

Quranic Concept of Evolution

Author: Atif Munawar Mir

Mississauga, Canada

SUMMARY

According to the Holy Quran, the **evolution of life** is the result of **divine will** and **divine guidance**. The Holy Quran declares that the **harmony** and **complexity of creation** and could not have come of its own accord. In contrast, **natural selection**, the foundation of **modern theory of evolution**, credits **accidental mutation** for the **survival of life** and its **complexity**. But it fails to explain how the **life was created** and how the **accidents** can guide the life towards **complexity**.

EVOLUTION OF LIFE: DIVINE WILL, NATURAL SELECTION

The Holy Quran states that life resulted from evolution. However, this evolution was not blind or random. Rather, evolution was controlled by Divine hand. This Divine hand accounts for the beginning, diversity and complexity of life on Earth.

However, modern biology, which is based on Darwin's theory of evolution, attributes evolution to the principle of *natural selection*. According to this principle, humans, animals and plants, all evolved by natural accidents. The evolution of the human body was simply the outcome of automatic natural processes spread out over billions of years. In this immensely long process, humans evolved from one-celled organisms without any Divine help, guidance and purpose.

Natural selection is the cornerstone of Darwin's theory. Unlike the Holy Quran, the principle of natural selection did not acknowledge the idea that the universe is designed by an intelligent mind.

Another difference between the principle of natural selection and the teachings of Islam is regarding the path of evolution. Natural selection states humans and apes have evolved from a common ancestor. Following this logic, biologists consider apes to be the most recent ancestor of humans. The Holy Quran, however, doesn't put forward the idea of one common ancestor and thus doesn't regard ape to be part of human evolutionary chain.

Natural Selection

Natural selection means that nature, not Divine Will, has guided the direction of evolution.

Three Conditions of Natural Selection

According to neo-Darwins, three conditions must be satisfied before natural selection can take place. The first condition is reproduction – that is there must be offspring. Secondly, the offspring should vary from the parents due to mutation, even if negligibly so. Finally, the accidental mutation in offspring should eventually lead to differences in the ability to survive and to further reproduce.¹

¹ Charlesworth, Deborah and Brian. (2003) *Evolution*. Oxford University Press: 7

Before going further, here is one essential clarification. Darwin had argued that the variation in offspring (second condition) reflects their adaptation impulse in changing environment. However, the modern biologists attribute the variation to mutations inside living organisms.² For instance, Darwin argued that Giraffe's long neck is the result of high trees in its habitat. Modern biologists attribute the long necks to the mutation in a small-necked animal.

The following is a demonstration of the three conditions at work

While a monkey cannot give birth to human offspring, it can have an offspring that is slightly more humanlike. Later on, this humanlike monkey will give birth to an offspring that will be more similar to humans than its parent and so on. Given enough time, there could be a series of many small steps linking a monkey ancestor to a human descendant.

These three elements of natural selection provide a mechanism by which things can change their design without any outside help. For example, a real watchmaker plans out the watch he will make before he starts. On the other hand, natural selection brings about slight modifications in organisms with no particular end in sight. These many small changes over a long period of time can eventually turn a monkey into a human.

Darwin's History of Evolution

The principle of natural selection was fully explained by Charles Darwin in his famous book, *On the Origin of Species*. It was published in 1859 and caused a wave of controversy. Darwin based the book on the discoveries he made while traveling in South America where he collected many specimens of plants, animals, rocks and fossils. He discovered fossils of extinct animals that resembled certain surviving species. Also, he saw cases where resemblance existed among existing species. These findings forced him to think about these questions:

Why do animals become extinct?

Why is there resemblance among various species, surviving or extinct?

In pre-Darwin times, the concept of evolution was prominent, however, it was uncertain as to how the process of evolution occurred. Darwin introduced the idea of natural selection to explain the process of evolution.

His findings, which are more or less accepted in the world of biology, were that evolution has been occurring since the beginning of time and is still in process today. Natural selection concludes that humans are descendants of bony fish, which first appeared in the seas 400 million years ago. Using their bony fins, these fish made their way out of the sea and slowly adapted to survive on land. This bony fish was the ancestor of all vertebrates (backbone) amphibians, reptiles and birds that lived on earth 370 millions years ago. When some reptiles evolved into birds the front two legs slowly became wings. Other reptiles evolved into mammals with four legs. In humans, front legs evolved into arms. In whales, limbs have all but disappeared.

