

Creation and Evolution in the Holy Qur'an

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Introduction

This is a piece of work in progress, not a complete article yet. Readers find below 34 main verses which the author could identify in the Holy Qur'an about creation and evolution, on the basis of his little knowledge. These are presented in the order of creation and evolutionary processes.

Meanings are explained by consulting with known interpreters like Bin Katheer (Arabic) and Yusuf Ali (English) and by looking at the scientific evidence, particularly from anthropology, biology, and cosmology. The objective is to tell the story of God's creation of life and how it evolved on planet Earth, with particular attention to the creation of humans.

Researchers can find support to the evolutionary theory from the meanings of of these verses. God Almighty started the creation of life on Earth, then left it to evolve as a result of learning from the adaptation to various environments, with intervention from Him to make His creation better.

أعوذ بالله من الشيطان الرجيم

I seek refuge with God from the stoned Shaitan (Satan)

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the Most Compassionate, the Most Merciful

وَالسَّمَاءَ بَنَيْنَاهَا بِأَيْدِينَا وَإِنَّا لَمُوسِعُونَ

51.47: We have built the heaven with power, and We are expanding (it) (The Holy Qur'an, Chapter 51, Verse 47).

In this verse, God Almighty praise to Him, is telling us that He created heaven and He is expanding it. Modern cosmology supported this fact of expanding universe in the twentieth century. Like in the case of every verse below, readers will discover that these facts were mentioned in the Holy Qur'an 1429 years ago, in order to confirm to us humans that the Holy Qur'an is God's message to humanity, and consequently to follow its teachings in order to live happily in this life and in the hereafter. (Footnote # 1).

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

21.30 . Have not those who disbelieve known that the heavens and the earth were of one connected entity, then We separated them from each other, and We made every living thing out of water? Will they not then believe?

The focus of the first part of this article is on the creation of life; therefore, the part of the verse concerning the relationship between life and water is of special importance. Basically, life depends on the availability of water, which has become a scientific given.

For decades, space programs have had a major goal of investigating whether there is water on other planets or not, in order to begin the exploration of whether there is life on those planets or not. Several verses of the Holy Qur'an have stated clearly that every living being has been created from water.

Water covers about seventy percent of the surface of the Earth, which has provided it with the essential requirement of life. (See Footnote # 2 about the origins of life on Earth, as agreed upon by natural scientists)

For more information about the origin of the universe, according to the Holy Qur'an, see: [The Quran on the Origin of the Universe](#)

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً

4.1 . O mankind! Be careful of your duty to your Lord Who created you from a single soul and from it created its mate and from them has spread a multitude of men and women.

This verse tells us that the beginning of life was a single soul, then its mate came out of it. Biological science tells us that the earliest form of life was represented by single cell organisms found in water, then these multiplied by splitting themselves. With the course of time, reproduction started to be by mating pairs, instead of the archaic forms of splitting or dividing.

The same meaning is expressed in other verses, such as 30.21, as follows:

وَمِنْ آيَاتِهِ أَنْ خَلَقَ لَكُمْ مِنْ أَنْفُسِكُمْ أَزْوَاجًا لِتَسْكُنُوا إِلَيْهَا وَجَعَلَ بَيْنَكُمْ مَوَدَّةً وَرَحْمَةً إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

30.21 . And of His signs: He has created for you from yourselves mates with whom you find rest , and He ordained between you love and mercy . In this, there are signs for people who ponder .

وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِنْ مَّاءٍ فَمِنْهُمْ مَنْ يَمْشِي عَلَى بَطْنِهِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى رِجْلَيْنِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى أَرْبَعٍ يَخْلُقُ اللَّهُ مَا يَشَاءُ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ

24.45 . Allah has created every animal out of water . Of them (is a category which) walks upon its belly, (another which) walks upon two legs, and (a third which) walks upon four . Allah creates what He wills. Allah is Able to do everything (he wants) .

In this verse, Allah (Praise to Him) tells us that animals were originally created out of water (as was the origin of humans). Some of these animals walk on their belly (like snakes), others walk on two legs or on four legs.

We know that almost all animals except kangaroos (and penguins) walk on four legs. However, for Prophet Muhammed (Peace and blessings be upon him) and old world humans at the time of revelation (1429 years ago), they did not know that there was an animal which walked on two legs in Australia. Only God knew that and has told us about it, as another piece of evidence that He is the author of the Holy Qur'an, not any human being.

الَّذِي أَحْسَنَ كُلَّ شَيْءٍ خَلَقَهُ وَبَدَأَ خَلْقَ الْإِنْسَانِ مِنْ طِينٍ

32.7. (Allah is He) who has made everything He created better, and He began the creation of the human (being) out of clay.

In this verse, we are told that Allah (Praise to Him) began the creation of human beings out of clay, but that was the beginning, then He improved His creation making it better.

The most relevant word in this verse is "began" (bada-a), which tells us clearly that creation happened in a process that had a beginning, not just at once. The same meaning is found in Verse 15, Chapter 50.

أَفَعَيِينَا بِالْخَلْقِ الْأَوَّلِ ۚ بَلْ هُمْ فِي لَبْسٍ مِنْ خَلْقٍ جَدِيدٍ

50.15. Were We then tired with the first creation? (No), they (nonbelievers) are in confusion about a new creation (resurrection).

This verse confirms the meaning included in 32.7, saying that there was a first creation, the creation of life, which then evolved according to a long process of learning how to adapt to the environment.

The scientific evidence available to us tells us that the beginning of life was in an environment similar to swamps, which are composed basically of water and earth matter. This produced clay, where the first forms of life began in the form of single cell organisms. These organisms multiplied reproducing themselves first by splitting and division. However,

later, they paired as males and females to reproduce as they took other life forms in the sea and on land. Reproduction has become in the form of uniting the watery genetic materials of males and females, as the following verse (32.8) reveals.

(See Footnote # 2 about the origins of life on Earth, as agreed upon by natural scientists)

ثُمَّ جَعَلَ نَسْلَهُ مِنْ سُلَالَةٍ مِنْ مَاءٍ مَهِينٍ

32.8 . Then He made his offspring from a quintessence of despised water (coming out of parents).

ثُمَّ سَوَّاهُ وَنَفَخَ فِيهِ مِنْ رُوحِهِ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ قَلِيلًا مَّا تَشْكُرُونَ

32.9. Then He shaped him (in due proportions), and breathed in him of His Spirit, and made for you hearing, sight, and hearts; little thanks you give.

