

GUIDED EVOLUTION: PROOF FROM PUNCTUATED EQUILIBRIUM

By

Ataul Wahid Lahaye and Zia H Shah

THE QURANIC TEACHINGS ON EVOLUTION

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ

All praise belongs to Allah alone, Lord of all the worlds. (Al Quran 1:2)

In the second verse of the first chapter of the Holy Quran we are introduced to our Creator where it is written. “All praise belongs to Allah alone, Lord of all the worlds.” The Arabic word for praise is Hamd, and in this context it implies admiration, magnifying and honoring the object of praise, and lowliness, humility and submissiveness in the person offering the praise. The word translated as Lord is Al-Rabb. It means Lord, Master, Creator, the One who sustains and develops and brings to perfection by degrees. The Arabic word translated as worlds is Al-Alamin and it signifies all that is besides Allah, animate and inanimate bodies. So, the Holy Quran leaves no doubt or ambiguity as to who the Creator is, and what His attributes are.

Some people deny evolution at all levels and believe in spontaneity instead and are known as Creationists. Creation means that each animal was created separately in its finished form with all the organs it contains all at the same time. Islam does believe that there is a creator; however, this is certainly not the Quranic concept of creation.

The word Al-Rabb is used numerous times in the Quran as an attribute of Allah. The closest meaning of this in English language will be “The Provident”. Khalifatul Maseeh IV, Hadhrat Mirza Tahir Ahmad proposed that this attribute is a proof that God created life through the process of evolution. He writes in his book *Revelation, Rationality, Knowledge and Truth*, “This attribute leaves no doubt whatsoever as to the fact that the Quran Speaks of creation only in step by step progressive stages which are well provided for, categorically rejecting the concept of spontaneous generation. Spontaneous generation is further rejected by the Quran because it violates the dignity of God.”¹

The following verse from *Surah Al-Inshiqaq* addressing humans, promises them that theirs is a continuous journey from stage to stage:

That you shall assuredly pass on from one stage to another. (Al Quran 84:20)

Again:

“Man, what has emboldened thee against thy Gracious Lord, Who created thee, then perfected thee, then proportioned thee aright? He fashioned thee in whatever form He pleased.” (Al Quran 82:7-9)

According to Islam, there is an all-embracing plan of Creation. At different stages of evolution, the processes that governed and shaped life were different but their direction remained the same—always pointing at man. Again, God informs us in the Holy Quran .

What is the matter with you that you expect not wisdom (intelligence) and staidness from Allah? While He has created you in different forms and ever changing states? Have you not seen how Allah has created seven heavens in perfect harmony, and has placed the moon therein as a light, and made the sun as a lamp? (Al Quran 71:14-17)

All these verses in unison leave no doubt whatsoever as to the fact that the Quran speaks of creation only in step by step progressive stages which are well provided for, categorically rejecting the concept of spontaneous generation. These verses suggest an evolution controlled and directed by the hand of the Creator.

William Paley in 1803 had in secular arena started the discussion of Design in Biology. In recent times his concepts have been refined by a so called secular movement called Intelligent Design. In the verses mentioned above from chapter 71, both the concepts of Design and Evolution are introduced long before Darwin coined the idea and the Intelligent Design movement or the Discovery Institute challenged it.

The true Muslims see the guiding hand of God in the improbabilities involved in the creation of the universe and the life on the planet earth. In the words of the famous biologist Stephen Jay Gould:

"If dinosaurs had not died in this event, they would probably still dominate the domain of large-bodied vertebrates as they had for so long with such conspicuous success, and mammals would be small creatures in the interstices of their world. This situation prevailed for 100 million years; why not for 60 million more? . . . **In an entirely literal sense, we owe our existence, as large and reasoning animals, to our lucky stars.**"¹² What he calls our lucky stars, Muslims consider to be God's Providence!

DEFINING EVOLUTION RELATED TERMS

The term “evolution” originally meant “change through time”. However the definition is in constant flux. Descent through common ancestry, natural selection: Survival of the Fittest, random effects, like genetic drift, change of gene frequencies in populations and Chance have all been added since Darwin coined this concept.

There are two types of evolution: macroevolution and microevolution. Microevolution is “slight, short-term evolutionary changes within species.” In contrast, macroevolution is “the origin and diversification of higher life forms or, “evolutionary change on a grand scale, encompassing [among other things] the origin of new species.

