

The Scientific Miracles of the Qur'an

INTRODUCTION

Fourteen centuries ago, God sent down the Qur'an to mankind as a book of guidance. He called upon people to be guided to the truth by adhering to this book. From the day of its revelation to the day of judgement, this last divine book will remain the sole guide for humanity.

The matchless style of the Qur'an and the superior wisdom in it are definite evidence that it is the word of God. In addition, the Qur'an has many miraculous attributes proving that it is a revelation from God. One of these attributes is the fact that a number of scientific truths that we have only been able to uncover by the technology of the 20th century were stated in the Qur'an 1,400 years ago.

Of course the Qur'an is not a book of science. However, many scientific facts that are expressed in an extremely concise and profound manner in its verses have only been discovered with the technology of the 20th century. These facts could not have been known at the time of the Qur'an's revelation, and this is still more proof that the Qur'an is the word of God.

In order to understand the scientific miracle of the Qur'an, we must first take a look at the level of science at the time when this holy book was revealed.

In the 7th century, when the Qur'an was revealed, Arab society had many superstitious and groundless beliefs where scientific issues were concerned. Lacking the technology to examine the universe and nature, these early Arabs believed in legends inherited from past generations. They supposed, for example, that mountains supported the sky above. They believed that the earth was flat and that there were high mountains at its both ends. It was thought that these mountains were pillars that kept the vault of heaven high above.

However all these superstitious beliefs of Arab society were eliminated with the Qur'an. In Sura Sad, verse 2, it was said: "God is He who raised up the heavens without any support..."(The Qur'an, 38:2). This verse invalidated the belief that the sky remains above because of the mountains. In many other subjects, important facts were revealed at a time when no one could have known them. The Qur'an, which was revealed at a time when people knew very little about astronomy, physics, or biology, contains key facts on a variety of subjects such as the creation of the universe, the creation of the human being, the structure of the atmosphere, and the delicate balances that make life on earth possible.

Now, let us look at some of these scientific miracles revealed in the Qur'an together.

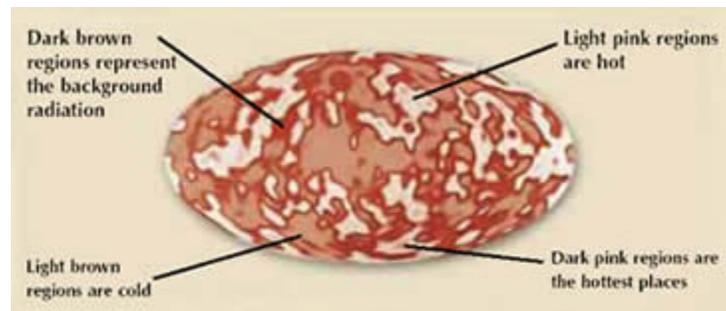
THE COMING OF THE UNIVERSE INTO EXISTENCE

The origin of the universe is described in the Qur'an in the following verse:

"He is the Originator of the heavens and the earth."(The Qur'an, 6: 101)

This information given in the Qur'an is in full agreement with the findings of contemporary science. The conclusion that astrophysics has reached today is that the entire universe, together with the dimensions of matter and time, came into existence as a result of a great explosion that occurred in no time. This event, known as "The Big Bang" proved that the universe was created from nothingness as the result of the explosion of a single point. Modern scientific circles are in agreement that the Big Bang is the only rational and provable explanation of the beginning of the universe and of how the universe came into being.

Before the Big Bang, there was no such thing as matter. From a condition of **non-existence** in which neither matter, nor energy, nor even time existed, and which can only be described metaphysically, matter, energy, and time were all created. This fact, only recently discovered by modern physics, was announced to us in the Qur'an 1,400 years ago.



The sensitive sensors on board the COBE space satellite which was launched by NASA in 1992, captured evidentiary remnants of the Big Bang. This discovery served as evidence for the Big Bang, which is the scientific explanation of the fact that the universe was created from nothing.

The Expansion of the Universe

In the Qur'an, which was revealed 14 centuries ago at a time when the science of astronomy was still primitive, the expansion of the universe was described like this:

"And it is We who have constructed the heaven with might, and verily, it is We who are steadily expanding it."