When the fetus reaches a degree of mental development that allows it to receive information, God's basic software is installed in it. An angel blows part of God's spirit in His new creation. This includes at least two programs.

The first is shared with other living beings, in order to make the organs of an organism functioning internally and automatically. The second is unique to humans in that it allows humans to distinguish good from evil and consequently enables them to choose their actions.

This is a basic premise in the story of creating humans, as told by God (Praise to Him) in several chapters of the Holy Qur'an, as in Al-Baqara (Chapter II), Verses 30-38. For more about blowing some of God's spirit in humans, see ["Mind, Self, Soul, Spirit, and Happiness from an Islamic Perspective."](#)

وَقَدْ خَلَقْنَاكُمْ أَطْوَارًا

71.14. He has created you in diverse (and successive) stages.

This verse may be interpreted to refer to the successive stages of the development of a fetus in its mother's womb. However, it can also be interpreted to refer to the successive stages of the human evolution, as summarized in Footnote # 4. The latter interpretation has support from the following verse, 6.2.

هُوَ الَّذِي خَلَقَكُمْ مِنْ طِينٍ ثُمَّ قَضَىٰ أَجَلًا وَأَجَلٌ مُّسَمًّى عِنْدَهُ ثُمَّ أَنْتُمْ تَمْتَرُونَ

6.2. He is Who has created you from clay, then he spent a term of time (away from you), and (it is) a specific term he determined. Yet, you doubt (his ability)!

In this verse, we know that God's creation of life from clay (which is a combination of water and earth soil) happened first a long time ago. God then stayed away from his creation letting it evolve to interfere when He determined that it was time to interfere.

The following verses provide more details about the original environment of creation of life and how it evolved after that.

وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ صَلْصَالٍ مِّنْ حَمَإٍ مَّسْنُونٍ

15.26 . We created the human being from stinking, smooth, (and wet) clay.

This verse gives a very specific description of the environment where life started. It refers to swamps where still water is combined with the earth soil, which creates stinking but smooth clay easy to take different forms.

This is exactly what biologists have come up with to explain the beginning of life on Earth.

وَاللَّهُ أَنْبَتَكُمْ مِّنَ الْأَرْضِ نَبَاتًا

71.17. And Allah has caused you to grow out of the earth like plants.

This means that originally organisms started in earth, inside the stinking muddy swamps, then they left to the sea and to the surface of the earth, like plants which grow out of the earth to appear over its surface.

A related meaning is that Allah has (originally) planted humans and other organisms in earth and caused them to grow out of it like plants, which pass through different and successive metamorphosing stages from seeds to growing plants, then to the flowering stage, and ultimately to the death of the grown plants. However, life continues as the dying plants produce life in the form of seeds.

The stages of creation, from soil first and watery genetic materials from parents later, are mentioned in the following verse (18.7).

قَالَ لَهُ صَاحِبُهُ وَهُوَ يُحَاوِرُهُ أَكَفَرْتَ بِالَّذِي خَلَقَكَ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ سَوَّاكَ رَجُلًا

18.37 . His companion said to him, while arguing with him: Have you disbelieved in Him Who created you of the earth soil, then of a nutfah (union of a father's sperm and a mother's egg), then fashioned you into a man?

The two stages of creation are also mentioned in the following verse (35.11).

وَاللَّهُ خَلَقَكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ جَعَلَكُمْ أَزْوَاجًا

35.11 . Allah created you from the earth soil, then from a nutfah (union of a father's sperm and a mother's egg), then He made you pairs (or mates: males and females).

More specific description of the kind of clay the first creation happened, as was mentioned above in Verse 15.26, is also mentioned in the following verse (55.14) but with adding a new word, pottery.

خَلَقَ الْإِنْسَانَ مِنْ صَلْصَالٍ كَالْفَخَّارِ

55.14 . He created man of stinking clay, (wet and smooth like the one used in making) pottery.

The stages of creation are also mentioned in the following verse (40.67) but with more specific description of the main stages of the development of a fetus in the womb, from nutfah to alaqah, and finally to a complete baby.

هُوَ الَّذِي خَلَقَكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ يُخْرِجُكُمْ طِفْلًا

40.67 . He is Who created you from the earth soil , then from a nutfah (union of a father's sperm and a mother's egg), then from a leech (a fertilized egg sticking to the womb sucking nutrients from it like a leech), then He brings you out (of the womb) as a child.

A nutfah is the Arabic word for a fertilized egg, a zygote, or the union of a father's sperm and a mother's egg.

An alaqah is the Arabic word for a leech. In this case, it refers to a fertilized egg sticking to the womb sucking nutrients from it like a leech.

Other related verses (23.12-14) mention other main stages in the development of the fetus in the womb, the mudgha, bone, and flesh stages.

ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً (ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ (١٣) وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سُلَالَةٍ مِّنْ طِينٍ (١٢) فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ثُمَّ أَنْشَأْنَاهُ خَلْقًا آخَرَ ۗ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ (١٤)

23.12-14 We created the human being from a product of wet earth; (12)

Then, We placed it as a nutfah (fertilized egg) in a safe (deep) lodging; (13)

Then, We created the nutfah into an alaqa (leech).

Then, We created the alaqa into mudghah (a little lump, like a chewed substance).

Then, We created the mudghah into bones.

Then, We clothed the bones with flesh.

Then, We produced it (the human being) as another creation.

So blessed be Allah, the Best of creators! (14).

Only recently in human history, biological and medical researchers could reach such accurate knowledge about the major stages of the fetus development, as described in the verses above.

This description was revealed to the Prophet Muhammed, peace and blessings of Allah be upon him, 1429 years ago. There was no way for an illiterate man in Arabia to know about the human creation by himself and with this accuracy.

This is one of the Holy Qur'an miracles, giving evidence that the author of this book could be nobody else except God, the Creator, praise to Him.

The objective is to assure people with reasoning that the Holy Qur'an is God's message to humanity. When they are sure, then they follow His teachings, which are designed for their good in this life and in the hereafter.

For more information about describing stages of the human embryo development, see:

[The Quran on Human Embryonic Development](#)

الَّذِي خَلَقَكَ فَسَوَّاكَ فَعَدَلَكَ

82. 7. It is He Who created you, fashioned you perfectly, and made you with the right proportions (straightened you up, to walk in an upright position).

