



Al-Azhār

Volume 11, Issue 01 (Jan-June, 2025)

ISSN (Print): 2519-6707



Issue: <https://www.al-azhaar.org/index.php/alazhar/issue/view/23>
<https://www.al-azhaar.org/index.php/alazhar/article/view/565>
Article DOI: <https://doi.org/10.5281/zenodo.17661951>

Title

Analyzing the Concept of Evolution in
Uzma Aslam Khan's The Geometry of
God with reference to the Holy Quran

Author (s):

Mustanir Ahmad

Received on:

26 January, 2025

Accepted on:

27 March, 2025

Published on:

25 June, 2025

Citation:

Mustanir Ahmad "Analyzing the
Concept of Evolution in Uzma Aslam
Khan's The Geometry of God with
reference to the Holy Quran." vol.11,
Issue No.1 (2025)P:13-43

Publisher:

The University of Agriculture
Peshawar



[Click here for more](#)

Analyzing the Concept of Evolution in Uzma Aslam Khan's The Geometry of God with reference to the Holy Quran

**Mustanir Ahmad*

Abstract

Literary and critical writings have been influenced by Charles Darwin's concept of evolution since the publication of On the Origin of Species (1859). This research article seeks to analyze the concept of evolution as portrayed in Uzma Aslam Khan's The Geometry of God and explore the original Darwinian concept of evolution with respect to the present age. Khan's novel has been taken as a representative text written in the contemporary era. The close-reading technique has been used for analyzing the text with a goal to interpret the same with reference to the Holy Quran. The findings are, then, explained in order to reach a conclusion regarding the theory of evolution. Certain characters and incidents in the novel have been analyzed to find how ordinary people and strict religious believers play between doubt and faith regarding their creation existence due to the Darwinian theory of evolution. After analyzing the novel and comparing it with other works as well as present age, the researcher has found out that mankind and it should not be confused with religion. It has been concluded that by reviewing and analyzing different theories of evolution, it can be noted that Khan has remained successful at carrying out an objective analysis of the issue. The study is important in understanding the concept of evolution. It is also a step towards enabling upcoming researchers to explore such topics.

Keywords: *evolution, Khan, mankind, Certain, Uzma Aslam Khan*

.....

**Associate Professor, Department of English, Hazara University Mansehra*

Introduction

The present study is an effort to explore the concept of evolution in Uzma Aslam Khan's *The Geometry of God*. The word evolution means change over time or developmental changes in something over a period of time. In biological terms, it is a gradual change in one species leading to the formation of other species, or transfer of characteristics from one species to another over a period of time (Purves et al., 2002). In different times different theories of evolution have been presented. Important ones are Lamarck's theory of evolution, Darwin's theory of evolution through natural selection, De Vries mutation theory and Neo-Darwinism or modern synthetic theory of evolution. The most influential and complete theory of evolution is Charles Darwin's theory of evolution through natural selection which he presented in his book *On the Origin of Species*. In this book he has given evidence for common origin of all life forms. He has stated that evolution occurs in organisms in which useful traits are transferred from one generation to another. In his view when with the change in environment and surroundings a species becomes adaptable, then those adaptable characteristics or traits are transferred to upcoming generations. Hence, results in higher and more developed form of species. With his theory of evolution through natural selection, he also suggested that humans have evolved from some lower forms of animals. These lower forms of animals are in fact monkeys or apes with which humans share similarities with respect to structure, form and even mental capabilities. Detailed arguments are given by Darwin in his book *The Decent of Man*. Darwin was severely attacked with respect to his human-evolution concept. Public as well as scientists were not ready to accept it. Religious people considered it as a direct attack on man's faith and his belief in God. Different religions in the world hold a stance that humans are superior to all living beings and are created by God. So, human evolution concept went against religions laws. Darwinism came in Victorian era. Victorian era is marked with industrial and scientific developments, specifically Darwin's theory of evolution. People in Victorian age greatly suffered from doubt of faith and even people started to question the existence of God. Along with laymen and strict religious believers the effects of these theories were also inflicted on literature. Writers of that age wrote novels and poems which show the effects and influences of developments specifically

of theory of evolution. Poems like *Dover Beach* and *In Memoriam* shows the doubt of faith of people of Victorian age. Writers like Gaskel and H.G.Wells have also portrayed the effects and influence of theory of evolution. Even writers used to shape their major characters on Darwin and have given them his qualities. Along with the effects on people, the works also portrayed some of their characters as symbolic of Darwin's survival of the fittest phenomena. The effects and elements of theory of evolution cannot be confined to Victorian era only. These can also be seen in the present age. In the contemporary period one of the renowned writer of Pakistan, Uzma Aslam Khan also seems to attempt these effects and influence of theory of evolution. Her novel *The Geometry of God* is a portrayal of these effects and influences.

The novel's major incidents are based on a tug of war between two parties, one, that promotes Islamic values and principles (The Party of Creation), and is against a group of palaeontologists (ones who study the evolution of whales). The second group, as described, the palaeontologists studying the evolution of whales, is not concerned with The Party of Creation, and is even not against their teachings, this group is only concerned with its study of whales. But the main problem in this novel is that The Party of Creation promotes hatred among people for Zahoor, the main proponent of the group of palaeontologists, and is against his concept of evolution and declares it as a direct attack on Islamic values and straying people from their religious beliefs. As in the novel, in the first meeting of Party of Creation the leader of the party says:

'There is pollution in our societies because of those who stray!... liars and cheats! Evil-wishers spreading falsehoods! Seeing in the Holy Quran and Sunnah what they please! Changing what is eternal, permanent,...They say it is gravity, we know it is Allah! (*Louder applause*)...Talking of senses, cause, effect. We will repair the damage with science that is pure!' (Khan, 2008, pp.74-75).

The story runs through a few major characters, Amal and Mehwish, two sisters; Zahoor, their maternal grandfather; Noman, son of the founder of The Party of Creation and some minor characters such as Amal's parents, Zahoor's sons, Amal's future husband Omar and Noman's parents especially his father - main proponent of The Party of Creation "Jamaat-e-pedaish". Amal plays a vital role in this novel and is

in fact the protagonist of the novel, as she was the one who found the “golden key” that is; the bone that aided in believing that whales were first, land animals, and later, they changed to whales and started living in water. As Amal says, as she found the skull, “... I found the skull. Of course I didn’t know it was skull” (Khan, 2008, p.3). This leads to the concept of evolution and supports the idea of evolution, and it is also the main reason why rigid Islamic believers started to be against the concept of evolution.

In this research the researchers will attempt to explore the concept of evolution with the help of views of different scholars and scientists. It will also be pointed out how different fiction writers have reacted and depicted its elements in their woks, including Uzma Aslam Khan, and so, coming to a most appropriate conclusion with respect to the concerned discussion.