² Hoyle, Fred. (1983) *The Intelligent Universe*, Holt, Rinehard and Winston: 32

Monkey and apes appeared 35 millions years ago and lived in trees. According to natural selection, for some uncertain reason, a specific group of ape was eventually banished from the forest some five million years ago. Eventually, this exiled ape learned to walk upright and slowly became human.

Islam and Natural Selection

One of the attributes of God, according to the Holy Quran, is that He creates in stages. Humans have also been created in stages. It provides no details of those stages, but does offer principles that tend to point toward four major stages in the evolution of humans.³ In the first stage, humans were lifeless material. In the second stage, humans were physically humans but mentally they were still on the level of animals. They lacked language, articulation and logic. In the third stage, humans developed thinking skills and in the final stage, humans learned to exist as a society. So the Holy Quran does talk about human evolution, from matter into mind, in stages. This evolution from one stage to another, however, occurred under Divine guidance.

The Holy Quran disagrees with the blind aspect of natural selection as well as its path, which places humans and apes in the same evolutionary chain. The enormous gap between humans and animals in mental potential and social skills raises the issue of the missing link, which is discussed later on.

The Quranic scripture repeatedly declares that at every step of creation intentional choices were made. Choices were not made by the blind operator of natural selection, but by God, the All-seeing, the All-knowing.⁴ But He hasn't simply created nature but he has also actively been involved in the selection of species, which ones go extinct and which ones survive. The creation and sustenance of all species depends on the Will of God.

According to natural selection, however, humans are merely the outcome of trillions of evolutionary accidents created by random events in the evolution process. They have no specific purpose in the universe. Their existence is coincidental.

This is a striking contrast to Quranic position that states that it was humanity that is the ultimate purpose of Creation.

Implications and Analysis of Natural Selection

Complexity: Mutative Changes, Divine Control

One of the key elements of natural selection is that offspring sometimes vary from their parents. For instance, a yellow butterfly may have a black offspring. This kind of variation and mutation, though rare, tends to occur in all species. Over a long period of time, the cumulative effect of such mutations leads to an entirely new specie.

This theory of mutative change has given rise to the idea that mutation plays an important role to slowly build, improve and evolve all living organisms into complicated yet harmonious biological entities.

The Holy Quran disagrees that natural selection by itself brings about evolution. Allah states in the Holy Quran that Divine Will guides evolution, not by accident. If nature had guided evolution, life was more

³ Ahmed, Hazrat Mirza Bashiruddin Ahmed (Khalifa Sani (PBUH)). (1954) *Sairay Rohani: First Part*. Alshirkatul Islamia Ltd. 18-23

⁴ The Holy Quran: Chapter 56, Verses 58-74

likely to have degenerated than evolved. Haphazard mutation could have led to countless number of non-life outcomes.

According to natural selection, all living things including humans have evolved out of one single cell. That one single cell eventually has evolved into human body with trillions of specialized cells that direct different functions of human body. What are the odds that one complex cell evolved into trillions of highly complicated specialized cells by chance? The chances are less than unlikely.

The journey, from an incredibly complex single cell to trillions of unfathomable specialized cells, likely needs a guide, a designer. Without the guide, the cells were more likely to disorganize themselves. Scientists agree that the stage-by-stage progress of a single cell into highly specialized cells was more likely to be stalled or reversed if the journey had lacked a pre-designed map.

Allah has created the heavens and the earth in stages as he declares in the Holy Quran.⁵ It is Allah that creates, develops and sustains life, and ensures harmony and diversity in all things, living and non-living. All this cannot be realized through random choices of adaptation.

Evolution as presented by the Holy Quran states that life advanced step by step from dust, water, clay and also from fermenting blackish mud, which subsequently turned into dry, ringing clay.⁶

One of the interesting features of natural selection is that accidental mutations generally lead to wonderful design. With the help of accidental mutations, a monkey without the power of logic or speech ends up as a human equipped with the capabilities of language and reasoning. Seemingly, natural selection always moves in the direction of progress. According to some critics of natural selection, calling such a progress accidental is like hoping that a monkey typing randomly on a keyboard would eventually produce a Shakespearean play.

Equally astonishing is the fact that when survival of specie was at stake, more than often, there was a mutation in that specie that ensured its survival. Take the example of green butterflies, which uses green trees as camouflage. However, due to pollution caused by nearby coal factories, the tree leaves generally became darker. As a result, green butterflies found it hard to hide from its prey. However, it does accidentally give birth to black offspring, which allows it to use dark trees as camouflage. Eventually, green butterflies, no longer able to hide from its prey, disappears while the black off springs increases in numbers. That is how an accidental mutation helped this specie to change and thus survive.