This verse may refer to three main stages of the creation of human beings. The first was creation of a living cell (The Arabic verb khlaqa, created). The second was the change from unicellular prokaryote organism to the multi-cellular eukaryote animal organism (The Arabic verb sawwa, fashioned you perfectly). The third was the human departure from the animal stage (The Arabic verb 'adala, made you walk in an upright way).

Bin Katheer explains this verse using a Hadeeth from the Prophet, peace and blessings of God be upon him (Volume 4: 267). The Hadeeth tells us that God created humans in the best image and the right proportion and made them walk in a balanced way, in an upright position, which allowed them to walk between the two cold places.

This is a direct reference to the homo erectus, which marked a major departure of humans from their closest kin in the primate family. The Prophet mentioning of walking between the

two cold places is a reference to the fact that walking on two legs, instead of all four as they did before, allowed humans to explore, migrate, and ultimately live in all regions of the earth between the two cold areas, the North Pole and the South Pole. There was no way for the Prophet (bbuh) to know at that time even about the existence of the two Poles. More details about the stages of the human departure from the ape family will be provided in the Footnote # 4.

فِي أَيِّ صُورَةٍ مَّا شَاءَ رَكَّبَكَ

82. 8. In whatever form (image) He willed, He put you together (assembled you).

Bin Katheer (Volume 4: 267-268) mentions a Hadeeth explaining this verse, particularly the Arabic verb rakkaba, by saying that the fertilized egg carries all the genetic characteristics of humans all the way to the first creation, including Adam.

Ekremah, Abu Saleh, and Quotada added that some people may even have a feature or more of animals as their faces may look like a monkey, a pig, a dog, or a donkey. So, a human being is the product of a long line of genetic traits. God chooses which traits are used in assembling a new human being.

I would like to add that the Arabic verb, rakkaba, can be translated into putting together or assembling. Thus, the word may refer to assembling human beings by using genetic materials from other organisms, in order for humans to be better than their closest animal relatives, the primates. If human scientists have been using genetic engineering to introduce changes in existing organisms, then it must be a given that their Creator, praise to Him, did that earlier if He willed to.

وَلَقَدْ خَلَقْنَاكُمْ ثُمَّ صَوَّرْنَاكُمْ ثُمَّ قُلْنَا لِلْمَلَائِكَةِ اسْجُدُوا لِآدَمَ فَسَجَدُوا إِلَّا إِبْلِيسَ لَمْ يَكُن مِّنَ السَّاجِدِينَ

7. 11. And We created you (humans, in plural form), then fashioned you (made you in the image you are, also addressing humans in plural form), then said to the angels: Prostrate to Adam! And they prostrated, all except Iblis (another name for Satan), who was not of those who made prostration.

In this verse, God Almighty praise to Him is telling angels that Adam (and his offspring by implication) is higher in rank than angels themselves. That's why He asked them to make prostration to Adam as an acknowledgement from them that he is higher than they are in the ladder of creation. All angels obeyed except Iblis (Satan) who refused arguing that he is better than humans, saying that he was created of fire while Adam was created of clay.

Humans have been more preferred by God as higher in rank than angels because of their ability to acquire more knowledge and because of their ability to choose between right and wrong. While angels are created to be obedient to God, humans have been given the ability to do that by choice. However, Satan refused to acknowledge that humans are better than him and asked God to give him (and his offspring) the chance to prove his point, by derailing

humans from the right path. God accepted the challenge and delayed Satan's punishment to also include humans who listen to him. (Footnote # 3)

The Arabic words relevant to this article in the above verse are the verbs khalaqa (created) and sawwara (fashioned the image). These two words refer to the two stages of creating life first, then increasing its complexity, and finally bringing it to the human stage (Verse 82.7 above), which is higher in rank than angels.

This verse gives support to the argument of creating humans through stages of creation, fashioning, and education (2.31). Neither Bin Katheer nor Yusuf Ali could explain (consistently) why the verse starts by addressing humans in plural form (We created you (khalaqnakum), then fashioned you (sawwanakum). After using "then" to indicate the passing of a period of time, God praise to Him tells angels to prostrate to Adam, who is one human being. This means that Adam was chosen as the best example of humans who have been created, fashioned, and educated by God, in order to win the contest of knowledge vis-a-vis angels.

أَلَمْ تَرَ أَنَّ اللَّهَ خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ إِنَّ يَشَأْ يُذْهِبْكُمْ وَيَأْتِ بِخَلْقٍ جَدِيدٍ

14.19 . Have you not seen that Allah has created the heavens and the earth with the right proportions? If He wills, He can remove you and bring (in your place) a new creation .

There are two meanings relevant to the subject of this article in the above verse. First, Allah praise to Him has created heavens and Earth with the right proportions, which is a reference to the perfect system of interrelationships between components of the universe.

The Earth is placed in a perfect position and distance from the sun in order for life to flourish and continue. Proximity and distance from the closest point to the sun on Earth (the equatorial region) has led to the variation of environments and climates, leading to the wonderful variation in the fauna and flora in the biosphere. The proportion of water in the planet (70%) is equal to the proportion of water in the human body. The balance between oxygen and carbon dioxide and the formation of the ozone, which protects Earth from the ultraviolet cosmic radiation, all are examples of the right proportions of creation mentioned in the above verse.

The second meaning is related to God's threat that He can cause humans to disappear if they disobey Him and bring a new creation, which is better. Natural scientists may support the meaning of this verse that there were many now-extinct species, which once dominated Earth, like dinosaurs.

فَالْيَوْمَ نُنَجِّبُكَ بِبَدَنِكَ لِتَكُونَ لِمَنْ خَلَقَكَ آيَةً وَإِنَّ كَثِيرًا مِّنَ النَّاسِ عَنْ آيَاتِنَا لَغَافِلُونَ

10. 92. Today, We save you (Pharaoh of Egypt) through saving your body so that you may be a sign for those after you . Lo! Most people are heedless of Our signs.

This verse is part of the story of Moussa (Moses), peace be upon him, and the Pharaoh of Egypt, which is told in several chapters of the Holy Qur'an, including Younus, Chapter 10, Verses 79-92.

Bin Katheer (Volume 2: 203-205) mentioned that when Moussa (pbuh) hit the sea with his stick, it split like a huge cliff on each side, creating twelve paths for the twelve Israelite tribes, each one separated from the other by a glass window. When the Pharaoh and his army arrived and saw the awesome view, they were afraid to proceed but the senior angel, Jibril (Gabriel) encouraged them to continue by marching in front of them. When all of them were in the middle of the path, God ordered the sea waters to merge again, drowning them all.