Statement of the Problem:

Various fiction writers have tried to discuss theory of evolution in their writings. The novelist Uzma Aslam Khan has also attempted to discuss this concept and supported it by discussing religious fundamentalists’ views about evolution and common man’s understanding. It is to be determined as to why and how Uzma Aslam Khan has supported this concept and tried to make people understand its true meaning.

Objectives of the study:

- To analyze the arguments given about evolution throughout the novel with respect to the views of different scholars and scientists
- To give subtle information and arguments to refute fundamentalists’ negation of the concept of evolution as shown by Uzma Aslam Khan in *The Geometry of God*
- To support concept of evolution with regard to Uzma Aslam Khan’s *The Geometry of God*

Research Questions:

1. How Uzma Aslam Khan has portrayed the elements and effects of theory of evolution in her novel *The Geometry of God*?

2. Why religious fundamentalists negate the concept of evolution as shown in Uzma Aslam Khan's novel *The Geometry of God*?

Significance of the study:

Uzma Aslam Khan's novel *The Geometry of God*, a publication of 2008, is a novel based on themes of religion versus science, imagination versus doing, intellect versus the senses and freedom versus duty. The major plot of the story is knitted through the discussion and events that carry intellect versus senses to unfold the war between parties supporting Islamic principles and the one that promotes concept of evolution, beautifully immersed in love relations between some of the major characters. This research that analyzes the concept of evolution as explored in this novel can be helpful in understanding the concept of evolution in its true form. It will also be helpful in opening the eyes of common people and making them realize that the concept of evolution is not harmful for their faith. This research is very significant as such topics are usually avoided by people considering the study harmful for their religious beliefs.

Literature Review:

A historic perspective of concept of evolution

This section deals with different theories of evolution. Four main theories are being reviewed namely Lamarck's theory of evolution, Darwinism, De Vries Mutation theory, and Neo-Darwinism. Before describing these theories, concept of evolution is taken into consideration in general terms. The concept of evolution existed long before. Some important names are given who also have considered this concept.

Purves et al. (2002) has explained the concept of evolution on biological grounds and stated that "Biological evolution is a change over time in the genetic composition of a population" (p.379). In his view this involved two kinds of evolution, microevolution and macroevolution. When changes occur within the life of a species then its microevolution and when changes occur in the appearance of new species then this is known as macroevolution. This is all in simple words evolution. So, in general terms, evolution is a process of genetic change through the period of time. Iqbal (1934)

pointed out that before Darwin or Lamarck, some other (Muslim) scientists have also discussed the idea of evolution. He referred to Al-Jahiz that he, in his book *Kitab-al-Haiwanat* first hinted at the changes in animal life caused by migrations and environment generally and Ibn-e-Maskawaih, the author of *Fauz-ul-Asghar* gave in many respects modern theory of the origin of life. According to Ibn-i-Maskawaih, evolution is the process which starts with plant life and ultimately after step-wise evolutionary mechanism reaches to man. Enger et al. (1988) in *Concepts in Biology* defined evolution in following words:

Evolution is the adaptation of a population of organisms to its environment by way of a change in the gene frequency over time. Natural selection is the process that causes evolution to occur and speciation is a primary step that can lead to greater evolutionary change. (p. 324)

Enger et al. stated that before Darwin and Wallace Jean Baptise Lamarck have also given concept of evolution which he described through adaptation of long necks of giraffes. This was based on assumption that due to unreachable trees giraffes stretched their necks which resulted in new generations with long necks. But he was considered wrong and so in 1858, Darwin and Wallace proposed their theory of evolution through mechanism of natural selection. Following are the main theories of evolution.

Mayr (1972) pointed out concept of Lamarck's theory of evolution and stated that modern theory has only one meaning and that is of having common descent. In the eighteenth and early nineteenth century it was directed to the concept of embryological phenomena, and Lamarck was of that belief. He gave his concept of evolution in *Philosophie Zoologique* (1809). Lamarck has never used the terms like "evolution", "evolutionism" or "transformationism" (p. 59). In *Philosophie Zoologique*, numerous passages can be quoted to understand the concept of Lamarck's evolutionary theory but they do not give accurate views of him, except his discussion of aquatic animals. ". . . After a long succession of generations these individuals originally belonging to one species, become at length transformed into a new species distinct from the first" (p.60).

Lamarckism was also open to criticism. According to Pujari, a German Biologist August Weismann's attack came as a blow to Lamarckism. In 1892, he proposed theory of continuity of germplasm, which stated that not the germ cells but the somatic cells are affected by the environment. Somatic cells are not transferred from generation to generation, only germ cells are transferred. So, his point was that acquired characters could not pass to the next generation, they must be lost. Even 'weak muscles of a wrestler's son' was also a point that went against Lamarck's concept of use and disuse of organs. But Lamarckism has its own significance being a scientific theory, because it was the first complete theory of evolution. Lamarckism was revised by T.H Morgan, Spencer, Tower, Mc. Dougal, and some others. This theory to some extent has refined Lamarckism. It states that germ cells are also affected by environmental factors and they do carry changes to the next generation. This theory is known as Neo-Lamarckism.

This affirms Lamarck's view of Divine Power being responsible for evolutionary changes. According to Lamarck, in animal world there is a transition from less to more complex organisms, which is progressive and gradual in nature. Main crux of Lamarck's evolutionary theory is based on two fundamental laws. Lamarck's first law propose that through use or disuse of an organ, its capabilities and strength is enhanced or diminished, and the second law can be summarized as, changes in an organism through use or disuse of an organ can be transferred to upcoming generations, leading to evolutionary changes. If Lamarckism is to be situated in modern era and confronts mechanisms of natural selection, genetics, molecular biology and epigenetics, there would not be a disagreement from Lamarck's side.

Darwin's theory of evolution / Darwinism:

Darwin (1859) has given how and when theory of evolution has originated. In this work it is stated that the concept of evolution is older than Darwin's. It dates back to Empedocles and Aristotle proceeding to Darwin and Lamarck. Darwin stated about theory of evolution: "On my return home in the autumn of 1836 I immediately began to prepare my journal for publication, and then saw how many facts indicated the common descent of species . . ." (p. 6). The quotation shows that Darwin after his

expeditionary voyage on H.M.S Beagle in 1836 thought of proposing his theory of evolution, because during the journey he observed that all species are the descendents of some other species leading to common ancestor. But in *On the Origin of Species* (1859), it has been pointed out that he was not the first one who found this. There are many others. The first one being Lamarck and then others, who suggested that species are in fact the degenerations of the same type, pointing towards the same origin of life. Grant (1826) concluded his paper on the Spongila by saying that one species is the descendants of other species and with the help of modifications species can be improved likewise Rafinesque (1836) suggested that, “all species might have been varieties once, and many varieties are gradually becoming species by assuming constant and peculiar characters” (qtd in. Darwin, 1858, p.13)

A celebrated geologist, Keyserling (1853), pointed out that new species can be said to come into being due to the germs of existing species with some specific changes like a new disease that spreads due to the presence of miasma.

