morphic Resonance

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Abstract

The search for the cause of the universe and the origin of life was always a great challenge in the life and history of human beings. As time passed, there was the development of facts and myths to substantiate their ideologies. When one ideology becomes prominent, there will be opposition and counter synthesis resulting in new theories leading to a debate involving a cultural, political, and theological dispute about the origins of the Earth, of humanity, and of other life. The debate is so crucial; such is the language one hears in today's conflict between those groups that advocate evolution and those that espouse creationism. The language is one of polarity: polarity which is so strong in its effect that members of either camp find little room to hear, much less rationally consider, the opposing viewpoint. The level of support for evolution is extremely high within the scientific community and in academia, with more than 90% of scientists supporting evolution. Support for Abrahamic religions' accounts or other creationist alternatives are very low among scientists, and virtually non-existent among scientists in the relevant fields. Christian fundamentalists dispute the evidence of the evolution of humanity and other life forms demonstrated in modern palaeontology, genetics, histology and cladistics and those other sub-disciplines which are based upon the conclusions of modern evolutionary biology, geology, cosmology, and other related fields. Through this paper, a complementary reading is made to reconcile the debating groups standing on the shoulders of evolutionary developmental biology and the hypothesis of morphic resonance.

1. Introduction

In a world torn by disagreements and conflicts at every level, from the spiritual and intellectual to the physical and chemical, those in quest of the creation of peace and harmony have often turned to the task of seeking accord between religion and science. The contemporary landscape is in fact filled by such efforts, many of which, although based on the best of intentions, only contribute to further chaos in the present-day world. Many such attempts substitute sentimental wishing for reality and ambiguous definitions and positions for the clarity and rigor which alone can disperse the fog of ignorance that blurs the vision of present-day humanity travelling on a road that becomes even more dangerous. The platform is more controversial due to the categorical statements and observations made by different personals while establishing their concepts in their field of specialisations. Due to the growth of different fields of intellectual exploration, coupled with the narrowing of mental horizons, tensions are created if the experts cross the domains creating category mistakes. The worldviews of traditional religion and that of modern science are often thought to be irreconcilable because modern science appears to contradict at least some of the core beliefs of major religions. At the very least, the credibility of traditional beliefs concerning the

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creation of the world,[1] the special place of humans in the created order, and God's ability to act upon the world all appear, at least prima facie, to be at odds with scientific thinking. There were expositions of creation and evolution from different angles of thought and synthesis often creating a gap between the two streams of human growth and harmonious existence. This led to a debate.

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1.1. Scope and relevance of the paper

The gap between science and religion should be narrowed gradually leading to the hearty synthesis of both for a harmonious life catering to the sustenance of the biosphere. Understanding the domains of both science and religion, identifying their various capacities, and merging the knowledge of both to synthesize them for harmony of existence are the intended ideas behind the study.

1.2. Methodology

The research follows the methodology of qualitative research. To make relevant data to substantiate the argument, both located and open sources are referred to. Proper systematization and logical connection in formulating the body of the study in fact was so

[1] For the traditional Hebrew account of creation, see the Book of Genesis, Chapters 1& 2 and it is common for Judaism and Christianity. For an account of creation in the Qur'an, see, for example, Sura 41: 9–12.

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strenuous because of less access to the timely interventions of resource persons. The ideas which are given either as inlayed or displayed have been obtained from other sources which have been duly acknowledged in the paper.

1.3. Operational Definitions

Morphic fields are a concept explored to great degree by Rupert Sheldrake and are becoming increasingly popular in the study of evolution. Because of their existence, present life forms are directly influenced by previous generations of the same type because of the 'causal influence' and are hierarchically organized from cells to tissues to organs to organisms as a whole, then progressing outward to include culture, communities, the whole of society, the environment, the planet, and the process of evolution. Each individual organism both draws upon and adds to the unconscious collective memory or morphic fields of each species. Morphic fields contain an inherent memory which has been transmitted by similar systems through Morphic resonance**.**[2]

Morphic resonance is a process whereby self-organising systems, such as physical or chemical or biological, inherit a memory from previous similar systems. In its most general formulation, morphic resonance means that the so-called laws of nature are more like habits; the greater the degree of similarity, the greater resonance to that particular field. Resonance occurs to the greatest degree with patterns that most resemble one's own past patterns. This is how habits develop. One tends to resonate most strongly with its own past patterns of thoughts, behaviours, and patterns, reflecting that each individual organism 'broadcasts' its own unique morphic field.[3]

Evolutionary developmental biology - Evo-Devo is a field of biology that compares the developmental processes of different organisms to determine the ancestral relationship between them, and to discover how developmental processes evolved. It addresses the origin and evolution of embryonic development;: how modifications of development and developmental processes lead to the production of novel features, such as the evolution of feathers, the role of developmental plasticity in evolution, how ecology impacts development and evolutionary change, and the developmental basis of homoplasy and homology.[4]

2. God of Abraham and Creationism

[2]Sheldrake, *A New Science of Life*, 12.