(The Qur'an, 51:47)

The word "heaven", as stated in this verse, is used in various places in the Qur'an with the meaning of space and universe. Here again, the word is used with this meaning. In other words, in the Qur'an it is revealed that the universe "expands". And this is the very conclusion that science has reached today.

Until the dawn of the 20th century, the only view prevailing in the world of science was that "the universe has a constant nature and it has existed since infinite time". The research, observations, and calculations carried out by means of modern technology, however, have revealed that the universe in fact had a beginning, and that it constantly "**expands**".

At the beginning of the 20th century, the Russian physicist Alexander Friedmann and the Belgian cosmologist Georges Lemaitre theoretically calculated that the universe is **in constant motion and that it is expanding**.

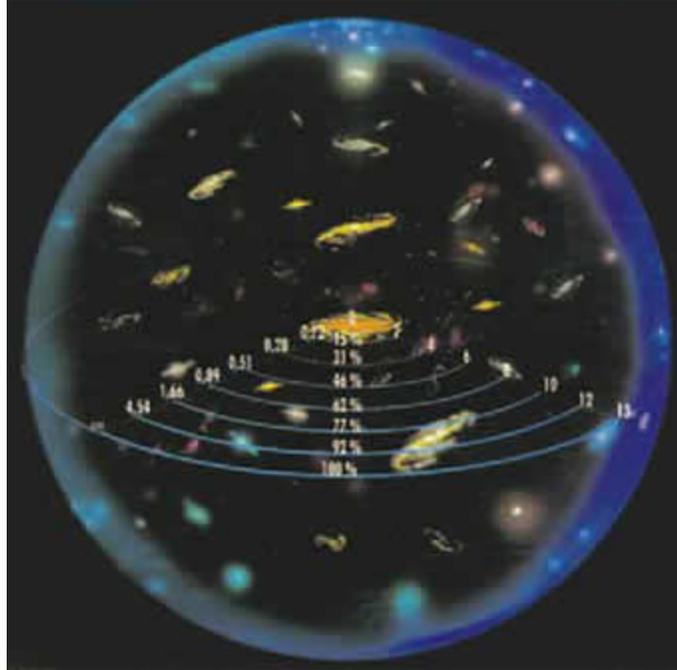
This fact was proved also by observational data in 1929. While observing the sky with a telescope, Edwin Hubble, the American astronomer, discovered that the stars and galaxies were constantly moving away from each other. A universe where everything constantly moves away from everything else implied a constantly **expanding** universe. The observations carried out in the following years verified that the universe is constantly expanding. This fact was explained in the Qur'an when that was still unknown to anyone. This is because the Qur'an is the word of God, the Creator, and the Ruler of the entire universe.



Edw



Georges Lemaitre



From the moment of the big bang, the universe has been constantly expanding at a great speed. Scientists compare the expanding universe to the surface of a balloon that is inflated.

The Splitting Asunder of "The Heavens and The Earth"