Bin Katheer added that despite what they saw by their eyes, the Israelites asked Moussa to show them the body of the Pharaoh to make sure that he died. God gave them what they wanted by throwing the body of the Pharaoh to the shore, so they can see it, as a sign of God's punishment for those who oppress believers.

I see a different interpretation for the Arabic words *liman khalfaka* (to those after you). The Israelites of Moussa (pbuh) lived at the time of the Pharaoh, not after his time. Therefore, the sign was intended to be to those who would come after that time, simply because the Israelites saw the miracle and lived it by themselves.

The interpretation I see closer to the meaning of these words in the verse is that God decided to preserve the Pharaoh's body to be a sign for the generations of humans who would come after the Pharaoh's time.

The Pharaoh's body was probably carried to the Egyptian capital by those who stayed away and did not drown, to be mummified, in order to be preserved for future generations of humans to see. Mummies of the Egyptian pharaohs were discovered in 1898 and now displayed in the Royal Mummies Room of the Egyptian Museum, in Cairo.

There is no agreement between historians and biblical scholars about the pharaohs involved in the story or the time they lived. Some authors identify the oppressive Pharaoh as Seti I, the Exodus pharaoh as Ramses II, and the Exodus event about 1290 BC, according to Encyclopedia Britannica.

وَقَالُوا أَنبَا كُنَّا عِظَامًا وَرُفَاتًا أَلَيْسَ لِمَنْبُغُوهُمْ خَلْقًا جَدِيدًا

17.49 . And they say : When we are bones and dust, are we going to be resurrected as a new creation?

Bin Katheer (Volume 2: 64-65) explained this verse mentioning that the Quraish non-believers challenged the Prophet (pbuh) concerning the resurrection of humans in the Day of Judgment. They wondered how God can recreate humans to question them, after they had become bones and dust.

This author further discusses resurrection of the body and the soul in another article, titled, "Mind, Self, Soul, Spirit, and Happiness from an Islamic Perspective."

God Almighty gave the Prophet the answer to their challenging question in the following two verses (17.50 and 17.51).

قُلْ كُونُوا حِجَارَةً أَوْ حَدِيدًا

أَوْ خَلْقًا مِّمَّا يَكْبُرُ فِي صُدُورِكُمْ

17.50. Say: (Yes, you will be resurrected even if) you are stones or iron.

17.51. Or a created matter, which is greater (or stronger than iron) in your minds.

God has said, "Yes." You will be resurrected even if you become stone, iron (Verse 17.50), or stronger than that (Verse 17.51). Bin Katheer did not elaborate. He did not explain how humans can become stones, iron, or stronger than iron.

For this author, this is a clear reference to the 19th century and after archaeological findings. The science of anthropology emerged in the second half of the 19th century to specialize in studying human pre-history and pre-industrial history. It includes four major sub-disciplines: Archaeological anthropology, Biological anthropology, linguistic anthropology, and cultural anthropology.

Archaeologists have discovered human fossils that date back to millions of years ago. Biological anthropologists with assistance from archaeological anthropologists have reconstructed human prehistory through classifying discovered human fossils by time using accurate dating methods, like potassium-argon and radio-carbon methods. They have agreed on a general sequence of evolutionary changes of the human body (See footnote # 3). In particular, they have focused on studying the human skeleton, skull, and fingers among other features to investigate these evolutionary changes.

What's relevant in this verse is the fact that humans can become fossils in rocks. Some bodies can be fossilized in clay layers which are rich in iron, thus becoming iron fossils.

Humans never knew that they can be fossilized in rocks before the 19th century. However, this information was revealed in the Holy Qur'an 1429 years ago, as evidence that its author is the Creator of life, the All Knowledgeable, who knows all things, including fossilization.

Verse 17.51 continues to answer the question by indicating that humans may contemplate the introduction of new changes on themselves, which may make them even stronger than iron. This could be a reference to ideas about future biological engineering. The verse is saying to the nonbelievers that the Creator, praise to Him, will still resurrect them for reckoning in the Day of Judgment even if they change themselves into something stronger than iron.

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافُ أَلْسِنَتِكُمْ وَأَلْوَانِكُمْ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِّلْعَالَمِينَ

30.22 . And of His signs is the creation of the heavens and the earth, as well as the difference of your languages and colors. In these, there are signs for people of knowledge.

This verse addresses scholars from various social and natural sciences, inviting them to believe in God. For natural scientists, particularly those studying how the universe came into being, this verse invites them to have a look at the verses of the Holy Qur'an, which tell humans how this happened. When they find that their knowledge about the universe has already been revealed in the Holy Qur'an, then this is the evidence for them to believe that the Holy Qur'an is God's message to humanity.

For more information about this part, readers may look at The Scientific Evidence [That God Exists and the Holy Qur'an Is His Message to Humanity](#), particularly the books written by Dr. Muhammed Zaghlul Raghieb El-Naggar, one of which was cited in the references of the article.

This verse is inviting scientists to believe as they contemplate its meanings. The verse tells us that the difference in human languages and in colors of human skin is related to the creation of heavens and earth.

The Earth is shaped in the form of a less-than-perfect globe, pointed at its both poles and enlarged at its equator. This shape of the Earth allows light coming from the Sun to reach our planet in different distances, the shortest of which is to the equator and the longest is to each of the North and South poles.

It follows that the equatorial region is the hottest because it is the closest to the sun, while the Arctic and Antarctic regions are the coldest because they are the farthest regions from the sun.

The archaeological record shows that the oldest human fossils have been found in Africa, then more recent fossils have been found in Asia and Europe, and most recently in the new world. This is a reference to human migration to the north and south of the equator (See footnote # 4).

In order for the human skin to repel the harmful concentrated ultraviolet radiation from the sun and the cosmic, it has adapted to living in the equatorial region by pigmenting itself as dark as possible. As humans started to settle away from the equatorial African region, skin color started to be less and less pigmented, until it becomes the fairest skin color in the Scandinavian Peninsula. If Africa was elongated to reach the Antarctic region, as Scandinavia reaches the Arctic region, then we would see South African blonds with blue eyes.

Moreover, sufficient ultraviolet radiation in the equatorial region provides organisms with enough Vitamin D, necessary for bone formation. As humans migrated to the north and the south away from the equator, fairer skin color is needed in order for cells to be able to receive more ultraviolet radiation, to generate more Vitamin D.