So, Darwin has also followed the same path, and along with Wallace (1858) proposed a theory of evolution known as theory of natural selection. For Darwin and Wallace (1858) natural selection was the basic mechanism responsible for the origin of new species. They for the first time in 1858 gave the descent with modification hypothesis with the help of natural selection. There are some basic principles of hypothesis. 1) all organisms produce more offsprings than their environment can support; 2) intraspecific variability of most characters exist in abundance; 3) competition for limited resources leads to a struggle for life (Darwin) or existence (Wallace); 4) descent with heritable modification occurs 5) as a result, new species evolve into being.

Darwin was the one who supported his arguments with the help of facts obtained from experiments, but in 1889 Wallace produced series of lectures titled as Darwinism whereby he used such facts and data that were not known to Darwin himself. If both are compared it is said that Wallace’s contributions were much more than Darwin’s, but the latter was celebrated more than the former.

According to Darwin there is a missing Precambrian fossil record in the course of evolution, and this is the main point that is used against Darwin by many people. Studies revealed that Darwin's dilemma was resolved, although the traces of cellular structures in Precambrian rocks are sparse and more fossils are required (Schoff 1999; Conway Morris 2000; Carroll 2001; Knoll 2003). Apart from this Darwin was also worried for not finding the intermediate forms of life in the fossil record. This also seems to be resolved by the recent discoveries of intermediate forms in the evolutionary history of many animal and plant lineages (Kemp 1999; Zhou and Zhang 2003; Zimmer 1998).

Darwin's postulate of common ancestry is also accepted. Prokaryotic protocells that evolved into prokaryotic organisms are the ones that are responsible for all life on Earth (Seligmann and Amzallag 2002; Woese 2002; Martin and Russell 2003). It has been noted that Darwin was unaware of Mendel's work but this cannot lead to the detraction from his important contributions in the sphere of concept of evolution. Darwinism basically rests on his book *On the Origin of Species* (1859). The major driving force in evolution is the Darwin/Wallace principle of natural selection. Lamarck's principle of the acquired characteristics was accepted by Darwin (1859, 1872) and so, Darwinism can be called as Lamarck/Darwin/Wallace theory of evolution. Than (2015) presented the crux of Darwinism and stated that organisms change with the course of time due to the heritable physical or behavioural changes and thus become adaptable to the environment and survive. For understanding the concept of natural selection, in *On the Origin of Species*, origin of whales is being discussed. Natural selection involves evolution on two levels, microevolution and macroevolution. In microevolution a species can change its size or colour and in macroevolution an entire new species can evolve. In case of whales it changed from land to water or marine animals through different biological changes. Their front legs may have changed into flippers and back legs may have disappeared. In Darwin's view apart from such sort of natural selection, evolution also takes place due to sexual selection - ability of an organism to attract its mate.

Pujari (2015) also acknowledged Darwinism or theory of natural selection. In his view according to Darwinism, all life that exists today originated from and share similarities with life form that existed millions of years before. This means that all life came into existence from a common ancestor. Charles Darwin's concept of natural selection have some postulates, geometric increase, limited food and space, struggle for existence, variations, natural selection or survival of the fittest, inheritance of useful variations and speciation. According to Darwinism, populations multiply geometrically and this results in increase in reproductive powers of organisms. As population increases so demand of basic needs like food and space also increases. Due to limited food and space competition between individuals for struggle of existence occur. Darwin terms variation as law of nature and no two individuals are same except twins. Concept of natural selection or survival of the fittest is an important element of Darwin's theory. According to it, nature selects individuals with useful variations and the rest are rejected by nature. So useful variations are then transferred from generation to generation, thus resulting in new species.

Mukhopadhyay (2009) encapsulated the theory of evolution and the phenomenon of natural selection and favoured Darwin in this respect. In his opinion, according to Darwin's natural selection members of species develop adaptive characteristics like long neck of giraffes at the same time causing other species to change as well, such species is then accepted by nature and this phenomenon is known as natural selection and a major part of Darwin's theory of evolution. He accepted Darwin's statement that every species is a descendent of some other species.

...those [species] belonging to what are called the same genera, are lineal descendents of some other and generally extinct species, in the same manner as the acknowledged varieties of any one species are the descendants of that species (p.31).

Mukhopadhyay defended Darwin and concluded his article by saying:

Darwin's strong points, his major contributions in evolutionary biology – theory of natural selection, and introduction of the population approach – remain permanently secure (p.38).

The abovementioned reviews of different writers on Darwin's theory of evolution or Darwinism give a lucid picture in which one can see that Darwin's ideas and postulates with respect to process of evolution were accepted. Darwin is still celebrated as a scientist who gave a theory of evolution based on reason, logic and experimental work. His theory makes sense to people, although it also has some defects. Major among them is the one based on the arguments that Darwin was unaware of Mendel's works of heredity. In this perspective a glance must be taken of Mendel's laws of inheritance and genetics.

Mendel's laws of Inheritance form basis of genetics and transfer of characteristics or traits from one generation to the other generation.

Bishop (1996) criticized Darwinism with respect to Mendel's works. Darwin's concepts were mutation, variation and soft heredity while Mendel stressed on discontinuous variation and hard heredity without mutation. Mendel's theory was to oppose all the Darwin's ideas about evolution and theory of descent with modification.

Bizzo and El-Hani (2009) argued on criticism on Darwin's unawareness of Mendel's Laws of heredity and genetics. He commented that Darwin was not able to have a clear view of evolution in biological terms because his theory lacked heredity theory. If he knew Mendel's laws and work he could have made some important advances in developing his theory of evolution. Considering Mendel's works they stated that Mendel had given a platform to understand the passing of traits in generations. In Mendel's view characters are not transferred to generations as a result of missing of traits. In fact the manner in which traits behave is discrete i.e; they are separately or distinctively involved in transferring from generation to generation. The dilemma is that Darwin during his life time was unaware of Mendelism.

Just a few years after Darwin published *The Origin of Species*, Gregor Mendel wrote a groundbreaking paper of inheritance in pea plants. In that paper, Mendel proposed a particulate model of inheritance, which stated that organisms transmit discrete heritable units (now called genes) to their offspring. Although Darwin never learned about genes, Mendel's paper set the stage for understanding the genetic differences on which

evolution is based. (Campbell and Reece, 2008, p 469, qtd in. Bizzo and El-Hani, 2009, p. 109)

Another fault found in Darwin's theory of evolution was the discussion of origin of humans. Darwin (1882) has stated that humans resemble with some lower form of life. For this he wrote a book *The Decent of Man* to show that humans have evolved from some lower form of animals. In this book he described similarities between lower forms and humans on the basis of structure and form. In initial chapters he had made the comparison with respect to structure as well as mental and cognitive faculties between human beings and other animals. From his studies and discussions he concluded that it cannot be denied that humans and other animals have common ancestor. He also tried to prove it with sexual selection of humans and other lower form of animals. In his arguments the most controversial point was that he did not give any privilege to humans on account of moral development. In his view this was the natural developmental process of evolution. All the arguments in his book some lower form of animals, most probably apes because of the similarities between the two on the basis of structure, form and mental abilities.