E Mayr. In his book *The Growth of Biological Thought*: Thinks a broader definition of evolution is needed which would include both multiplication of species and diversification within species.” microevolution and macroevolution. Thus, the definition of Evolution is still evolving.

What is the Darwinian principle of the ‘Survival of the Fittest?’ According to this principle, for the advancement of the quality of life, nature has worked out an automatic method of sifting. This slow continuous process of selection becomes pronounced when a species confronts challenges to its survival. It works in every area of animal activity.

If Allah was only the First cause of creation of the universe or if universe came into being from nothingness by itself then the term used for evolution will be ‘Blind Evolution.’ On the other hand if Allah remained involved with the evolutionary process in the model of ‘Personal God’ of Judaism, Christianity and Islam then that will be labeled as ‘Theistic Evolution’ or ‘Guided Evolution.’

The stages or states mentioned in the Holy Quran relating to the ‘Guided Evolution’ may apply to the groups of animals like fish, amphibians, reptiles, mammals or the stages in time as outlined in the concept of ‘Punctuated Equilibrium’ which implies that life evolved on the planet earth in spurts and sudden outbursts rather than gradually. Several proofs can be offered for the concept of ‘Guided Evolution,’ here we will limit ourselves to ‘punctuated equilibrium.’

A TESTABLE HYPOTHESIS

Charles Darwin in his *Origin of Species* presented a challenge that few people know about. “If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.”³

With this statement, Charles Darwin provided a method by which his theory of evolution could be tested. The logic was simple: since evolution is a gradual process in which slight changes produce advantages for survival, it cannot produce complex structures in a short amount of time. It’s a step-by-step process which may gradually build up and modify complex structures, but it cannot produce them suddenly. This was the greatest contribution of Darwin that distinguished his theory from metaphysics, philosophy or religion as it could be tested. It was science! But it did evolve into fiction and rhetoric in the hands of his followers, the neo-Darwinists like Professor Richard Dawkins.

Now the question arises as to why life pursued a definite evolutionary course in a single direction as though none else was available. The only explanation offered by scientists relates to the role of natural selection. Though they fully recognize the dimension and the gravity of the problem, they would have us believe that at every crucial point of decision making it was natural selection which took the decision, always making the right choices out of a countless number of available options. However blind it may be, natural selection would always go for the right choice and only the fittest would survive in a competitive world. But this choice, on the part of natural selection, they agree, is not conscious. The limitations of this blind process should be apparent on even superficial reflection. Darwin himself delighted in showing that local adaptation often produced 'degeneration' in design, that he described as anatomical simplification in parasites, for example.⁴ The Holy Quran presents a different perspective on the issue of selection. It suggests 'Guided Evolution' rather than a blind process:

"And thy Lord creates whatever He pleases and selects whomsoever He pleases. It is not for them to choose. Glorified be Allah, and far is He above all that they associate with Him." (Al Quran 28:69)

The purpose and philosophy of evolution is doubtlessly the creation and promotion of the senses. The creation of senses, each of which in itself is a masterpiece of creative wonders, stands witness to a well-executed design at the grandest scale, where harmony rules supreme. No wonder then, that the Holy Quran repeatedly sums up the outcome of evolution in just three simple terms: the creation and perfection of the faculty of hearing, seeing and understanding.

And Allah brought you forth from the wombs of your mothers while you knew nothing, and gave you ears and eyes and hearts, that you might be grateful. (Al Quran 16:79)

NATURAL SELECTION

Adam Smith (1723-1790) remains a towering figure in the history of economic thought two centuries after his death. He is primarily known for a single work, *An Inquiry into the nature and causes of the Wealth of Nations* (1776), the first comprehensive system of political economy. He proposed that individuals in trying to improve and promote their personal situation work hard and find out the most advantageous methods to employ their capital and labor. They work with the intention of their personal gain and not for the advantage of the society. But if the mechanisms of personal struggle are allowed to run freely, good performers eliminate the less efficient and in so doing cause an unintended public advantage. He suggested that law makers should minimize their intrusions and let personal struggle or free market help nations become rich and powerful. He wrote, "I have never known much good done by those who affected trade for the public good." It has been proposed that it is in Adam Smith's economics transferred to nature that Charles Darwin found his principle of natural selection.