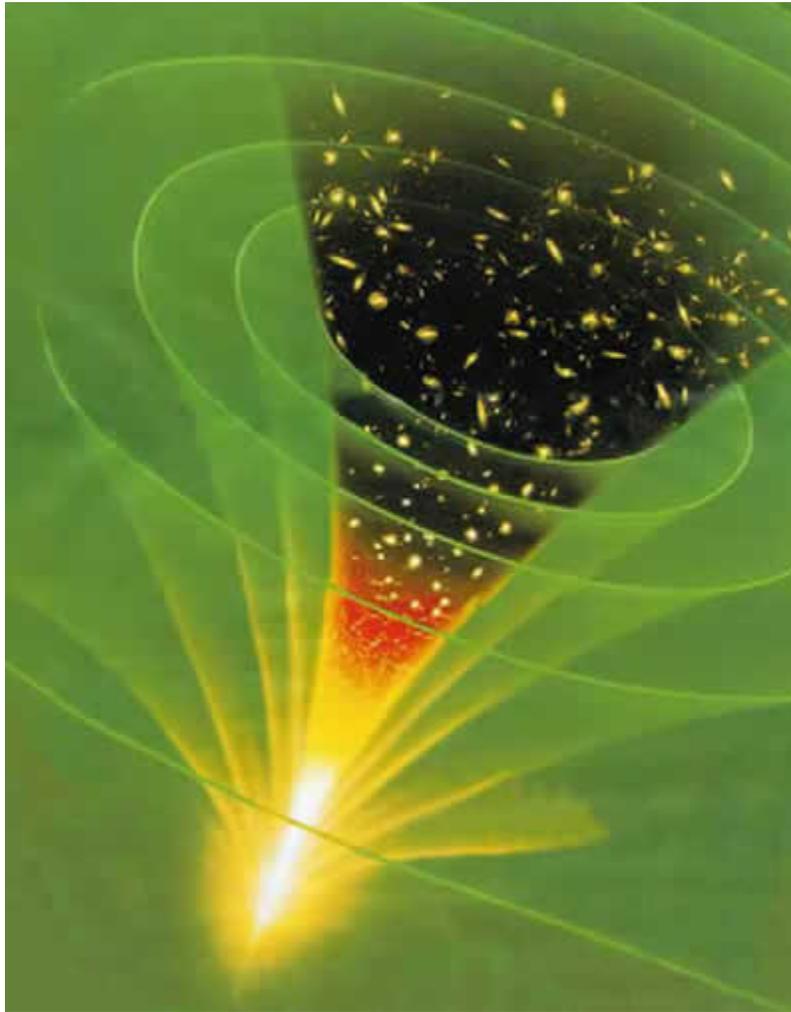
Another verse about the creation of the heavens is as follows:

"Do not the Unbelievers see that the heavens and the earth were joined together (as one unit of creation), before We clove them asunder, and We made from water every living thing. Will they not then believe?"
(The Qur'an, 21:30)

The word *ratq* translated as "**sewn to**" means "mixed in each, blended" in Arabic dictionaries. It is used to refer to two different substances that make up a whole. The phrase "**we unstitched**" is the verb *fataqa* in Arabic and implies that something comes into being by tearing apart or destroying the structure of *ratq*. The sprouting of a seed from the soil is one of the actions to which this verb is applied.

Let us take a look at the verse again with this knowledge in mind. In the verse, sky and earth are at first subject to the status of *ratq*. They are separated (*fataqa*) with one coming out of the other. Intriguingly, when we remember the first moments of the Big Bang, we see that a single point included all the matter in the universe. In other words, everything, including "the heavens and earth" which were not created yet, were included in this point in a condition of *ratq*. This point exploded violently, causing its matter to *fataqa* and in the process created the structure of the whole universe.

When we compare the expressions in the verse with scientific findings, we see that they are in perfect agreement with each other. Interestingly enough, these findings were not arrived at until the 20th century.



The picture represents the Big Bang, which revealed once again that God created the universe from nothingness. The Big Bang is a theory that has been proven with scientific evidence. Although some scientists tried to advance alternative theories against the Big Bang, scientific evidence caused the theory to be completely accepted by the scientific community.

Orbits

While referring to the Sun and the Moon in the Qur'an, it is emphasized that each moves in a definite orbit.

"It is He Who created the night and the day, and the sun and the moon. They swim along, each in an orbit. "
(The Qur'an, 21:33)