[3]Sheldrake, *A New Science of Life*, 12.

[4]Hall, "Evo-devo or devo-evo—does it matter". 177

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The three major monotheistic religions, namely Judaism, Christianity and Islam, are known as Abrahamic Religions. Here God is conceived as the eternal, omnipotent, omniscient, creator of the universe, most holy, just, omni-benevolent and omnipresent, etc. The creation story is understood in the light of the biblical exegesis on genesis. There are two creation narratives. The narration creates a majestic view that God created everything. Biblical scholars found parallels in Babylonian myths[5] of the same story and demythologised to present a non-negotiable truth that God created everything. His work brought all creatures into existence from chaos to the very existence of human beings. The independence and sovereignty of the Lord is emphasized through these narratives. The interpretation of days in the bible is exegetically understood that these are a kind of anthropomorphic conception and hermeneutically explained as not human days in any way. The main theme is that the universe and living organisms originate from specific acts of divine creation, as in the biblical account, rather than by natural processes such as evolution.

3. Darwin's Theory of Evolution

To understand the cause of the cosmos, there were continuous researches made by different people throughout the ages. As a summary of these, one can have a notion that the origin and evolution had happened through a series of changes may be put together in a theoretical form with two main theories: chemical and biological evolution. The process of creation and evolution of primordial earth was proposed in the theory of chemical evolution by Oparin and Haldane and the theory was substantiated through the experiments of Miller and Urey.

> … a mixture of water, hydrogen, methane, and ammonia was cycled through an apparatus that delivered electrical sparks to the mixture. After one week, it was found that about 10% to 15% of the carbon in the system was now in the form of a racemic mixture of organic compounds, including amino acids, which are the building blocks of proteins.[6]

Later these evidences were further strengthened by the experiments of Sydney Fox. But the problem did not end with that. How the varieties of organisms were formed on the earth was a puzzle for the scientists. The problem was satisfactorily explained by Darwin through the process of Evolution by Natural selection. For him all life is related and has descended from a common ancestor: the birds and the bananas, the fishes and the flowers -- all are related. This process is very slow and gradual.

[5]Myths like Enuma-Elish and Gil-Gamesh
[6]Miller, "A Production of Amino Acids Under Possible Primitive Earth Conditions", 121.

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"Huxley applied Darwin's ideas to humans, using palaeontology and comparative anatomy to provide strong evidence that humans and apes shared a common ancestry."[7] Precise mechanisms of reproductive heritability and the origin of new traits remained a mystery. Towards the end of this, Darwin developed a theory of pangenesis. Gregor Mendel added flavour to this theory by proposing the laws after conducting a series of hybridization experiments in pea plants and reported that traits were inherited in a predictable manner through the independent assortment and segregation of elements later reported as genes by Johansson. These laws are eventually supported the theory of pangenesis of Darwin. Later August Weismann made the important distinction between the gametes and the somatic cells and demonstrated that heredity and variation are due to the factors present in germ cells. Hugo de Vries made a remarkable connection in between Darwin and Mendel. To explain the variation in the living kingdom, de Vries developed a mutation theory. In the first half of the twentieth century, a modern evolutionary synthesis connected natural selection, mutation theory, and Mendelian inheritance into a unified theory that applied generally to any branch of biology. The modern synthesis was able to explain patterns observed across species in populations, through fossil transitions in palaeontology, and even complex cellular mechanisms in developmental biology.[8] In 1953 James Watson and Francis Crick by the series of experiments done in collaboration with Rosalind Franklin and Maurice Wilkins demonstrated the structure of DNA and added that it is the base of inheritance. The presence of similar characters along with variations is explained by further investigations done in the field of molecular biology. Variation is caused by mutations in different levels molecular structure of an organism further proliferated into generations coming after.