Other primates, like chimpanzees and gorillas on the equator and the macaque monkeys in Japan have shown the same adaptation strategy. Macaque monkeys have fair skin and hair color with red faces, in northern Japan, in contrast to dark-skinned and dark-eyed primates in the African equatorial region (Footnote # 5).

The difference in languages may also be explained as adaptation to different environments. As various human groups started to migrate to new regions looking for new resources of plant and animal food resources, they had to develop new vocabulary to describe these resources found in the new environment.

As a group settles in a territory for a long time, their vocabulary expands to include their expressions of the material and non-material components of their culture.

A language starts very simple, as a pidgin, with couple of thousand words, expressing the basic components of the culture of a given group. As a group settles in a geographically marked territory, isolating it from other groups by natural barriers such as deserts, mountains, water, or forests, then the pidgin may grow to a full language as the population grows and its culture expands.

A variant of a language, a dialect, may form as a result of migration of part of the population to a new territory, or if a political or natural barrier takes place, such as the case of American English vis-a-vis British English. Then, a dialect has a chance to evolve to a different language, such as the case of English, which was originally part of a proto-Germanic language.

When speakers of different languages meet suddenly and realize that they need to continue communication with each other as groups, then they may create a new form language known as Creole, which has components from different languages. This was the case the Creoles of the Caribbean at the beginning of the age of discovering the new world. Ultimately, these Creoles become fully developed national languages, taught in schools and used in various ways of communication.

The European imperialist invasion and colonization of Africa and Asia introduced European languages, such as English and French to become the dominant or official languages after independence. The imperialist administrations imposed European languages on the population by using them in schools. However, after independence, many African and Asian nations found themselves forced to continue using European languages because they had several national languages, in addition to having European-educated bureaucracy which communicates only in European languages (Footnote # 6).

The use of European languages in this way is known among linguists as lingua franca, such as in the cases of India, Pakistan, Singapore, and Malaysia, in Asia. In these countries, English has become the lingua franca, the language in common, among the various linguistic groups. Most African countries have also continued to use the language of the European imperialist administrators as their lingua franca, in addition to teaching their national languages in schools and using them in the media.

To sum up, the difference in human skin colors and languages is related to the adaptation to different environmental regions, which have been created by the shape of the Earth and its relationship to the Sun and the Cosmos, as Verse 30.22 points.

خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ يُكَوِّرُ اللَّيْلَ عَلَى النَّهَارِ وَيُكَوِّرُ النَّهَارَ عَلَى اللَّيْلِ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ كُلٌّ يَجْرِي لِأَجَلٍ مُّسَمًّى

39.5 . He has created the heavens and the earth with the right (proportions). He makes night to succeed day (in a cycle), and He makes day to succeed night (in a cycle), and He ordained for the sun and the moon that each runs on for a specific time term.

This verse provides us with more information about how the heavens and the earth have been created with the right proportions to allow them to be sustained and functioning. Day and night have been allowed to succeed each other, as a result of the earth turning around its self. This allows living organisms to work and rest in a regular cycle. Seasons have been possible by the earth orbiting the sun in an annual journey, which allows diversification of activities on Earth. Had there been only night (if for example the earth is too far away from the sun) or only day time (if a planet is located between to sons), then life could not be sustained as it has been on Earth. The planet could be too cold or too hot to sustain prosperous life.

Thus, part of the creation of life on planet Earth is the suitable conditions of temperature, light, and darkness, which were made possible by God's creation of the heavens and the earth with the right proportions. See also 14.19 above.

The verse also includes scientific facts about the sun and the moon. It mentions that both of them are running, each one has its own orbit, they will continue doing so for a specific term of time.

وَالْأَرْضَ بَعْدَ ذَلِكَ دَحَاهَا

79.30 . And the Earth, after that, He made it egg-shaped.

The Earth is shaped in the form of a less-than-perfect globe, pointed at its both poles and enlarged a little bit at its equator. So, it is not flat as Europeans thought at the time of the revelation and for centuries after that. If the Holy Qur'an described the Earth shape as just a circular globe, then somebody would challenge it later because it is a little bit less than a perfect globe. That's why it is described as an egg-shaped, which is the closest shape that people could identify.

The egg-shape of the Earth allows the light coming from the Sun to reach our planet in different distances, the shortest of which is to the equator and the longest is to each of the North and South poles.

It follows that the equatorial region is the hottest because it is the closest to the sun, while the Arctic and Antarctic regions are the coldest because they are the farthest regions from the sun. This explains differences in human languages and skin color, as explained in Verse 30.22 above.

The most relevant word in this verse is the verb "daha," which means: made it look like an egg in its shape. This author never heard the usage of the verb daha or its noun dahya (egg) in the eastern Mediterranean Arab region. However, he heard the noun in Libya in the early 1970s and learned that other North African Arabs use it to refer to an egg.

Bin Katheer did not explain the meaning of the verb and its origins as he usually did in his interpretations. He stated clearly that the meaning of the verb "daha" is explained by the following verse, 79.31. He added that God made the earth inhabitable by making water and pasture lands available.

In fact, Bin Katheer got this meaning of Verse 79.30 from the companions of the Prophet, peace and blessings of God be upon him, and their followers, though he did not attempt to explain the origins of the meaning of the verb itself.

The egg-shape of Earth allowed the existence of the major geographical regions of vegetation and rainfall, with rain forests on the equatorial (tropical) region and less rain to the north and south of it (the dry regions), then to more rain as we go farther to the north and south (the moist regions), and finally to the absence of vegetation to the northernmost and southernmost parts of the planet (polar regions) because snow and ice cover the freezing land. See Footnote # 7 for more details.

Translators, such as Yusuf Ali, Pickthal, and Mohsin did not attempt to find a meaning to the verb "daha," and translated it as "extended" or "spread" the earth.

Moreover, by describing Earth as egg-shaped, God Almighty praise to Him is telling humans that the Holy Qur'an is His Word and message to humanity. Europeans thought that the earth was flat until Copernicus and Galileo told them that it was a globe, allowing Columbus and other explorers to sail west in order to reach India in the east. More recent geographical research showed that the earth is not a perfect globe. For more information, see Footnote # 8.