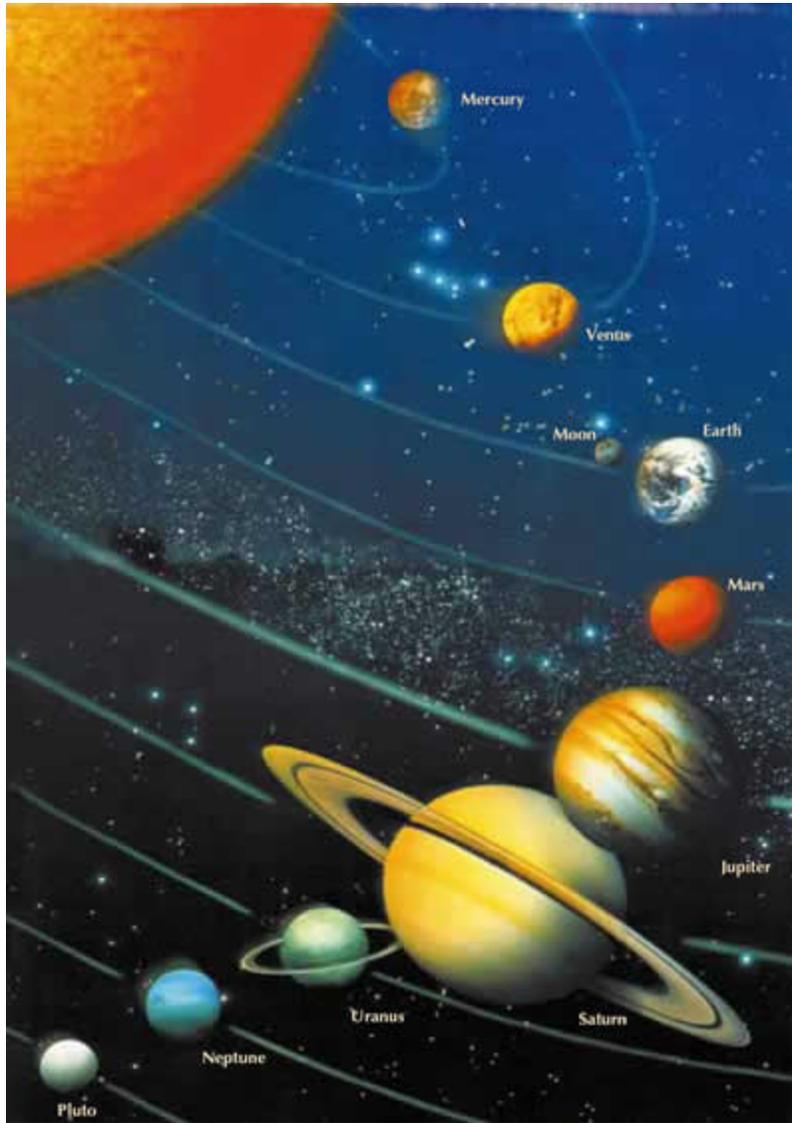
It is mentioned in another verse, too, that the Sun is not static but moves in a definite orbit:

"And the sun runs to its resting place. That is the decree of the Almighty, the All-Knowing. "
(The Qur'an, 37:38)

These facts communicated in the Qur'an have been discovered by astronomical observations in our age. According to the calculations of experts on astronomy, the Sun is traveling at the enormous speed of 720,000 kilometers an hour in the direction of the star Vega in a particular orbit called the Solar Apex. This means that the sun travels roughly 17,280,000 kilometers a day. Along with the Sun, and all planets and satellites within the gravitational system of the Sun also travel the same distance. In addition, all the stars in the universe are in a similar planned motion.

That the entire universe is full of paths and orbits such as this one, is written in the Qur'an as follows:

"By the sky full of paths and orbits."
(The Qur'an, 51:7)



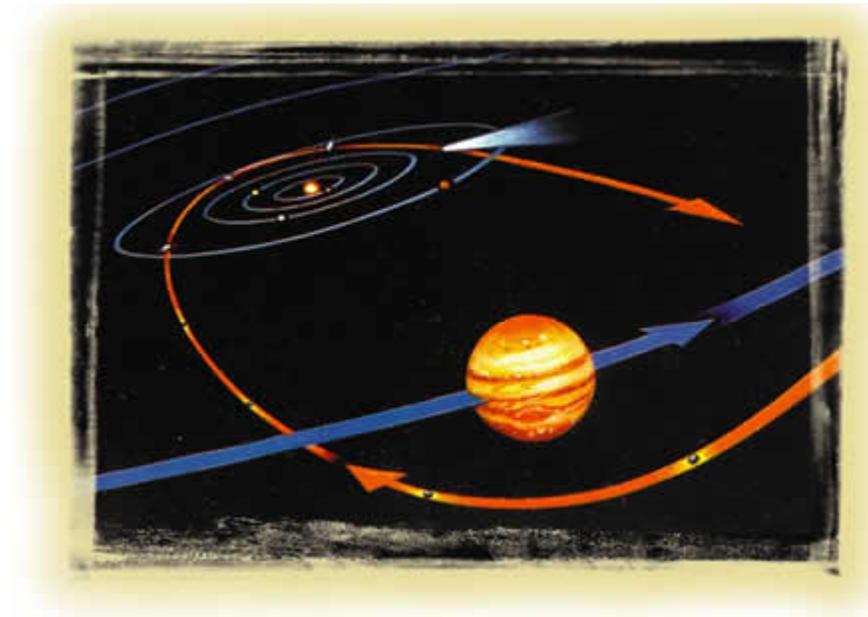
There are about 200 billion galaxies in the universe, consisting of nearly 200 billion stars in each. Most of these stars have planets, and most of those planets have satellites. All of these heavenly bodies move in very precisely computed orbits. For millions of years, each has been "swimming" along in its own orbit in perfect harmony and order with all the others. Moreover, many comets also move along in the orbits determined for them.