Evolution by means of natural selection has the principle like organisms are highly likely to produce as much as they can. This leads to an exponential increase in population leading to the struggle for existence, resulting in survival of a fraction of offspring in each generation. Most populations are stable in size except for seasonal fluctuations. Since natural resources are limited, only the fittest among the offspring will be survived. It depends upon the hereditary constitution of the surviving individuals which are likely to produce more young ones than less fit individuals. Since the variations occurred, no two individuals are alike. Most of these variations are inheritable. The unequal ability of organisms to survive and reproduce will lead to the gradual change in the population. In this way favourable

[7]Bernal, *Origins of Life*, 27.
[8]Quammen, *The reluctant Mr. Darwin*, 20.

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characteristics accumulate over the generation. So natural selection is the differential success in reproduction which results in the adaptation of organisms to their environment. It occurs through the interaction between the environment and the variability inherent in population. The basic factor of this mechanism includes mutation, recombination, gene migration, gene flow, genetic drift, speciation, isolation, hybridization, co-evolution, co-operation etc. Molecular biology improved our understanding of the relationship between genotype and phenotype. "Advancements were also made in phylogenetic systematics, mapping the transition of traits into a comparative and testable framework through the publication and use of evolutionary trees."[9] In 1973, evolutionary biologist Theodosius Dobzhansky penned;

> "that 'nothing in biology makes sense except in the light of evolution', because it has brought to light the relations of what first seemed disjointed facts in natural history into a coherent explanatory body of knowledge that describes and predicts many observable facts about life on this planet."[10]

Since then, the modern synthesis has been further extended to explain biological phenomena across the full and integrative scale of the biological hierarchy, from genes to species. This extension has been dubbed 'Evo-Devo – Evolutionary Developmental Biology'.

4. Evolutionary Developmental Biology [Evo-Devo] – Insights deepened

Soon after the proposal of the structure of DNA in 1953, and subsequent elucidation of the genetic codes of different genes in 1960s, there were more than 180 similarities in DNA base pairs found in many genomes that proved the theory of common ancestry. This was the base of Evolutionary Developmental Biology, which synthesised Darwinism and neo-Darwinism with molecular genetics and developmental biology. The key concepts formulated include the understanding that the evolution of multicellular creatures needs a developmental approach, evolution of adult can be achieved by developmental repattering including all developmental terms, different factors of life and reproduction should be taken into consideration; the behaviour of cells, signalling, expressions of genes are very important in regulating evolution and development.

5. Hypothesis of Morphic Fields and Morphic Resonance

A field is a region throughout which a force may be exerted. Some of the fields include gravitational, electric, and magnetic fields that surround, respectively, masses, electric charges, and magnets. Michael Faraday developed the concept of field based on his

[9]Schuh, and Andrew,*Phylogenetics*, 390.
[10]Dobzhansky, "Nothing in biology makes sense except in the light of evolution".125–126.

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investigation of the lines of force that appear to leave and return to a magnet at its poles. These lines of force denote the magnetic flux. Fields are used to describe all cases where two bodies separated in space exert a force on each other. The concept of the morphogenetic field, fundamental in the early twentieth century to the study of embryological development, was first introduced in 1910 by Alexander G. Gurwitsch.[11] Experimental support was provided by Ross Granville Harrison's experiments transplanting fragments of a newt embryo into different locations.[12]

A morphogenetic field is a group of cells able to respond to discrete, localized biochemical signals leading to the development of specific morphological structures or organs. This is clearly a well-defined system in developmental biology.[13] The spatial and temporal extent of the embryonic fields is dynamic, and within the field is a collection of interacting cells out of which a particular organ is formed.[14] As a group, the cells within a given morphogenetic field are constrained — i.e. cells in a *limb field* will become limb tissue, those in a *cardiac field* will become heart tissue. Importantly, however, the specific cellular programming of individual cells in a field is flexible: an individual cell in a cardiac field can be redirected via cell-to-cell signalling to replace specific damaged or missing cells.[15]

Morphic resonance is a term coined by Rupert Sheldrake in his 1981 book *A New Science of Life.* He uses the expression to refer to what he thinks is "the basis of memory in nature....the idea of mysterious telepathy - type interconnections between organisms and of collective memories within species."[16] In its most general formulation, morphic resonance means that the so-called laws of nature are more like habits. The hypothesis of morphic resonance also leads to a radically new interpretation of memory storage in the brain and of biological inheritance. Memory need not be stored in material traces inside brains, which are more like TV receivers than video recorders, tuning into influences from the past. And biological inheritance need not all be coded in the genes, or in epigenetic modifications of the genes; much of it depends on morphic resonance from previous members of the species. Thus, each individual inherits a collective memory from past members of the species, and also contributes to the collective memory, affecting other members of the species in the future.