Again, it should be emphasized here that the phenomenon of natural selection under changing environments does not possess any instrument of effecting internal cellular changes to suit the external requirements. The chromosomes and the character bearing genes lie far beyond the reach of chaotic external changes. The natural laws which govern them are insulated from the whims of cold and heat, or dryness and humidity. They are two absolutely unrelated phenomena.

Hence, in a game of chance, as indeed it is a game of chance, it is highly implausible for the game of chance to always take the stride in the right direction as needed by the dictates of evolutionary requirements at that point in time. It is unfortunate however; that most scientists shut their eyes to the inevitability of the Hand of a Conscious Wise Selector Who will always take the right decisions at the right moment and will not leave them to the throw of a dice.

How can it be possible for evolution to continuously march forward in the direction of man while at each moment the possibilities of its taking the wrong steps backwards are overwhelmingly larger?

At each step forward, evolution driven by chance should have slipped a hundred thousand steps backwards. But for life with no prefixed direction, as some naturalists believe, the concept of a step forward simply does not arise. Forward in which direction and to what end, are the questions which can never be answered in relation to chance being its creator. Every step it took could be in any direction. Man not being the ultimate goal of evolution, life would lose its bearing in the wilderness of chaos, squandering each quality it had gained, by chance, to the stormy aimless winds of annihilation.

Stephen Gould at times accepts the limitations of the natural selection, he writes:

Darwin's independent criterion of fitness is, indeed, "improved design," but not "improved" in the cosmic sense that contemporary Britain favored. To Darwin, improved meant only "better designed for an immediate, local environment." Local environments change constantly: they get colder or hotter, wetter or drier, more grassy or more forested. Evolution by natural selection is no more than a tracking of these changing environments by differential preservation of organisms better designed to live in them: hair on a mammoth is not progressive in any cosmic sense. Darwin delighted in showing that local adaptation often produced "degeneration" in design -- anatomical simplification in parasites, for example.⁵

To summarize our thoughts about "natural selection" we borrow the punch line again from Stephen Gould, "**Human beings evolved from apelike ancestors whether they did so by Darwin's proposed mechanism or by some other, yet to be discovered.**"⁶

PUNCTUATED EQUILIBRIUM

According to the conventional theory of evolution, every living species has sprung from a predecessor. A previously existing species turned into something else in time and all species have come into being in this way. According to Darwin this transformation proceeded gradually over a very long period of time.

Darwin stressed the gradual nature of the process several times in his writings. At one instance he highlighted this by quoting, **“Nature does not like to jump.”**⁷ A little later, he clarified himself further by saying,

“Why should not Nature take a sudden leap from structure to structure? On the theory of natural selection, we can clearly understand why she should not; for natural selection acts only by taking advantage of slight successive variations; she can never take a great and sudden leap, but must advance by short sure, though sure steps.”⁸

About the slow development of individual organs Darwin writes in *On the Origin of Species by Means of Natural Selection*:

“If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely breakdown.”⁹

If such gradual development of the organs and the species, was the practice of nature, then numerous intermediary species should have existed and lived within this long transformation period. For instance, some half-fish/half-reptiles should have lived in the past, which had acquired some reptilian traits in addition to the fish traits they already had. Or there should have existed some reptile-birds, which acquired some bird traits in addition to the reptilian traits they already had. Naturalists refer to these imaginary creatures, which they believe to have lived in the past, as "transitional forms". If such animals had really existed, there should be millions and even billions of them in number and variety. More importantly, the remains of these strange creatures should be present in the fossil record. The number of these transitional forms should have been even greater than the present animal species and their remains should be found all over the world. In *The Origin of Species*, Darwin explained:

“If my theory be true, numberless intermediate varieties, linking most closely all of the species of the same group together must assuredly have existed... Consequently evidence of their former existence could be found only amongst fossil remains.”¹⁰

When terrestrial strata and the fossil record are examined, it does not bear out the gradual development. The study of fossils suggests that all living organisms appeared almost simultaneously. The oldest stratum of the earth in which fossils of living creatures have been found is that of the Cambrian period. The Cambrian Period is often divided into the Early Cambrian Epoch (540 to 520 million years ago), the Middle Cambrian Epoch (520 to 512 million years ago), and the Late Cambrian Epoch (512 to 505 million years ago).