ANALYSIS AND DISCUSSION

The concerned novel is here analyzed in the light of theory of evolution. Concept of Evolution in simple words is the process of change that exists in species over a period of time. This change is particularly genetic. There are different theories of evolution as mentioned in literature review chapter. Not only Western scientists were the forerunners of concept of evolution but also Muslim scientists were the initiators of it, like, Al-Jahiz and Ibn-i-Maskwaih. Among all the scientists and scholars, Darwin is the most important one as he had given a detailed explanation of this theory. His theory of evolution emphasized on transfer of acquired characteristics from one generation to another with the help of process of natural selection. The theory of evolution brought much critique and doubt to the people of that age (Victorian Age). Darwin also proposed that apes are the ancestors of man and this shook the faith of common man; belief in the existence of God and His creation. This doubt has been portrayed by the writers of that age as well. Among the contemporary writers, Uzma Aslam Khan, a

Pakistani writer, has portrayed the effects and influence of this theory in her work, *The Geometry of God*.

Geometry: The concept

The Geometry of God, not only deals with the influence of concept of evolution, it also has other important themes like Feminism. The novel in the start is set outdoors but then confined to indoors only. The girl, who found the piece of bone that was the initiative that whales were first land animals, was confined to home to look after her little blind sister. In the novel, there are other incidents also that portray the stereotypical minds of men and their stereotypical view of women. Apart from this, the novel also deals with the theme of identity. Struggle of a girl, Amal, to know who she is? And her grandfather *Nana*, who never discloses his identity, is a representation of identity issues. Along with these themes, the novel is beautifully immersed in love relations of different characters. All the themes and issues in this novel are very important but the angle with which it is analyzed, is not only different but, also interesting, important and out of the way.

In order to go further in analysis of this novel, first the title is to be considered with respect to the topic. If the meaning and definition of word ‘geometry’ is searched, one comes to know that it is “a branch of mathematics that deals with the measurement, properties, angles, surfaces and solids; broadly; the study of properties of given elements that remain invariant under specified transformations (Meriam Webster Dictionary – online)”. It is also the alignment of a thing or its spatial shape. Keeping in view the definition and meaning of the word ‘geometry’ and the title of novel as well as research topic, this word can be understood as a framework that God has made of His creation. Relating to the topic concept of evolution, ‘geometry’ can imply the finding out of the sediments, rocks and bones whose structures help to connect the links of evolution of species. So, the title of the novel, *The Geometry of God* can mean the shape and structure of life and creation that God has made. This points to the concept of evolution, and the writer has explained this concept, and its effects on people, their lives, and their faith in her novel.

Description of characters

Along with the title, the effects of evolution are also evident in the characters of the novel. The novel comprises of some major and some minor characters and all are connected in one way or another to the ongoing issue of the novel. Amal, Zahoor, Mehwish and Noman are among the major characters. These characters are particularly attached to the theme. The novel starts with the discovery of piece of skull golden key, the bone that proved that whales may be first land animals. This discovery was made by the protagonist, Amal, an eight years old girl. So, the very first paragraph of the novel suggests that the emphasis is on the concept of evolution and how it has been perceived by people. Her *Nana*, Zahoor, a main palaeontologist is the one who wants to propagate and discover the evolutionary change of whales, and so Noman, the son of the main proponent of Jamat-e-padaish, portrays him as a threat to his father's party, although it is not so. Mehwish's character is also connected to these characters and the theme as well. She is the one who limits her sister to home therefore Amal cannot go out and discover more about whales. The minor characters as Ama and Aba of Amal, Omer, and Noman's father, are also somehow related to the theme and the main characters of the novel.

Zahoor: Representation of Darwin and other scientists

Effect of theory of evolution in literature is also the one that even the writers have built their characters on the personality of Darwin or scientists. Gaskell (1864) modelled his character named Roger on Darwin as he is a naturalist in the novel. Likewise, Khan has shaped one of his major characters on Darwin. Zahoor is the name of that character, a palaeontologist, who study fossil to examine the evolution of whales. Darwin was considered to be a non-believer but he has never exposed his faith clearly. It was just critics' view that he was a non-believer and does not have faith in God. Same is the case with Zahoor in the novel. He never reveals his faith and so people think about him that he is a non-believer, a 'kafir'. He once said in the novel that when people ask him to declare his faith, they are actually burying it inside him. "My faith is what you burry when you force me to expose it (Khan, 2008, p.235)." These lines in no way prove him to be a non-believer. In fact faith is a very personal asset of a person.

Zahoor, as discussed earlier is shaped on Darwin's personality because he did not expose his identity and faith. Apart from not disclosing his belief on God, Zahoor is somehow different from Darwin. He studied evolution of whales while Darwin studied evolution of different species and suggested common ancestry of all living beings. By thoroughly reading the novel one comes to know that Zahoor's search and his work of studying whales' fossils did not affect the faith or religion of people. On the other hand, Darwin's study, work and research were worth in effecting people's beliefs. Khan's this leading character is actually used to represent the whole fraternity of scientists who studied or believed in concept of evolution, from Lamarck to Darwin. Every scientist's work on evolution was not harmful for people's faith, and so is Zahoor's in novel. The fundamentalists like the ones mentioned in novel, are responsible for making people believe that all scientists (who worked on evolution) stray them from religion and shake their faith.

Towards the end of the novel Zahoor is being shot in her grand daughter's wedding. This was because the fundamentalists consider him as a threat to people's faith. In the novel Zahoor can be perceived as Darwin, and so, Zahoor is Victimized for his study of fossils. Before his killing, he is even jailed because a propaganda has been made against him that on the lower side of his slippers is written God's name. in the novel author has shown that it cannot be true because as Amal thinks, that Nana always wear these slippers since her childhood and these are now torn off. In this regard, it seems to be propaganda against him, in order to stop his work and teachings. Incidents in the novel which shows his imprisonment and ultimately his murder, portrays the rigidness and cruelty of such people who cannot differentiate between reality and appearance. Zahoor, in the entire novel, is not shown as straying people from their belief, it was just that he wants people to open their mind and eyes and understand and perceive things in their original form.

Elements and effects of evolution on fundamentalists and people

Uzma Aslam Khan in her novel criticizes the people who are rigid in their thoughts about the worldly knowledge of science. Her character Zahoor, says to her granddaughter while looking to the rock, that whatever is there in these rocks (fossils),

people fear from exploring them because that doubts their existence. They do not like to know what the fossil records reveal.

Oh, because then you dig up letters that piece together a very different puzzle about how we got here (Khan, 2008, p.5).

This is a mention to the theory of evolution “how we got here” (Khan 2008 p.5), how evolutionary changes within species by discovering and studying fossils have transformed from one species to another or how some species have transformed from land to water animals.