To sum up, this great verse is telling us that God, the Knowledgeable, made Earth egg-shaped, in order to make it inhabitable by His creatures. The egg-shape of the earth created the rainfall and vegetation regions, as Verse 79.51 also reveals. This geographical diversity encouraged human migrations from less hospitable to more hospitable regions, and consequently leading to phenotypic and cultural differences between diverse human population groups.

أَخْرَجَ مِنْهَا مَاءَهَا وَمَرْعَاهَا

79.31. He produced as a result (of its egg-shape) its water and its pasture.

Verses 13.41 and 22.44 give support for the fact that Earth is a less-than-perfect globe by explaining how this has happened.

أَوَلَمْ يَرَوْا أَنَّا نَأْتِي الْأَرْضَ نَنْقُصُهَا مِنْ أَطْرَافِهَا ۗ

13.41. Haven't they seen that We come to Earth reducing it from its outlying parts?

The meaning is that the outlying parts of the Earth have been reduced leading to its shape of a less-than-perfect globe.

أَفَلَا يَرَوْنَ أَنَّا نَأْتِي الْأَرْضَ نَنْقُصُهَا مِنْ أَطْرَافِهَا ۗ

21.44 Don't they see that We come to Earth reducing it from its outlying parts?

Allah Almighty has told the truth.

* Dr. Hassan Ali El-Najjar has a Ph.D. in Sociology and a Master's degree in Cultural Anthropology from the University of Georgia, USA. He is also a native speaker of Arabic. He was born in Gaza, Palestine, in 1369 Hijriya, 1950 AD.

The author's translation of the meanings of the verses mentioned in this article is solely his responsibility though he consulted with three other translations of the Holy Qur'an, namely those of Yusuf Ali, Mohsin, and Pictal, found in www.quranexplorer.com. The author also made use of the famous Bin Katheer's interpretation of the Holy Qur'an.

Readers are advised that it is the meaning of the verses which is translated and interpreted here. It is a human effort that may be fallible and erroneous. Further, there are differences between a translator and another and between an interpreter and another due to differences in their linguistic, scientific, and cultural backgrounds. There is no claim of ultimate accuracy in the translation, as verses of the Holy Qur'an can be best understood through the Arabic text of revelation.

** Stages of writing this article:

Verses in Arabic and translations from other translators, on October 29, 2007.

Translation revised by this author to become his responsibility, on July 8, 2008.

Initial author's interpretation and comparison with the biological literature, in November-December 2008.

The Arabic quotations of the Qur'anic verses were taken from:

<http://www.quranexplorer.com/>
Arabic Qur'an: <http://www.kashar.net/Quran/QuranArabic.asp>

Qur'an in English and other languages: <http://www.kashar.net/Quran/>

Some of the translation of verses were taken from:

<http://www.quranexplorer.com/>

Footnotes:

1. The Expanding Universe has been accepted as a scientific given since the beginning of the twentieth century, following the work of Albert Einstein, Edwin Hubble, and thousands of cosmologists around the world. Hundreds of thousands of entries have been written about the subject. Just to cite the first view, readers can look at:
Big Bang Cosmology: Physics

Section II describes what it means to say the universe is expanding, ... In terms of the expanding universe, this means that not only will every galaxy ...

Expanding Universe

Nov 1, 1995 ... other words, a contracting universe instead of an expanding universe. Because the Hubble Constant is a measure of how much space is ...

archive.ncsa.uiuc.edu/Cyberia/Cosmos/ExpandUni.html - 11k - Cached - Similar pages

The Expanding Universe

In these solutions, the light coming from distant objects would be redshifted as it traveled through the expanding universe. The redshift would increase ...

skyserver.sdss.org/dr1/en/astro/universe/universe.asp - 22k - Cached - Similar pages

Expanding Universe

May 15, 2007 ... The Expanding Universe site has been discontinued. Those interested in Astronomy are invited to explore the resources available through the ...

vrl.tpl.toronto.on.ca/expanding_universe/ - 5k - Cached - Similar pages

Image results for expanding universe - Report images

2. The origin of Life on Earth

The story of life on Earth as told by scientists is identical to that mentioned in the above verses of the Holy Qur'an, which state that life started in wet, warm clay, where water mixed with the Earth's basic elements. This applies to the unicellular prokaryotic cells, which reproduced by division into similar pairs, through the process known as binary fission.

Scientific research indicates that the universe developed 10-20 billion years ago. About 4.6 years ago, the sun and the Earth developed (Scupin, 2008: 29).

See Big Bang Cosmology: Physics mentioned in Footnote # 1.

About 3.8 billion years ago, life began to develop on Earth. The atmosphere of early Earth included carbon dioxide, water vapor, carbon monoxide, hydrogen, and nitrogen, in addition to other elements. Life was the product of chemical interactions between the Earth elements and energy from the sun, volcanoes, wind storms, and lightning, which produced organic molecules, the necessary building blocks of life.

The first forms of life was the unicellular prokaryotes and unicellular eukaryotes. The first multi-cellular eukaryotes (soft-bodied animals) appeared in the ocean about 630 million years ago. This view that life started in water came out as a result of 20th century research conducted by the Russian A. I. Oparin, the Scottish J. B. S. Haldane, and the Americans Stanley Miller and Harold Urey.

Other researchers hypothesized that "early polymerizations leading to the origin of life may have occurred in cracks in the deep ocean floor where hot water, carbon monoxide, and minerals such as sulfides of iron and nickel spew forth. Such hydrothermal vents would have been better protected than Earth's surface from the catastrophic effects of meteorite bombardment. Today, these hot springs produce precursors of biological molecules and energy-rich food, including the highly reduced compounds, hydrogen sulfide and methane."

A different hypothesis about how life started on Earth indicate that life's chemical building blocks (organic polymers) "may have formed and accumulated on rock or clay surfaces, rather

than in the primordial seas. Clay, which consists of microscopic particles of weathered rock, is particularly intriguing as a possible site for early polymerizations, because it binds organic monomers and contains zinc and iron ions that may have served as catalysts. Laboratory experiments have confirmed that organic polymers form spontaneously from monomers on hot rock or clay surfaces" (Solomon, Berg, Martin, 2006: 385-387).

The accumulation of organic molecules led to the formation of the protobiont simple pre-cells. But "how pre-cells evolved into living cells remains to be solved." Understanding molecular reproduction provides us with some clues.