Rocks formed or deposited during this time are assigned to the Cambrian System. The living creatures found in the strata belonging to the Cambrian period emerged all of a sudden in the fossil record – there are no pre-existing ancestors. The fossils found in the Cambrian rocks belonged to snails, trilobites, sponges, earthworms, jellyfish, sea hedgehogs, and other complex invertebrates. This wide mosaic of living organisms made up of such a great number of complex creatures emerged so suddenly that this miraculous event is referred to as the "Cambrian Explosion" in geological literature.

Darwin was aware of the absence of transitional forms linking different species. It was his hope that they would be found in the future. Therefore in his book *The Origin of Species* he wrote the following in the chapter "Difficulties of the Theory":

“Why, if species have descended from other species by fine gradations, do we not everywhere see innumerable transitional forms? Why is not all nature in confusion, instead of the species being, as we see them, well defined?... But, as by this theory innumerable transitional forms must have existed, why do we not find them embedded in countless numbers in the crust of the earth?... But in the intermediate region, having intermediate conditions of life, why do we not now find closely-linking intermediate varieties? This difficulty for a long time quite confounded me.”¹¹

The single explanation Darwin could come up with to counter this objection was the argument that the fossil record uncovered so far was inadequate. He asserted that when the fossil record had been studied in detail, the missing links would be found. Believing in Darwin's prophecy, evolutionists have been searching for fossils and digging for missing links since the middle of the 19th century all over the world. Despite their best efforts, the data found so far to support gradual development is rather scarce.

Richard Monastersky, the editor of *Earth Sciences*, which is one of the popular publications of naturalist literature, states the following about the "Cambrian Explosion" which came as a total surprise to naturalists:

“A half-billion years ago, the remarkably complex forms of animals we see today suddenly appeared. This moment, right at the start of Earth's Cambrian Period, some 550 million years ago, marks the evolutionary explosion that filled the seas with the world's first complex creatures. The large animal phyla of today were present already in the early Cambrian and they were as distinct from each other as they are today.”¹²

A famous British paleontologist, Derek V. Ager says:

“The point emerges that if we examine the fossil record in detail, whether at the level of orders or of species, we find—over and over again—not gradual evolution, but the sudden explosion of one group at the expense of another.”¹³

Another evolutionist paleontologist Mark Czarnecki comments as follows:

“A major problem in proving the theory has been the fossil record; the imprints of vanished species preserved in the Earth's geological formations. This record has never revealed traces of Darwin's hypothetical intermediate variants - instead species appear and disappear abruptly, and this anomaly has fueled the creationist argument that each species was created by God.¹⁴

How the earth came to overflow with such a great number of animal species all of a sudden and how these distinct types of species with no common ancestors could have emerged is a question that remains unanswered by evolutionists. The Oxford zoologist Richard Dawkins, one of the foremost advocates of gradualism and the writer of *Mount Improbable*, admits, “The Cambrian strata of rocks, vintage about 600 million years, are the oldest ones in which we find most of the major invertebrate groups. And we find many of them already in an advanced state of evolution, the very first time they appear. It is as though they were just planted there, without any evolutionary history. Needless to say, this appearance of sudden planting has delighted creationists.”¹⁵

This lack of fossil data of slow progress has struck a big blow to the Darwin's and Dawkin's concept of gradualism. Darwin himself recognized the possibility of this when he wrote: "If numerous species, belonging to the same genera or families, have really started into life all at once, the fact would be fatal to the theory of descent with slow modification through natural selection."¹⁶

This lack of fossil data has lead to a new theory named Punctuated Equilibrium. This new theory gives up on one of the important components of Darwinian theory, namely gradualism. Yet, the proponents of this new theory have chosen to retain the paternal umbrella of Darwin's evolutionary theory, because of its popularity in Scientific circles and to distinguish themselves from the Creationists. Stephen Gould has been the most famous proponent of Punctuated Equilibrium. According to this theory the discontinuities of the fossil record are not artifacts created by gaps in the record, but rather reflect the true nature of morphological evolution, which happens in sudden bursts associated with the formation of new species.