Story of how humans got here is a point to Darwin’s belief of common ancestry and his stance that humans have evolved from some lower form of animals. An indication to Darwin’s *The Descent of Man*, this quote signifies that when people study fossil records, they can get confused about their existence as supreme beings. On real grounds, no individual can ever accept that he/she has evolved from lower form of animals like apes or monkeys. Khan has also pointed to such effects of theory of evolution. Contrarily it can also be taken as the other side of picture. This side of picture may result in the fact that this is not so. Fossil records can also reveal that humans have not evolved from apes, because when Darwin’s *The Descent of Man* met criticism, it was noted that there are some missing fossil records and human being descended from apes cannot be traced out correctly.

They also fear that people’s faith may be in danger then, because they get confused about their existence and the creation of God. But attainment of knowledge is not prohibited in any of the religion including Islam. Zahoor says in the novel, ‘*Nazar se dekho*’ (Khan 2008 p.4). This *Nazar* is actually keen observation which common people do not usually have, to look at things with a different view so that one can be an explorer of things which common man cannot think of.

The critique on fundamentalists or strict religious believers continues in the novel. Khan beautifully conveys to the readers the difference between appearance and reality connecting it to her issue at hand. Noman’s father at her home describes what their party plans under the supervision of General Zia. His party according to him wants

to save youth from things that can ruin them. He calls young Pakistani a “cultural freak” (Khan, 2008, p.23), he has no clear picture of his religion and so should be saved from influences like films and science. Her daughter at once says that he also watches films and Anjuman is his favourite heroine. Instead of admitting the reality, he silences her daughter. Her mother warns her that if she argues with her father again, she will scold her. This is an ironic situation that he wants to save youth and is himself a victim. (23)

The novel presents critique on fundamentalists of and on. In this perspective term fundamentalism must be understood. According to Mariam-Webster dictionary, religious fundamentalism is a movement or attitude stressing and literal adherence to a set of basic principles. Likewise it can also be defined as a form of religion, especially Islam and Protestant Christianity that upholds beliefs in the strict, literal interpretation of scripture as defined in Oxford dictionary. In the world, believers of almost all religions use their religion to guide their lives. When an individual’s belief is in the authority of sacred teachings of religious prophet or God then this is what religious fundamentalism means in broader sense. In such people’s view their religion is beyond criticism and should be forced or imposed upon others. There is no place for scientific explanations in fundamentalism. But this term has been misused and is referred to terrorism. But this is not fundamentalist Islam, fundamentalist Islam is the conservative wing of Islam as the fundamentalist Christianity is the conservative wing of Christianity. Such fundamentalist Muslims are in fact pious Muslims who follow the path shown by Muhammad (SAW), promote recitation of Quran and prayers. Some also promote sharia as the law of the state. In short, it is just strict adherence to the fundamental principles of any set of beliefs (Colins English Dictionary-online). The fundamentalist Muslims are no doubt the pious people and genuine followers of Islam, but due to their strict adherence to Islam, they fear from getting confused in the existence of God. For them it is hard to swallow the new developments which may consequently result in questioning the existence of God. Although Quran invites Muslim to observe nature and search for knowledge, but due to strong believe in God such people fear of getting lost in worldly knowledge. For this reason Khan has criticized fundamentalists that they are unable to see the truth and handle their faith.

Criticizing behaviour of fundamentalists, Khan mentions an incident where Noman is being asked by his father to prove that Jinnah wanted Pakistan on Islamic grounds. Aba gives him two speeches of Jinnah. The first one saying that there is no caste or creed discrimination, and all are equal citizens of one state. This one is the more important one and known to wide range of people as well. The second one says that we should follow the Islamic rules. Both are important and are the explanation of a kind of state that Jinnah wanted. But here Khan has shown that in order to fit his own purposes, Aba tears the first one and makes his son sure that there is only one interpretation and just focus on that. (35-36)

‘I want you to prove that this does not exist and this,’ he taps the second page, ‘does. That there is only one.’ (Khan, 2008, p.36)

This is a satire that people mould things to their own benefit. In the novel also this fits to Aba’s Jamat-e-Pedaish’s purposes, spread of Islamic values which according to the party’s members are lost. It is true that people of subcontinent wanted Pakistan on Islamic grounds but along with it Jinnah’s Pakistan was the one that empowered all citizens (of any caste, creed or race) with equal rights. Even the last sermon of Holy Prophet (SAW) also addressed the same issue and it is stated that there is no difference among people on the basis of caste colour or creed, indirectly suggesting that all are equal. But here due to stubbornness of religious believers the one quote that says all citizens are equal is neglected and the one which clearly points to religion (Islam) is accepted. This is in fact a first step towards the intentions of this party to reject the palaeontologists’ view of evolution and to negate what they say.

Before going further, it should be noted that in the novel there is a description of 5th seminar of Islamization. In order to develop the whole idea, Islamization must be understood. What this word means? What was Zia’s Islamization and how people perceived it? As the word itself suggests, Islamization in simple words is, when a society is shifted towards Islam or when a political and social system based on Islamic principles is being imposed in a society. In perspective of Zia’s Islamization process, a glimpse of history is needed. In 1977, fresh general elections were announced. This announcement made the political anti-Bhutto parties active like Jamat-e-Islami,

Tehreek-e-Istaqlal, Pakistan National Alliance (PNA) etc.,. These parties were not only in opposition but they also wanted to throw away Bhutto. These anti-Bhutto parties initiated movement to introduce Nizam-e-Mustafa. General Zia-ul-Haq as chief Martial Law Administrator addressed the people on July 5th, 1977, and said that public had shown a positive response to the military take over and he made his aim to Islamize the country, i.e; to implement Nizam-e Mustafa. In his opinion, Pakistan has gone far from Islamic laws and values, and this was mainly due to the differences between Islamic and Western legal systems. Spiritual base of Islamic legal system is Quran and Sunnah, so, imposition of Islamic legal order is important for an Islamic society.

Policy of Islamization mainly focused on culture, law, economy, and education. Some important features of this policy are as follows. Sharia courts were established, laws were reviewed and made according to Quran and Sunnah, interest-free banking and zakat was made compulsory, Islamic studies and Pakistan studies were made compulsory at BA/BSc level, Hadood laws were made to decrease the rate of crimes. Although, Zia has taken positive steps for Islamizing the state but it is believed that the steps taken by him were only to keep people busy and satisfied and prolong his tenure of government. This belief was mainly because through Referendum his tenure of government extended for five years. Some people also considered the efforts of Zia as true and good for the betterment of the state

At that time for the promotion of Islam different seminars were organized. Khan has also portrayed one such seminar in her novel, which she calls The fifth seminar of Islamisation. In order to negate the concept of evolution in the name of Islam, this meeting is very important. At this meeting the members start to brainwash audience mentioning those people who spread knowledge, like Zahoora, as liars and cheats. Address of the chairman of JP is very significant. According to him the scientists see in the Quran whatever they please and whatever fits to their purposes. He negates the existence of force of gravity and says it is Allah that he is fixed to the seat, not gravity. But people are spreading falsehoods and say that it is gravity. Such damages are to be repaired. Likewise one of the JP's members (Noman's father), call 'earth sciences' a nonsense, earth is a dead body (74-75).