Biologists found that genetic information in living cells is stored in the nucleic acid DNA, which is transcribed into messenger RNA, which is translated into the proper amino acid sequence in proteins. Of special importance is the fact that both DNA and RNA can form spontaneously on clay and are capable of self-replication. However, biologists hypothesize that RNA existed on Earth before DNA. So, the self-replicating genetic code, forming on clay, was the link between organic molecules and living cells (Solomon, Berg, Martin, 2006: 388-389).

Then, the genetic information stored in DNA molecules is replicated and passed to new cells during cell division (Solomon, Berg, Martin, 2006: 2, 66). One example of such cell division is the binary fission of prokaryote reproduction (Solomon, Berg, Martin, 2006: 446). This is a process in which one cell divides into two similar cells, as illustrated by the division of bacterium *Streptococcus pyogenes* photograph on page 435 of Solomon, Berg, Martin (2006: 436).

The oldest fossil cells that are widely accepted are 2 billion years old. However, microfossils discovered in Greenland indicate that there were living prokaryotic cells about 3.8 billion years ago. These cells got their energy supplies from available organic molecules. Getting energy from sun light needed a mutation. Getting hydrogen by splitting water needed another mutation and a longer time, which was the case with cyanobacteria. These were the photosynthetic organisms, which existed about 3.1 to 3.5 billion years ago.

By 2 billion years ago, cyanobacteria had produced enough oxygen to change the Earth's atmosphere in two major ways. New aerobic organisms (aerobes) adapted to the availability of oxygen and used it more effectively for production of energy. These organisms produced oxygen and carbon dioxide regularly, which allowed oxygen to continue in existence as a stabilized and renewable element necessary for more efficient production of energy in the biosphere. Second, formation of accumulated oxygen layers in the upper atmosphere formed the ozone layer, which protects inhabitants of Earth from the harmful ultraviolet radiation from the sun (Solomon, Berg, Martin, 2006: 389-391).

3. The story of the creation of Adam in the Holy Qur'an

More details of the creation of Adam in the Holy Qur'an can be found in Al-Baqara, Chapter 2, Verses 30-39 and in other chapters, such as Al-'Araf, Chapter 7, Verses 11-26, Al-Issra, Chapter 17, Verses 61-65, Al-Kahf, Chapter 18, Verse 50, and Taha, Chapter 20, Verses 115-123.

4. Stages of the human departure from the ape family

There is no agreement among paleoanthropologists about one theory about the evolution of humans and their departure from their closest relatives, the chimpanzees (as humans share 99% of their DNA with them), in the ape family. However, the competing hypotheses agree on major facts on the basis of the archaeological, particularly fossil, record. Here are the main features of components of these working hypotheses:

I. Sahelanthropus Tchadensis, which was discovered in 2002, indicates a hominid origin dating back to 6-7 million years ago (mya), with some main differences from chimpanzees in the form of a flatter face, different teeth, and a larger brain. However, there is no evidence of walking upright, which is "a hallmark characteristic of hominids," as Verse 82.7 above states.

II. Australopithecines, which include seven main species.

1. Ardipithecus Ramidus, which dates back to about 5.8 - 4.4 mya.

2. Australopithecus Anamesnsis, which dates back to about 4.2 - 3.9 mya, had a mixture of human-like and apelike features. Back teeth and jaws larger than those of chimpanzees, front teeth smaller, was bipedal having an upright posture, the first marked human evolution from the ape family.

3. Australopithecus Afaresnsis, which dates back to about 4 - 3 mya, the common ancestor of the extinct A. Rubustus and the A. Africanus, had relatively small brain, pronounced supraorbital ridges, a jutting jaw, and a large canine teeth. No evidence of making tools or fire.

4. Australopithecus Africanus, which dates back to about 3 - 2.4 mya, walked erect, had human-like hands and teeth, ate both plants and animals, had smaller brain than that of present humans but much like that of its primate ancestors.

5. Australopithecus Aethiopicus, which dates back to about 2.5 - 2.2 mya, the ancestor of the Robustus and

Boisei extinct branches.

6. Australopithecus Robustus, which dates back to about 2 - 1.4 mya. Some researchers classify the extinct

A. Robustus in a separate genus, Paranthropus.

7. Australopithecus Boisei, an extinct species which dates back to about 2.2 - 1.1 mya.

Summary of the main characteristics of A. Aethiopicus, A. Rubustus, and A. Boisei:

These are "larger than A. Africanus and have extremely large molars, very powerful jaws, relatively small brains, and heavy skull crests. Most females lacked the skull crests and had substantially smaller jaws, another example of sexual dimorphism in early hominids. The teeth and jaws suggest a diet, perhaps of tough roots and tubers, that would require powerful grinding. These so-called robust australopithecines may or may not be closely related but are generally thought to represent evolutionary offshoots, or side branches, of human evolution" (Solomon, Eldra P., Linda R. Berg, and Diana W. Martin, 2006: 412).

III. Homo Habilis, which dates back to 2.3 - 1.6 mya, the first hominid to have enough features of the same modern human genus. It was small, with a larger brain and smaller premolars and molars than australopithecine. It left behind sites with primitive tools, stones with sharp edges for cutting and scraping, pebble choppers and flakes. Some researchers argue for classifying it more as australopithecus than as homo.

IV. Homo Ergaster, which dates back to 2 - 1.4 mya, the African ancestor of both Homo Erectus and Homo Heidelbergensis. Thus, it is the ancestor of modern humans.

V. Homo Erectus, which dates back to 1.7- 0.2 mya, is believed by some researchers as the east Asian offshoot of homo ergaster. Many researchers argue that it apparently evolved from homo habilis but it was taller, had a larger brain which kept getting larger. However, it retain some ape characteristics like the heavy suprorbital ridge and projecting face. It was the first hominid to have fewer differences between the sexes. It made more advanced stone tools, known as Acheulean tools, including hand axes, choppers, borers, and scrapers. It lived in northern colder areas, scavenged, hunted, wore clothes, built fire, lived in caves or shelters, and used spears as weapons. Some researchers argue that it went extinct in its east Asian region when more recent humans arrived later. However, there is no consensus on this argument.

VI. Homo Heidelbergensis, which dates back to 800 -100 thousand years ago, the ancestor of both Homo Neanderthalensis and Homo Sapiens. Some researchers call it as archaic Homo Sapiens.