In the words of Encyclopedia Britannica online regarding Stephen J Gould, “He joined the faculty of Harvard University in 1967, becoming a full professor there in 1973. With Niles Eldredge, he developed in 1972 the theory of punctuated equilibrium, a revision of Darwinian theory proposing that the creation of new species through evolutionary change occurs not at slow, constant rates over millions of years but rather in rapid bursts over periods as short as thousands of years, which are then followed by long periods of stability during which organisms undergo little further change.”¹⁷

Dawkins and Gould disagree with each other over their respective theory of evolution. Dawkins says evolution must have been slow and gradual for the ‘blind watchmaker’ to get the design work done. Gould says that the fossil record reveals that evolutionary work was not slow and gradual, but happened in geologically instantaneous bursts. So, evolutionists do differ on the details of the process. “If rival models of evolution cannot

even in principle explain complexity, Dawkins's blind watchmaker model deserves to be called the theory of evolution.," that is exactly what Dawkin's protégé Helena Cronin wrote in her book *The Ant and the Peacock*, where she referred to the Dawkin's model simply as 'modern Darwinism.'

Gould in his angry review of Cronin's book denied that most evolutionary biologists accept the gene-selection model as presented by Dawkins and declared that genes cannot possibly be the exclusive unit of selection. Gould asserted forcefully that most important bodily characteristics are 'emergent properties' of organisms which are not produced in any direct way by individual genes or even combinations of genes. Instead, these properties are products of such complex interactions among genes that they cannot even in principle be adequately known or predicted at the genetic level.

Both Dawkins and Gould are right about the other's position and therefore both are wrong about their own. It is not 'Blind Evolution' they are looking at 'Guided or Theistic Evolution.' The hand of God can be assumed in these sudden severe jumps and changes. This is, however, not the 'god of gaps' (religious followers trying to see god in the present day gaps of scientific understanding), as we acknowledge that God always works through natural mechanisms and never through supernatural.

According to the *New Encyclopedia Britannica* published in 1993, "Whether morphological evolution in the fossil record is predominantly punctuational or gradual is a much debated question. The imperfection of the record makes it unlikely that the issue will be settled in the foreseeable future. Intensive study of a favourable and abundant set of fossils may be expected to substantiate punctuated or gradual evolution in particular cases. But the argument is not about whether only one or the other pattern ever occurs; it is about their relative frequency."

The discovery of Burgess Shale in 1909 set the ground work for the theory of Punctuated Equilibrium. The Burgess Shale is an exceptional Middle Cambrian age (about 540 million years ago) fossil locality located in Yoho National Park in the Rocky Mountains, near Field, British Columbia, Canada. The locality is special because of the soft-bodied preservation of a wide diversity of fossil invertebrate animals. The locality has been intensely studied since its discovery in 1909 by Charles Walcott, and has been declared a World Heritage Site. A popular introduction to the Burgess Shale can be found in Steven J. Gould's book, 'Wonderful Life.'¹⁸

It is possible that these periods of intense activity leading to numerous activities suggest intervention of the Deity in the creation process, like He would influence nature at the times of Prophets in worldly affairs. We need to study these sudden bursts associated with the formation of new species, more intensely, without ever suggesting that God works through supernatural mechanisms.

WHAT STORY DO THE FOSSILS TELL

Darwin recognized that the fossil record did not contain fossils of these “intermediate” forms of life. Here is his confession from *Origin of Species*:

“The number of transitional varieties, which have formerly existed on the earth, [must] be truly enormous. However, Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain; and this, perhaps, is the most obvious and gravest objection which can be urged against my theory.”

He thought that the explanation to this criticism lies in the extreme imperfection of the fossil record, that had been discovered till then. Additional 150 years of discovery of new fossils have not changed the situation. These observations lead Eldredge and Gould to propose the theory of Punctuated Equilibrium.

According to paleontologists, almost all of the major living animal categories appear in the fossil record during the Cambrian Period, about 550 million years ago. This takes place within a 5-10 million year period which has been called the ‘Cambrian Explosion.’ It is unlikely that any theory of ‘Blind Evolution’ can account for the lack of transitional forms, because it must create too many complex life forms too quickly:

Before the Cambrian, very few fossils having anything to do with modern animal categories are found in the fossil record:

“Most of the animal categories that are represented in the fossil record first appear, ‘fully formed’ and identifiable as to their categories in the Cambrian some 550 million years ago...The fossil record is therefore of no help with respect to the origin and early divisions of the various animal categories.”¹⁹

The suddenness of the appearance of animal life in the Cambrian, ‘the Cambrian explosion’ has now earned titles such as ‘The Big Bang of Animal Evolution’ (*Scientific American*), ‘Evolution’s Big Bang’ (*Science*), and the ‘Biological Big Bang’ (*Science News*).²⁰

The Cambrian Explosion is by no means the only ‘explosion’ in the fossil record. Plant biologists have called the origin of plants an ‘explosion,’ saying, the spreading of land [plant] species is the terrestrial equivalent of the much-debated Cambrian ‘explosion’ of marine plants.