Natural selection presupposes millions of such accidental mutations in explaining improved designs and survival of species. What needs to be pondered here is the fact that trillions of such accidental/rare mutations occurred in such a timely fashion to prevent extinction of many species throughout the course of evolutionary history?

If one mutation, among trillions, had occurred differently, then humans would not exist. Mammals might still have been ruling the earth. One wrong turn and there wouldn't have been any life at all. However, according to natural selection, life has defied such dangers and has grown diverse and complex in a remarkable fashion.

⁵ *Holy Quran*: Chapter 67, Verses 2-4

⁶ Ahmad, Hazrat Mirza Tahir (Khalifa Rabia (PBUH)). (1998). *Revelation, Rationality, Knowledge and Truth*. Islam International Publications Ltd. 344 (Quotation based on Chapter 15, Verses 27, 29 & 34)

Scientists explain this as nothing but a series of coincidents driven by mutations. The occurrence of such coincidents is not likely, one scientist by the name of Fred Hoyle argues. He equates such occurrence of complexity through random choices with the assemblage of a 747 by a tornado whirling through a junkyard.⁷

Natural selection, if operated on its own, would have caused haphazard mutative changes. However, not only have mutations been timely, but the nature of the mutations have been essential for survival at that particular time. One timely mutation may be explained by coincidence but continuous and timely occurrence of mutations over million of years demands supervision of evolution. Otherwise, the extinction or deterioration of species would have been a more likely possibility.

According to the Holy Quran, accidents play no role in the survival of species. All species, including humans, are well protected from a host of impending dangers, constantly surrounding them, threatening extinction at every moment of their lives...it is a well chalked out, well-preserved and well-implemented protective design which is in operation throughout the history of life.⁸

Mutations do occur but they do not drive evolutionary processes. If mutations had been the force behind evolution, why is it that polar bears in the arctic are all white? Not even a single fossil has been found in the arctic, which might indicate that polar bears, at some point in time, accidentally gave birth to a yellow, blue or black colored polar bear. Following the logic of Darwin's theory, the polar bears in the arctic should also come in all shapes and sizes. There should be tiny polar bears, giant polar bears, heavyweights, and middleweights. But no such traces of variant bears are discovered in the arctic where the atmosphere is conducive to preserving fossils.⁹

Nature is full of examples that indicate that there is more to evolution than mutation can explain. For example, how does mutation logically explain as to why two separate electric fish species, the South American and African, have developed the same electrical features while living in two different geographical locations? One explanation is because the Creator of both fishes is the same. The second explanation offered by a proponent of natural selection, Richard Dawkins, is that fascinatingly both fishes have hit upon exactly the same solution (to different problems they faced).¹⁰

Visualizing how this highly sophisticated electrical device was constructed in the sea, without purpose, without design, and without knowledge of how electricity works, one is left with the scenario that once in the remote past, an ordinary fish may have been surprised with the bizarre chance appearance of some porthole (electrical appendage) in its belly.¹¹

Beginning of life: Chance, Design

How did life begin on Earth? According to natural selection, certain inorganic materials unintentionally combined to form organic materials (such as protein), which, through more accidents, evolved into DNA and RNA. Further chemical accidents eventually produced life. In this regard, there are two challenges that Natural selection faces. One how organic material resulted from inorganic materials in uncontrolled conditions? Secondly, how did remarkably complex bricks of life, DNA and RNA, evolve out of organic material?

⁷ Ibid. 474

⁸ Ibid. 345 (Quotation based on Chapter 13, Verses 9-12)

⁹ Ibid. 439

¹⁰ Ibid. 537

¹¹ Ibid. 537

Under laboratory conditions, it has been discovered that organic material can emerge out of chemical reactions of inorganic material. However, this was achieved in a controlled environment, under the supervision of scientists. The production of organic material in the laboratory needed proper supervision and proper control. If such supervision and control were needed to produce organic material in a laboratory, why were they not needed when the foundations of life were being laid down on Earth?

What are the odds that different inorganic materials ended up mixing in proper proportions on its own to produce organic material? To bring about such transformation, atmosphere has to be oxygen free, which was the case at that time according to recent scientific discoveries. Later on, the atmosphere became rich with oxygen as was needed to support life. Such timely chemical accidents, which produced building blocks of life in totally unsupervised circumstances in changing but favorable atmospheres, hardly seem to be accidental.