The orbits in the universe do not only belong to celestial bodies. The galaxies also travel at enormous speeds in computed, planned orbits. During these movements, none of these celestial bodies cuts across another's path, or collides with another.

Surely at the time the Qur'an was revealed, mankind did not possess today's telescopes or advanced observation technologies to observe millions of kilometres of space, nor the modern knowledge of physics or astronomy. Therefore, at that time, it was not possible to determine scientifically that space is "full of paths and orbits" as stated in the



verse. However, this was openly declared to us in the Qur'an that was revealed at that time: -because the Qur'an is the word of God.



Like many other comets in the universe, Halley's comet, seen above, also moves in a planned orbit. It has a specific orbit and it moves in this orbit in a perfect harmony with other celestial bodies.

All celestial bodies including planets, satellites of these planets, stars, and even galaxies have their own orbits that have been determined with very delicate computations. The One Who established this perfect order and

maintains it is God, Who created the entire universe.

The Roundness of the Earth

"He has created the Heavens and the Earth for Truth. He wraps the night up in the day, and wraps the day up in the night."
(The Qur'an, 39:5)

In the Qur'an, the words used for describing the universe are quite remarkable. The Arabic word that is translated as "to wrap" in the above verse is "takwir". In English, it means "to make one thing lap over another, folded up as a garment that is laid away". (For instance, in Arabic dictionaries this word is used for the action of wrapping one thing around another, in the way that a turban is put on.)

The information given in the verse about the day and the night wrapping each other up includes accurate information about the shape of the world. This can be true only if the earth is round. This means that in the Qur'an, which was revealed in the 7th century, the roundness of the world was hinted at.

It should be remembered, however, that the understanding of astronomy of the time perceived the world differently. It was then thought that the world was a flat plane and all scientific calculations and explanations were based on this belief. The verses of the Qur'an, however, include information that we have learned only in the past century. Since the Qur'an is God's word, the most correct words were used in it when it comes to describing the universe.

The Protected Roof

In the Qur'an, God calls our attention to a very interesting attribute of the sky:

"We made the sky a preserved and protected roof yet still they turn away from Our Signs.."
(The Qur'an, 21:32)

This attribute of the sky has been proved by scientific research carried out in the 20th century.

The atmosphere surrounding the earth serves crucial functions for the continuity of life. While destroying many meteors big and small as they approach the earth, it prevents them from falling to earth and harming living things.

In addition, the atmosphere filters the light rays coming from space that are harmful to living things. Interestingly, the atmosphere lets only harmless and useful rays- visible light, near ultraviolet light, and radio waves pass through. All of this radiation is vital for life. Near ultraviolet rays, which are only partially let in by the atmosphere, are very important for the photosynthesis of plants and for the survival of all living beings. The majority of the intense ultraviolet rays emitted from the sun are filtered out by the ozone layer of the atmosphere and only a limited-and essential-part of the ultraviolet spectrum reaches the Earth.

The protective function of the atmosphere does not end here. The atmosphere also protects the earth from the freezing cold of the space, which is about minus 270° C.



The atmosphere only lets rays required for life reach the Earth. Ultraviolet rays, for example, make it to the world only partially. This is the most appropriate range to allow plants to make photosynthesis and eventually for all living things to survive.