Others have called the origin of our own modern man, ‘a genetic revolution’²¹ where “no [ape] species is obviously transitional” leading one commentator to call it, like others called the Cambrian Explosion, a ‘big bang theory’ of human evolution.²² The pattern of rapid appearance of diverse life forms without transitions remains an important pattern in the fossil record. Gould, Eldredge and others have formed a different response to this

difficulty: punctuated equilibrium. According to which long periods of no evolution are interrupted by brief periods of very rapid evolution.

Though it does make certain predictions, punctuated equilibrium (rapid evolution) provides a poor way for proving Darwin's theory as the mechanism of evolution and confirming Darwin's strong prediction that transitional stages of change existed. In other words, punctuated equilibrium (rapid evolution) shows that Darwin was mistaken, as far as blindness and spontaneity and gradualism of the process of evolution are concerned.

In 2001, evolutionary biologist Ernst Mayr wrote in his book, *What Evolution is*, "New species usually appear in the fossil record suddenly, not connected with their ancestors by a series of intermediates."

Origin of Fish and Amphibians: The earliest reported jawless fish in the fossil record are found near the early-middle of the Cambrian Explosion with absolutely nothing resembling a fossil ancestor. The fact that such a complex organism as fish seem to pop up at the very beginning of the animal fossil record is nothing short of a huge challenge to a gradual evolutionary account. Various evolutionists have conceded that the origin of fishes is a major mystery as far as their 'Blind Evolution' is concerned.

Quoting from *The Diversity of Fishes*, "No intermediate fossils between jawed and jawless forms have been found--early fossils of jawed fishes had jaws, teeth, scales and spines. The origins of jaws and other structures that characterized the early gnathostomes are lost in the fossil record, belonging to some group about which we know nothing."²³

Amphibian to Reptile Transition: This alleged transition is pretty much non-existent in the fossil record. According to vertebrate paleontologist Robert Carroll,

"The earliest known reptiles are immediately recognizable as members of this group because of similarities of their skeleton to those of primitive living lizards."²⁴

"The early reptiles are sufficiently distinct from all previous amphibians that their specific ancestry has not been established."

Phillip E. Johnson, the pioneer of 'Intelligent Design' and 'Discovery Institute' also notes that number of difficulties that are presented when an amphibian tries to become a reptile:

"Amphibians lay their eggs in water and the larvae undergo a complex metamorphosis before reaching the adult stage. Reptiles lay a hard shell-cased egg and the young are perfect replicas of adults no explanation exists for how an amphibian could have developed a reptilian mode of reproduction."²⁵

Reptiles and Birds: Turtles pop out of the fossil record in the late Triassic without any predecessors or transitional forms. You've probably never heard this before, but it just so happens that evolutionarily speaking, nobody has any idea where the dinosaurs came from. The major dinosaur groups appear in the late Triassic fossil record without any recognizable ancestors. Despite all the talk of dinosaur fossils leading up to birds, there is actually a huge gap (40-50 million years) in the fossil record between the time of the supposed bird-like dinosaurs (i.e. Archaeopteryx) to the appearance of the first true birds. At supposedly about 70-80 million years ago, almost all modern birds groups appear without any direct recognizable evolutionary predecessors.

Evolutionist paleontologist Larry Martin, a challenger of the dinosaurs-to-birds theory, was quoted as saying that such comparisons "are riddled with characters based on mistaken anatomy" and such theories of dinosaur origins of birds are a good example of "garbage in, garbage out." Again in his words, "The theory linking dinosaurs to birds is a pleasant fantasy that some scientists like because it provides a direct entry into a past that we otherwise can only guess about. But unless more convincing evidence is uncovered, we must reject it and move forward to the next better idea."²⁶

Mammal History: Apart from the whale, the evolutionary fossil changes leading to almost all other mammal groups are generally not even claimed to exist. Similar to the Cambrian Explosion, paleontologists call the appearance of mammals in the fossil record something like a 'Mammal Explosion.'