The fifth seminar of Islamisation and the addresses of the members are a clear cut expression of dislike for those who are in search of knowledge, particularly the palaeontologists and scientists like Zahoor and his colleagues. The mention of law of force of gravity as being nothing because it is only God who does everything shows that they are negating knowledge. This is because for anything to occur there must be a process involved in it, the presence of force of gravity does not in any way deny the presence or existence of God. It is only a mechanism with which things are held to the earth. So, Khan through this meeting shows the behaviour of strict religious believers that how they perceive things and the knowledge which they consider as worldly. In the same meeting when a young boy interrupts a JP member and supports Earth Sciences in the light of Quranic verses, Aba (Noman's father) stops him and gets angry and says that he is not the one to lecture people on what Quran says. It is to be noted here that the boy only wanted to clarify that this knowledge and its thirst is not abandoned by Quran, in fact Quran invites one to seek such knowledge.

The Quran, in fact, praises the possession of this knowledge in two verses of Surah Al-Fatir... "In the mountain there are streaks of white and red of various shades, as well as other raven-black...only such as are endowed with innate knowledge stand truly in awe of God: for they alone comprehend that verily, God is almighty, much forgiving." (Khan, 2008, p.76).

On the same day there was a meeting of scientists and palaeontologists including Zahoor on study and evolution of whales. The meeting is being described as much smaller than the JP's and no threat to them and to common man. The members only talk about the discovery of a bone that is considered to be a key towards the belief that whales were first land animals. Zahoor also points out that there are some people who do not want people to dig fossils and find out about the creatures that existed before. Here one can trace that the theory of evolution has such an impact that due to fear factor, the knowledge is being forbidden (81-82).

Khan's character, Zahoor is a scientist, a palaeontologist, and a main proponent of concept of evolution. His meetings and his works is a no threat to religious fundamentalists and common man but one cannot say that every theory of evolution

and every scientist's work is a 'no threat'. Scientists like Darwin, who emphasized on common ancestry of creation and postulated that apes are descendants of man, is no doubt, a threat. In Victorian era people suffered from doubt of creation and faith in God, mostly because of this. They feared that if they have evolved from apes, then where the concept of supreme creation of man (which most religions say, including Islam) has gone? For people this simply meant they are also animals. This one was hard to swallow for them, in fact for everyone. Another issue was that it (i.e, evolution) occurs naturally, without any Divine Power. This shaken faith in God, no Divine Power meant no God. So, in the novel, such fear-factor was in JP members' mind and it made them to consider Zahoor, his meetings and his work a threat to them.

The author Uzma Aslam Khan has given the step wise evolutionary changes in the whales under the heading of "A Blueprint for Life" (Khan, 2008, p.97). There evolutionary changes are described with the help of the fossil records. First species of whales were *Mesonychids* and then *Pakicetus*. Same like the discussion of the evolutionary process of whales mentioned in this novel other different species also undergone through the process of evolution, and this is what the scientists discovered by giving evolution theories.

The author has criticized people who are against this concept and perceiving of this knowledge throughout her novel to provide a lucid picture of such people. Under the heading of "Pure Science", Noman uses Quranic verses to go against scientific theories, moulding the verses in such a way that the scientific theories seem wrong. He shows law of gravity as wrong and says it is only God who is able to make things stay or fall upon the ground. Likewise creation is also his will and Mendel and Darwin are wrong about the concept of creation and evolution (112-113).

Here Noman has used the verses to fulfil the requirements of his Aba's party and this will make people think that all the scientists are wrong and no such forces or mechanisms exist at all. The matter is that if one fear that these scientists and their theories can harm the faith and believe in God, and can turn him/her from religion and stray him, then the solution should not be to completely negate these theories. One can also perceive them that all this is by His will but there are different mechanisms through

which all this occur. As if one takes example of Newton's law of force of gravity, this is only that the scientist has discovered that the earth has a force which attracts things to itself and that's why everything falls downwards, if it is not so then how come that the things in space floats and does not rest on any planet. Likewise Mendel and Darwin's theories also suggest the mechanism through which all this have occurred. Why should one confuse it with faith? God must also have made mechanisms for every process to occur. Without mechanism how can things occur? If religion says that it is God who blesses a woman with a child then science say that there is a mechanism through which a woman gives birth to a baby and so religion also suggest this. Taking into consideration Mendel and Darwin according to whom characteristics transfer to other generations, one can see that child always resembles his parents or someone in the family then how can anyone say that these scientists are wrong.

Later in the novel, Noman gets confused at the idea of creation from water. His thoughts float while considering the point that all creation came from water. He comes to know that this can be a point to the theory of evolution and this can easily be interpreted in biological terms. This is like supporting concept of evolution with the help of Quran.

And he it is who out of this very water has created man ... I could use them to prove we develop in stages, from say a loop of lizard in embryonic fluid... like Aba, I could start with the conclusion – the soapy membrane of a new born child is a remnant of its reptilian origins – and point to the Quran (Khan, 2008, p.118).

Same is being described by Kingsley (1863) his characters water babies (those living in water) and the protagonist fall in water and consequently turns into water. This can also be interpreted in terms of the belief that every living thing comes from water. Whether Kingsley or Khan if taken in terms of religion specifically Islam, the concept of evolution and also religion suggests that all living things came into existence from water, what is called in Quran 'Nutfah'.

Here the writer (Khan) has shown how a person who wants to brainwash people (i.e; Noman) so that they can consider scientific developments as harmful for

their faith, have himself now fallen into the trap. This all has made him think what he is doing and what it is all in reality. He is somehow now able to think by himself rather than working for his father's party and just focussing on one interpretation. This invites people that they should think by themselves as well instead of following what others say.

Noman on his first visit at Zahoor's, confesses that he is the one who can use a sacred verse to prove a Divine Will as well as biological evolution right or wrong. He, in his own words, "match-fix" (Khan 2008 p.125). This signifies that he uses holy verses to fix them according to his Aba's purposes and to make people think that science and concept of evolution is all fake and has no existence with respect to religion (125). So, with the help of Noman, JP moulds the Quranic verses to fit their purposes. Such action of this party is due to the insecurity from the scientists that came due to the fear-factor. This insecurity is that people may turn to believe the scientists and their scientific developments including concept of evolution. Believing in concept of evolution will simply mean that people will no longer have faith in God and will not follow religion. The JP members did not want this to happen, they wanted to make religion alive in the hearts and souls of people. Khan's writing conveys that sense of insecurity has made such fundamentalists blind to the facts and reasons as well.