Another challenge that scientists are facing is how organic materials transformed into profoundly complex molecules such as DNA and RNA? Natural selection attributes this conversion of organic material into DNA to chance.

Professor Edwin Conklin, an eminent biologist at Princeton University, argues that the probability of life originating from accident is comparable to the probability of the unabridged dictionary resulting from an explosion in a printing shop.¹²

A British scientist, J.D. Bernal, believes that attributing origination of life to accident is even less plausible than Adam and Eve story.¹³ In other words, the scientist is saying that biblical explanation of beginning of life is much more believable than the story of accidents.

Frank Allen, Professor of Biophysics at the University of Manitoba, discovered that for a single protein molecule, which supports and builds life, to be formed out of chance would require 10 to the power of 248 years. This number is incredibly larger than 4.5 billion years, the scientifically measured age of the universe.¹⁴ If a single protein molecule takes so much time, how much time is needed before that protein turns into human?

Furthermore, modern science has discovered that once organic material is created from inorganic material, it is needed to exist in a dry stage to prevent it from reverting back to its elementary form. The Holy Quran, the advocate of Divine Will, explicitly talks about these recent scientific discoveries 1400 years ago. The Holy Quran states,

...with water did We create every living thing...¹⁵

The Holy Quran further states,

...And surely, we created man from dry ringing clay made from stagnant blackish mud...¹⁶

¹² Ibid. 475

¹³ Ibid. 360

¹⁴ Ibid. 472

¹⁵ Holy Quran, Chapter 21, Verse 31

¹⁶ Holy Quran, Chapter 15, Verse 27

This picture of water and clay, presented by the Holy Quran, seem to be consistent with the mixture of inorganic materials becoming organic, which was followed by a dry stage to allow the organic material to develop irreversible strength.

Missing Link: Missing or non-existent

Proponents of natural selection claim that the human species resulted from the mutation of monkeys. This explanation is offered in the light of the similarity in the biological structure of both, but if natural selection is based on small changes accumulated over long period of time, then one should expect to find species that are very similar to humans and monkeys. Otherwise, the great void between humans and monkeys in their behavioral patterns and mental potential cannot be explained? A comparison between humans and monkeys in all these fields will show that human potential is many billion times greater than that of the monkeys.¹⁷

Evolution cannot be attributed to mutation without explaining the gap that exists between humans and animals.

This absence of an intermediary specie or species is explained by assuming that the record of intermediate stages has been destroyed. It is argued that subsequent research will restore these lost intermediaries through fossil findings. This has not yet happened. The gap in human and monkey intelligence indicates that humans may have evolved in a different manner.

This picture of evolution goes against the fundamental assumption of natural selection, which identifies one common ancestor for all species.

Need of Creator

Another fundamental problem with natural selection is that it cannot be referred to as a Creator, because it doesn't create, but works on whatever already exists.¹⁸

So a very fundamental question needs to be addressed. Where did inorganic material come from that subsequently turned into DNA and RNA molecules, the foundation of life? Natural selection fails to explain this. It merely explains the development of life after creation.

Modern science despite remarkable accomplishments hasn't been able to create a single human cell or living enzyme. Even the creation of atom is beyond the reach of modern science. Anything more sophisticated, such as genes, chromosomes, cells, or microbes are so torturously complex that scientists are unable to fathom even the slightest degree of their manufacture.¹⁹

Conclusion

The Holy Quran states that life resulted from evolution. However, it identifies the harmony and complexity of creation and declares that all this could not have come of its own accord. Natural selection fails to explain the creation of life. The evolution of life as described by natural selection produces

¹⁷ Ahmad, Hazrat Mirza Tahir (Khalifa Rabia (PBUH)). (1998). Revelation, Rationality, Knowledge and Truth. Islam International Publications Ltd. 524

¹⁸ Ibid. 528

¹⁹ Khaleel, Dr. Kasem. (2003), Science and Religion, Knowledge House, 26

complexity and harmony of life through chance and mutation. Life has evolved in a progressive fashion, from simple to complex life, without any supernatural guidance.

Evolution of a complex life due to trillions of accidents in 4.5 billion years depends on too many chances. Hence, every step that life took, could have moved in any direction. A single step to be taken in the right direction without guidance is an unlikely chance. For each step to move invariably in the right direction, a billion times over and pursue unfalteringly the course that could lead to the creation of humans is bizarre and unrealistic.²⁰

²⁰ Ahmad, Hazrat Mirza Tahir (Khalifa Rabia (PBUH)). (1998). Revelation, Rationality, Knowledge and Truth. Islam International Publications Ltd. 409