There are no fossil transitional forms leading to bats and they basically appear in the fossil record as "modern" bats.

Plants: Plants have what paleontologists call a very 'poor' fossil record. Or do they? Soft algae fossils are thought to be found as far back as 600 million years ago, so it is clearly possible to find plants if they are there. However, all major groups of plants appear in the fossil record without recognizable transitional forms between one another.

By denying the existence of a Creator who has to be a being with a conscious mind and all the power to implement his decision, the scientists try to replace him with a formless idea. This idea of 'Blind Evolution' finds no support in either fossil evidence or biological evidence. Islam regards the idea of life with no Creator idolatry and answers these scientists in the following verse.

"Have they feet wherewith they walk, or have they hands wherewith they hold, or have they eyes wherewith they see, or have they ears wherewith they hear? Say, call upon the partners you associate with God, then contrive ye all against me, and give me no time."
(Al Quran 7:196)

Formless ideas can have as much time as they may, but God with his creative facilities can create in practically no time, as the fossil evidence clearly shows us.

For decades, scientists have been collecting evidence that contradicts both Darwin's theory and the grand materialistic gloss that usually accompanies it. Many physicists and cosmologists now recognize that the universe had a beginning and that many physical laws look suspiciously 'fine tuned' for the existence of intelligent life. In addition, biochemists and biologists have discovered a microscopic world of mesmerizing complexity belying the simple blobs of protoplasm that Darwin imagined.

The concepts of punctuate equilibrium and fossil record can be best understood in religious terms in the light of the following verse:

"All praise belongs to Allah, the originator of the heavens and the earth, Who employs the angels as Messengers, having wings, two, three, and four. He adds to His creation whatever He pleases; for Allah has power over all things." (Al Quran 35:2)

CONCLUSION

هُوَ الْأَوَّلُ وَالْآخِرُ وَالظَّاهِرُ وَالْبَاطِنُ وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

Allah is the First and the Last, and the Manifest and the Hidden, and He has full knowledge of all things. (Al Quran 57:4)

The universe has been designed and created by 'the Hidden' God through natural mechanisms, with the underlying purpose of ensuring free will for man and omnipresence and omnipotence of the transcendent God. "His is the Kingdom of the heavens and the earth; He gives life and He causes death, and He has power over all things." (Al Quran 57: 3) The Holy Quran very precisely states that Allah is Transcendent and Unknowable through human efforts alone: "Eyes cannot reach Him (Allah) but He reaches the eyes. And He is the incomprehensible, the All-Aware." (Al Quran 6:104)

So how are we to see the hand of God in the creation of the universe and life on this planet? The answer does not lie in denying the clearly established facts of science as many a fundamentalist religious people including many of the adherents of the Intelligent Design theory are likely to do. One can see the hand of the Creator or God only in the improbabilities of the events leading to the creation of the universe and life. There is a common saying that every day is not a Sunday. When we throw a dice the chance of getting a six is 1/6 to get two sixes in a row the chance diminishes to 1/6 * 1/6 that is 1/36. To get three sixes in a row the chance diminishes rapidly to 1/216. The chance of a useful mutation is one in a trillion, to have two useful mutations the odds become a trillion square. How many of the same mutations are going to be useful for the same purpose becomes a further catch. In ordinary life no one bets against such odds but in their zeal to deny a God, atheists know no limits or bounds! If they discover a mechanism of anything they rush to the judgment that an actor does not exist. Who is to tell God, how He may or may not create?

In the words of Professor Kenneth Miller:

“If as Gould argues, the evolutionary tape were played again, human life would not be expected. In fact, even if it were replayed a million times or more, man would not be expected again.”²⁷

Punctuated equilibrium by taking away from gradualism a strong axiom of Darwinism diverts our attention again towards a potential creator! If God had resorted to only slow gradual changes similar to what Dawkins proposes, in his book *Climbing Mount Improbable*; then, the only place we will find evidence for theory of ‘Theistic Evolution’ will be at the time of the first stroke. However, we know from the history of the prophets that the Gracious and the Merciful God has remained involved with the affairs of humans in an intimate fashion through out the history of the prophets of more than 6000 year. This creates hope that God not only participated in the first stroke leading to life but continued to participate at other key junctions. This creates a paradigm that by continuing to work on the details of evolution of life into different forms and the improbabilities involved we will continue to accumulate indirect additional evidence for the theory of ‘Theistic Evolution.’