The effects of theory of evolution are not only discussed in Khan's novel but also the writers of past have expressed these. Browning (1864) has shown effect on minds of people due to theory of evolution through his character Caliban, the concept of God in his mind, depicts common people's mental state due to Darwinian evolution. The fundamentalist also feared this conflicting state of people's mind that may occur if they are forced to accept this theory. Arnold (1867) pointed to such a doubt because it was Darwin's concept of evolution due to which man's status is lowered to animal (ape). This has according to Arnold dwindled the faith of people. Same is the perception of strict religious believers; they also fear that this will endanger people's faith.

In the novel there is a mention of monkeys satirically pointing to the scientific interpretation of monkeys/apes being ancestors of man. When Mehviash and Amal are at Lahore zoo, a boy cries that all are like monkeys. This is due to the apparent

resemblance of humans to apes. This is also a point to Darwin's postulate that apes are the ancestors of man (153). Tennyson (1850) has also pointed out to the same angle of Darwin's theory of evolution. He mentioned that humans were taking their shape from apes to more developed forms. So, as in the modern age people in the past were also affected from Darwinian concept of evolution. The work of Tennyson showed the affirmation of humans from apes. Similarly Kingsley (1863) has shown an incident in which people were to hunt gorillas and gorillas wanted to say that they were first humans and in this way they are their brothers but could not speak now. This can be a hint to man being a descendant of monkeys. The same effect is still prevalent as is reflected by Khan in her novel. If analyzed with the help of religion this point is wrong. The question is why this point is being highlighted so much? The concept of evolution does not only rest on this point. Evolution as a process or mechanism occurs everywhere not only in terms of biological evolution.

Evolution as a concept is a gradual change from one form to another. If one looks around, one can see many examples of evolution. Evolution is in all fields of life. It is in fact the other name for development. Different fields like medical, technology, agriculture and even environment have undergone evolutionary changes. If we take a glance of past, there were times when people died of simple high fevers, even there was no cure for small pox. But then gradually medical science has progressed and now doctors and scientists are on the way to grasp full cure of even deadly diseases like cancer and AIDS. This is evolution in the medical science, because it is a gradual change through which scientists and doctors have found cure of many diseases, not only the minor ones like high fevers and small pox but also the dangerous deadly diseases. Now in this respect process of evolution has also occurred in the germs, viruses and bacteria. Now the viruses have adapted themselves to the even the strongest antibiotics. In past Influenza (Flu) was cured by natural medication (which include domestic medicines made from different herbs) but now there are such types like bird flu and Congo virus, which take longer times to cure completely, even if the strongest antibiotics are used.

Now taking into consideration field of agriculture, once again a glimpse of past is needed. In olden times crops were irrigated by natural mean specifically rains, every season had its own crops called seasonal crops, and there were no medicines to save crops from pests. But now with advancements in science and technology, now there are different man made means of irrigating crops, no concept of seasonal crops or fruits, there are many fruits and vegetables that are available in all seasons. Now, farmers don't have to worry about their crops being damaged by pests. Field of agriculture has also advanced in this respect, there are different pesticides, which when sprayed on crops are saved from insects and pests. This is also evolution, a progress or development in the field of agriculture. The world has now become a global village. In olden times people used contact with each other by writing and sending letters. People travelled by foot from one place to another or by carts. Then with the advancement of technology, there were cars and likewise railways (trains) and aeroplanes, save time and cover distances in less time. Contact with one another shifted from letter to fax and phone calls. Now, the most advanced form of communication, internet, you can even see the person to whom you are talking at very instance. This is also evolution – development of technology from less to more advanced form. So, as mentioned before, evolution is everywhere, and so is in organisms. It cannot be denied at any cost. It must be accepted.

Even our Earth has taken its form through many changes. It evolved to the state of being a habitat of all living things through gradual changes and explosions of gaseous masses in galaxy. Likewise, this world will end up by gradual changes to a destructive form, where all life will end. So, the most evident example of evolution; as a concept, as a process, as a form of development; is this world where with the course of time, changes have occurred and will occur. H.G Wells (1895) has also mentioned the process of evolution with the perspective of the existence of earth as a result of evolutionary process. In his work when his protagonist travels to the future time, he sees that everything is in the degenerating state. As discussed earlier that evolution occurs everywhere and the earth is also the result of evolutionary process and will end in the same way, through gradual changes. Wells has also favoured this concept and it affirms that people do believe in the process of evolution that occurs in earth's sphere.

As a process in general terms concept of evolution is acceptable as it is evident everywhere but in biological terms it is hard to believe and accept it. Even the prominent political leaders are reluctant in this regard. This is the reason when observed in Pakistan this concept was banned in Zia's regime.

Khan's character Zahoor mentions Noman's visit, from which he came to know that the President has banned the teaching of evolution but at the same time allowed the digging of fossils.

‘...Zia band the teaching of evolution but allowed the digging of fossils to continue - ’
... ‘as if the two are somehow un related. People are so touchy about the first and so in different about the second. The abstract is more real than the conk reet. (Khan, 2008, p.156)

People think both are different, in fact they are very much concerned about the first one (concept/theory of evolution) and take study of fossils for granted. They do not understand that both are related to each other. If fossil study is allowed then how can its teaching be forbidden. The one is the knowledge and the other is the attainment of knowledge. So, how can both be indifferent? As described earlier the phenomenon of Islamization, so the abandonment of teaching of evolution was due to the promotion of Islamic values, forgetting the teachings of Quran that invites people to gain knowledge.

Some minor characters like Abdul and Fawad with whom Amal has been grouped for his work, talk about ranks assigned to man with respect to religion. With the help of these characters and their discussion, Khan has once again shown how people mould verses according to their purposes, and how people got affected from theory of evolution (236).

Evolution in the sense of Darwin's survival of the fittest can also be applied to humans as Gaskel (1864) has constructed one of his characters named Molly as the portrayal of survival of the fittest mechanism. Molly's character is shown as developed during the course of novel. Whatever was unacceptable for her in the beginning like the second marriage of her father is then accepted by her towards the end. She makes

herself adaptable to the changing environment around her. Khan has also portrayed some of her characters in the novel on survival of the fittest concept. Mehwish, blind sister of the protagonist Amal, in the start of the novel depends entirely on her sister but towards the end she can be seen as an independent individual, she does not want Amal to interfere in her matters.

‘I told you not to leave us alone but I did not tell you to push him out.’... ‘I am ready to see Noman alone next time.’ (Khan, 2008, p.326).

Mehwish who was wholly dependent on her sister since her childhood, when grown up, desires for becoming independent. She did not want Amal to interfere in her personal life and as the quote highlights, she shows dislike for Amal in interfering her matters. So, Mehwish’s character is developed in the course of novel. This also shows how humans can adapt to changing environments around them fulfilling the demands of survival of the fittest.

Towards the end of this novel, Khan shows confusion about creation in the mind of one of her major characters, Amal. Amal, when on her dig after being married, think about creation. Looking at the rock, she thinks that if she falls from this rock, the river will take her with him. In such a case there will be no trace left behind of hers. So, what will be the idea of her existence? Her thoughts are mixed.