[11]Beloussov, "Life of Alexander G. Gurwitsch and his relevant contribution to the theory of morphogenetic fields," 774.
[12]deRobertis, Elain, And Kenw, "Gradient fields and homeobox genes," 670.
[13]Alberts, et al. "Universal Mechanisms of Animal Development," 12.
[14]Gilbert et al. "Resynthesizing evolutionary and developmental biology," 359.
[15]Gilbert et al. "Resynthesizing evolutionary and developmental biology," 361.
[16]Sheldrake, *A New Science of Life*, 11.

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Over the course of fifteen years of research on plant development, Sheldrake came to the conclusion that for understanding the development of plants, their morphogenesis, genes and gene products are not enough. Morphogenesis also depends on organizing fields. The same arguments apply to the development of animals. Since the 1920s many developmental biologists have proposed that biological organization depends on fields, variously called biological fields, or developmental fields, or positional fields, or morphogenetic fields. All cells come from other cells, and all cells inherit fields of organization. Genes are part of this organization. They play an essential role. But they do not explain the organization itself.

6. A Synthesis – 'Evolutionary Creationism'

Evolutionary creation is a synchronised view of reading science and religion. This offers a Christian approach to evolution. It explores biblical faith and evolutionary science through a Two Divine Books model and proposes a complementary relationship between Scripture and science. The Book of God's Words discloses the spiritual character of the world, while the Book of God's Works reveals the divine creative process. It proposes that God created everything and sustains it through evolutionary processes i.e., evolution is a planned and purpose-driven natural process.[17]This position also argues that humans evolved from pre-human ancestors, and over a period of time the Image of God and human sin were gradually and mysteriously manifested. Evolutionary creationists experience the Father's love and presence in their lives.[18]The evolutionary lines of organisms are now very much understood by the contributions given from the field of science like palaeontology, genetics, geology, and eugenics etc., especially evolutionary developmental biology. Evolutionary creation holds a traditional notion of natural revelation. The reflection of intelligent design extends to the process of evolution, rejecting the God-of-the-gaps creative method, and declaring the faithfulness of the Creator's evolutionary mechanisms.[19] The evolution of species and formation of varieties of organisms or group of organisms are further explained by the hypothesis of morphic resonance. Evolutionary creationists uphold the unity and coherence of all the natural sciences, because scientific discovery is ultimately rooted in God. Christian evolutionists believe that every scientific discipline is a gift from the Lord, including the evolutionary sciences.

[17]Lamoureux,"Evolutionary Creation" P. 28. https://www.ualberta.ca/~dlamoure/evolutionary_creation.pdf
[18]Lamoureux,"Evolutionary Creation" P. 28. https://www.ualberta.ca/~dlamoure/evolutionary_creation.pdf
[19]Lamoureux,"Evolutionary Creation" P. 28. https://www.ualberta.ca/~dlamoure/evolutionary_creation.pdf

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7. Conclusion

Accommodating the valuable contributions of intellectual giants like Chardin – 'Directed Evolution', Aurabindo – 'Convolution Involution Principle', Goswami – 'Quantum Consciousness and God', EMF theory of Consciousness, etc., the complementary nature of Science and Religion is well affirmed. It is further coloured by the addition of the principles from Evo-Devo and Morphic resonance. This may be a good quest to preserve and propagate the authentic spirituality and to have an honest and critical understanding of the premises, assumptions, findings and groupings of modern science. Through this one can hope to avert the tidal wave that threatens what remains of traditional civilizations, authentic religions and spiritual teachings and that direct manifestation of Divine Wisdom and Power that is virgin in nature. Also, this pursuit provides the opportunity to exercise to the highest degree the virtue of 'compassionate love' and 'empathy' – the factors of 'planatisation' have a dominant role in integrating science and religion. Science only, and without cooperation of religion, is incomplete. Sciences do not deal with values but religions do. Science cannot make man happy, hopeful and serious to looking for the goal of the life. So science itself is not enough for his happiness. Thus, it is hoped that the integrated notion of science and religion should be a kind of morphic field which resonate the values of religion coupled with views of science. For the researcher, Science is the contemplation of the scriptures and scientists are the modern sages contemplating the mysteries of nature through the spectacle of human limitations. The movements of nature itself are controlled by the absolute and the absolute may be denoted as cosmic consciousness. Thus, the movements are the works of the absolute. Then the morphic field can be christened and can be called 'Holy Spirit' which 'broods over the surface of water.' Brooding over is the continuous process '*to create, to evolve, to rejuvenate and to innovate*.'

"Science without religion is lame, religion without science is blind." – Albert Einstein

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