However, in the final analysis, as “Eyes cannot reach Allah,” scientist can never show the hand of God working in a materialist paradigm. Regardless of the specific religion the only certainty for an honest believer is, “Allah is the Originator of the heavens and the earth. When He decrees a thing, He only says to it, ‘Be,’ and it is. (Al Quran 2:118)

¹Mirza Tahir Ahmad. Revelation, Rationality, Knowledge and Truth, page 340-341.

² Gould Wonderful life page 318

³ Charles Darwin. On the Origin of Species by Means of Natural Selection . Edited by Joseph Carroll. Published by Broadview Press, 2003. Page 213.

⁴ Stephen Gould. Ever since Darwin: Reflections in natural history. W. W. Norton and Company. P. 45.

⁵ Stephen Gould. Ever since Darwin: Reflections in natural history. W. W. Norton and Company. P. 45.

⁶ Stephen Gould Hen’s teeth and Horse’s toes. Page 254.

⁷ Charles Darwin, The Origin of Species, 6th edition. London: Oxford University Press, 1872, reprinted 1956, p. 203.

⁸ Charles Darwin, The Origin of Species, 6th edition. London: Oxford University Press, 1872, reprinted 1956, p. 204.

⁹ Charles Darwin, The Origin of Species, 6th edition. London: Oxford University Press, 1872, reprinted 1956, p. 191.

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- ¹⁰ Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 179.
- ¹¹ Charles Darwin, *The Origin of Species*, 6th edition. London: Oxford University Press, 1872, reprinted 1956, p. 172 and 280.
- ¹² Richard Monastersky, "Mysteries of the Orient", *Discover*, April 1993, p. 40.
- ¹³ Derek V. Ager, "The Nature of the Fossil Record", *Proceedings of the British Geological Association*, Vol 87, 1976, p. 133.
- ¹⁴ Mark Czarnecki, "The Revival of the Creationist Crusade", *MacLean's*, January 19, 1981, p. 56.
- ¹⁵ Richard Dawkins, *The Blind Watchmaker*, London: W. W. Norton 1986, p. 229.
- ¹⁶ Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 302.
- ¹⁷ "Stephen Jay Gould." *Encyclopædia Britannica*. 2008. *Encyclopædia Britannica Online*. 31 Jul. 2008 <<http://www.britannica.com/EBchecked/topic/240011/Stephen-Jay-Gould>>.
- ¹⁸ http://www.geo.ucalgary.ca/~macrae/Burgess_Shale/
- ¹⁹ R.S.K. Barnes, P. Calow and P.J.W. Olive, *The Invertebrates: A New Synthesis*, pgs. 9-10 (3rd ed., Blackwell Sci. Publications, 2001).
- ²⁰ See Meyer, Nelson, Chien, and Ross in "The Cambrian Explosion: Biology's Big Bang," in *Darwinism, Design, and Public Education*, edited by J. A. Campbell and S. C. Meyer, pg. 326 (reference 6) (2003).
- ²¹ Hawks, J., Hunley, K., Sang-Hee, L., Wolpoff, M., "Population Bottlenecks and Pleistocene Evolution," *J. of Mol. Biol. and Evolution*, 17(1):2-22 (2000).
- ²² "New study suggests big bang theory of human evolution" (January 10, 2000), at <http://www.umich.edu/~newsinfo/Releases/2000/Jan00/r011000b.html> (accessed 10/21/03).
- ²³ Helfman, et al. 1997. *The Diversity of Fishes*. Blackwell Science, MA.
- ²⁴ Carroll, Robert L. 1988. *Vertebrate Paleontology and Evolution*. W. H. Freeman. New York.
- ²⁵ *Darwin on Trial*, Phillip E. Johnson, Intervarsity Press, 1993. Pg. 77,-81
- ²⁶ Sunday World-Herald (Omaha, Nebraska), Jan. 19,1992, sec. B, P. 17. professor of systematics and ecology at the University of Kansas and head of the vertebrate paleontology division in the university's museum of natural history.
- ²⁷ Kenneth Miller. *Finding Darwin's God*. Cliff Street Books. An Imprint of Harper Collins Publisher, 2000. P 187.