If I leave behind no trace, I’ll exist as God first conceived me. As abstraction. I’d pre-exist, if He exists. But I’m a creature of this world and can’t renounce it. I need to scratch fingerprints, and leave my own. Sometimes I collect records of ancient life because I’m unafraid of my own mortality. Sometimes, because I’m afraid (Khan, 2008, p.301).

She may exist as she existed first, as created by God. Or she should leave behind her, her fingerprints. She also has mixed feelings about her mortality. She thinks that she collects ancient records because she is not afraid of her mortality, but sometimes she is (301).

This signifies that not only common man but also people who try to find out the evolutionary changes in the entire creation and studies fossils like, scientists and palaeontologists, also get affected and think about God and His creation. Actually they are the most affected but they are the ones who want to gain knowledge and have thirst for it. So, here Amal can also be taken as portraying all the scientists who do search for the truth but they also have mixed feelings. In the field of science, there are scientists who do believe on evolution and even Darwin's concept of evolution, but there are also the ones who do not believe in theory of evolution, or who do believe but not in Darwin's concept, specifically that humans are descendants of apes. This implies that state of confusion regarding the theory is also evident in scientists' perceptions. In Amal's character is a lucid picture of such perception of scientists.

The last trip mentioned in the novel of Amal to Salt range to discover more fossil records, unveil the mystery of whales. With help of this Khan has shown that Amal and her group found more of *Pakicetus*. Amal has finally found the hidden 'S', the tympanic bone. It suggested a kind of whale that can walk like a crocodile and swim like a fish (314-316). This last trip planned by the author, suggests that she is in the favour of concept/theory of evolution, and wants to clarify that knowledge in any form is knowledge and knowledge cannot be abandoned.

Theory of Evolution and Teachings of the Holy Quran

Quran clearly teaches that Allah has created the universe abruptly and once and it does not believe in the theory of evolution as presented by Darwin.

The holy Quran says that

أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا ۖ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ

Do the disbelievers not see that the heavens and the earth were one mass, and We tore them apart? And We made from water every living thing. Will they not believe? Allah not only created the universe but He has power over it and He is expanding it day and night as He pleases. Allah once again denies the theory of evolution when He says that

وَالسَّمَاءَ بَنَيْنَاهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ

We constructed the universe with power, and We are expanding it

CONCLUSION

Evolution is the process of change over time, or gradual change over time, or gradual change in anything. If change occurs there must be some development. In this respect evolution is equivalent to development of a thing. So, taking evolution as a concept, one can see that evolution is everywhere and in every field of life, existing in one form or the other. From the creation of this world till now every sphere of life has undergone through the process of evolution. Whether it is technology, medicine or agriculture, different fields have gone through evolution. Time and again it can be heard about any such field that evolution has occurred in it. Medical sciences, through the hard work of doctors and scientists have found out cure for the deadliest diseases also. In olden times no one was able to think that if a person is suffering from heart disease, through surgery he can get rid of it and can come to life again, but now it's been years that doctors can carry out open heart surgery. So, the medical science has progressed very much.

Evolution has also occurred in field of technology, the most advanced form is the internet. Although these are man-made advancements but they occurred with time and through different changes such fields have progressed. Apart from these man-made evolutions in various fields, as a concept, earth is also the result of evolution. But concept of evolution cannot only be taken in general terms. With this term 'evolution' is joined to the theory of evolution. This confuses its concept, its understanding and its acceptance.

In biological terms it has been observed by the researcher that evolution occurs when change occurs in genetic composition of a species over time or adaptation of an organism to its environment in the course of time. The theory of evolution is a sophisticated one and dates back to God knows when. Different theories of evolution are given in different times. Among all the theories some biologists/evolutionists have given the important and in a way complete theories. These include Lamarck, Darwin and De Vries. Lamarck gave the first ever complete theory of evolution. His theory was more or less similar to Darwin's. He structured his theory on two basic principles or

postulates, one states that use or disuse of an organ results in enhancing or diminishing its capabilities and the second one states that use or disuse results in such changes that can be transferred to other generations. His theory suffered from criticism and was not widely accepted at that time. So, in 1859, in *On the Origin of Species* Darwin proposed his theory of evolution. His theory lays emphasis on the principle that every species is the descendant of some other species, and that evolution occurs through natural selection or the survival of the fittest. When in an organism due to environment changes occur and so such changes are transferred to the upcoming generations. This point of common ancestry of all creation resulted in humans being descendants of apes. He was also unable to find intermediate fossil record and was not aware of Mendel's works. Due to these shortcomings this theory was attacked by critics but Darwin is an all time celebrated evolutionist.

BIBLIOGRAPHY

- Anila, A. (2013) Canadian and Pakistani Muslims teachers' perceptions of evolutionary science and evolution education, *Evolution: Education and Outreach*. Springer. Retrieved from: <https://evolution-outreach-springer-open.com/articles/10,1186/1936-6-10>
- Arnold, M. (1867). Dover Beach. *New Poems*. Ticknor and Fields. Howard University.
- Bateson, W. (1902). *Mendel's principles of heredity: A Defence*. London: Cambridge University Press.
- Bergman, J. (2003). The ape-to-human progression: the most common evolution icon is a fraud. *Journal of creation*. 22(3), 16-20.
- Bishop, B. E. (1996). Mendel's Opposition to Evolution and to Darwin. *Journal of Heredity*, 87(3), 205-213.
- Bizzo, N., & El-Hani C.N. (2009). Darwin and Mendel: Evolution and genetics. *Journal of Biological evolution*. 43(3). 108-114.
- Browning, R. (1872). In a balcony. *Dramatis Personae*. Poetical works, Robert Browning. B. Tauchnitz: Cornell University. 2.
- Burns, G.W. (1976). *The Science of Genetics: An Introduction to Heredity*. New York. Macmillan. 3.
- Byatt, A.S. (1992). Morpho Eugenia. *Angels and Insects* (3-160). London. Vintage Publishers.
- Campbell, N.A., & Reece, J.B. (2008). *Biology* (8th ed). San Francisco: Pearson Benjamin Cummings.

Carroll, S.B. (2001). Chance and necessity: the evolution of morphological complexity and diversity. *Nature*, 409(6823), 1102-1109.

Chandravadiya, D.M. (2013). Influence of industrial evolution on Victorian age and upper class. *International Journal of Research in all Subjects in Multi Languages*. 1(6).

Collins English dictionary (2016). Retrieved from: <http://collinsdictionary.com/dictionary/English/fundamentalism>.

Cruttenden, A. (2003). English Literature in its historical, cultural and social contexts/ Backgrounds to English Language. London: Evans Brothers, Brothers Limited

Darwin, C. (1859). *On the Origin of Species by means of natural Selection, or the preservation of favoured races in the struggle for life*. London: John Murray.

Darwin, C. (1872). *On The Origin of Species*. New York: PF Collier and Sons. 6.

Darwin, C. (1882). *The Descent of Man and Selection in relation to Sex*. (2nd ed). London: John Murray.