VII. Homo Neanderthalensis, which dates back to 230 - 30 thousand years ago, now extinct. This species lived in Western Asia, then proceeded to Europe as ice glaciers covering the continent receded northward. These early humans, Neanderthals, had short, sturdy builds. Their faces projected slightly, their chins and foreheads receded. They had heavy supraorbital ridges, and jawbones, and their brains and front teeth were larger than those of modern humans. Their nasal cavities were large (in adaptation to the European ice age), and their cheekbones were receding.

There is no consensus among researchers that Neanderthals were a separate species from Homo sapiens. They had more sophisticated (Mousterian) tools than H Erectus, like pointed spears, with which they hunted large animals. They had advanced social cooperation, rituals, and religious beliefs, as evidenced in burials.

About 30,000 years ago, Neanderthals disappeared from the archaeological record. Some researchers argue that they were outcompeted or exterminated by the more efficient Homo sapiens. Support for this hypothesis comes from analysis of the mitochondrial DNA of Neanderthal bones, which showed them as an evolutionary dead end, that did not interbreed with more modern humans.

This hypothesis was challenged by another, based on discovering a skeleton of a 4-year-old child in Portugal, which dates back to 24,500 years ago. The skeleton showed mixed features of both humans and Neanderthals (short lower limb bones). Researchers following this hypothesis argue that there was interbreeding between the two species. However, others still disagree saying that the child represented a normal variation in the human species.

VIII. Homo Sapiens, modern humans, appeared about 100 thousand years ago in Africa and the Middle East. By about 30,000 years ago, Homo sapiens became the only remaining members of genus Homo. Their skull lacked a heavy brow ridge and had a distinct chin.

There are two competing hypotheses about the origin of modern Homo sapiens.

The first is called out-of-Africa, through which researchers argue that Homo sapiens originated in Africa about 200,000 - 100,000 years ago, then spread to the Middle East, Asia, then to Europe.

The second is the multi-regional hypothesis, on the basis of which researchers argue that Homo Erectus spread around the world, then geographical isolation allowed evolution to modern humans. These groups continued to interact and interbreed with one-another, which prevented a complete reproduction isolation, but leading to the present day human regional variations.

Both hypotheses draw support from studies about fossils, molecular biology, and population genetics.

Source: Solomon, Eldra P., Linda R. Berg, and Diana W. Martin (2006: 409-416).

5. See pictures of Japanese macaque monkeys at:

http://www.blueplanetbiomes.org/japanese_macaque.htm.

For information about human migration and skin color, see Scupin (2008: 43-45, 412-439).

6. For more information about language, see Scupin (2008: 96-124).

7. Distribution of rainfall and vegetation in the world.

A - Tropical Moist Climates: all months have average temperatures above 18° Celsius.
Abundant rain and
vegetation.

B - Dry Climates: with deficient precipitation during most of the year, leading to least
vegetation.

C - Moist Mid-latitude Climates with Mild Winters, leading to more rainfall and more
vegetation.

D - Moist Mid-Latitude Climates with Cold Winters.

E - Polar Climates: with extremely cold winters and summers, which makes human life least
possible despite the
availability of water and vegetation .

7(v) Climate Classification and Climatic Regions of the World

Apr 16, 2008 ... When studying about the Earth's Climatic Regions as described below, use this animation (Figure 7v-1) as a guide to understanding the large ...

www.physicalgeography.net/fundamentals/7v.html - 143k - Cached - Similar pages

World Climates

Köppen divided the Earth's surface into climatic regions that generally coincided with world patterns of vegetation and soils. The Köppen system recognizes ...

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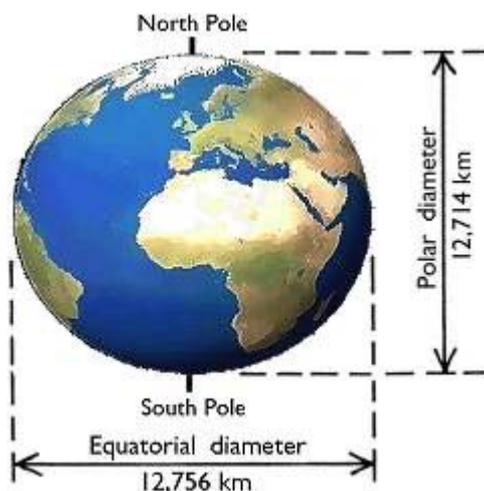
Image results for climatic regions - Report images

Physical Geography: Climatic Regions

Climate Regions. Modified Koppen Classification System. Our textbook uses the Koppen classification of world climates

8. Egg-Shaped Earth:

http://www.answering-christianity.com/egg-shaped_earth.htm Adio of Dr. Muhammed Zaghlool Al-Najjar.



Voyager pictures reveal Solar System is egg-shaped - Telegraph

Jul 2, 2008 ... Solar system is egg-shaped. Artist's rendering of Voyager 2 at the ... data back to Earth, long after their original missions ended. ...

www.telegraph.co.uk/scienceandtechnology/science/sciencenews/3346213/Voyager-pictures-reveal-Solar-System-is-egg-shaped.html - Similar pages

References:

A. Yusuf Ali. 1983 [1934]. "The Holy Qur'an: Text, Translation, and Commentary." Published by Amana Corp., Brentwood, Maryland, USA

Bin Katheer, Isma'il. "Interpretation of the Holy Qur'an." Hadeeths were revised and commented on by Hani Al-Haj, who compared them with those in the books of Nasseruddin Al-Albani. Published by Al-Tawfiqiya (Al Tawfikia) Bookshop, Cairo, Egypt. No year of publication but it should be in the last two decades of the twentieth century. (Author's name and insignia: Imam Al-Hafedh Emaduddin, Abul Fida, Isma'il Bin Katheer, Al-Dimashqi, who died in 774 Hijriya, about 1372 AD).

Scupin, Raymond. 2008. "Cultural Anthropology: A Global Perspective." 7th Edition. New Jersey: Pearson, Prentice Hall. Note: This is a textbook used in teaching Cultural Anthropology on the college level all over the United States. It's a comprehensive survey of research in the field.

Solomon, Eldra P., Linda R. Berg, and Diana W. Martin. 2006. "Biology." 7th Edition. Belmont, CA: Books/Cole-Thomson. Note: This is a major biology textbook used in teaching biology on the college level all over the United States. It's a comprehensive survey of research in the field.

The Holy Qur'an, the Arabic text, as published in www.quranexplorer.com

<http://www.aljazeera.com/English/Editorials/2007/October/Creation%20and%20Evolution%20in%20the%20Holy%20Qur'an%20By%20Hassan%20El-Najjar.htm>