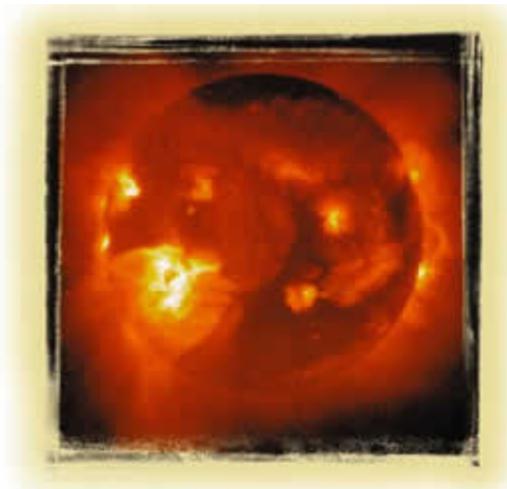
This illustration shows meteors that are about to crash into the earth. The celestial bodies wandering in space could pose a serious threat to the Earth. Yet, God, He Who creates most perfectly, has made the atmosphere a protective roof. Thanks to this special protection, most meteoroids do not harm the Earth, as they fall to pieces in the

atmosphere.

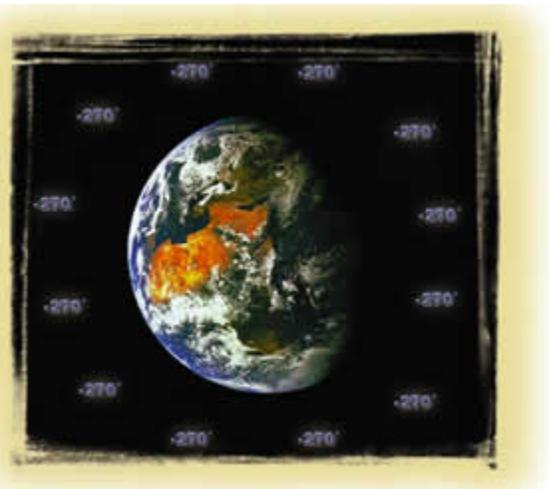


Most people looking at the sky do not think about the protective aspect of the atmosphere. They almost never think what kind of a place the world would be like if this structure did not exist. The above photo belongs to a giant crater caused by a meteor that fell in Arizona, in the USA. If the atmosphere did not exist, millions of meteoroids would fall to the Earth and the Earth would become an inhabitable place. Yet, the

protective aspect of the atmosphere allows living things to survive in safety. This is certainly God's protection of people, and a miracle proclaimed in the Qur'an.



The energy released in a Sun burst is so powerful that the human mind would hardly comprehend it: A single burst is equivalent to 100 billion atomic bombs similar to the one dropped on Hiroshima. The world is protected from the destructive effects of this energy by the atmosphere and the Van Allen Belts.



As we move from the Earth, which is perfectly fitted for human life, beyond the atmosphere into the space, we come across a freezing cold. The world is protected from the freezing cold of space, which is around - 270 degrees, by the help of the atmosphere.



The magnetosphere layer, formed by the magnetic field of the Earth, serves as a shield protecting the earth from celestial bodies, harmful cosmic rays and particles. In the above picture, this magnetosphere layer, which is also named Van Allen Belts, is seen. These belts at thousands of kilometres above the earth protect the living things on the Earth from the fatal energy that would otherwise reach it from space.

All these scientific findings prove that the world is protected in a very particular way. The important thing is that this protection was made known in the Qur'an in the verse "We made the sky a preserved and protected roof" 1,400 years ago.

It is not only the atmosphere that protects the Earth from harmful effects. In addition to the atmosphere, the Van Allen Belt, a layer caused by the magnetic field of the Earth, also serves as a shield against the harmful radiation that threatens our planet. This radiation, which is constantly emitted by the Sun and other stars, is deadly to living things. If the Van Allen belt did not exist, the massive outbursts of energy called solar flares that frequently occur in the Sun would destroy all life on Earth.

Dr. Hugh Ross has this to say on the importance of Van Allen Belts to our lives:

In fact, the Earth has the highest density of any of the planets in our Solar System. This large nickel-iron core is responsible for our large magnetic field. This magnetic field produces the Van-Allen radiation shield, which protects the Earth from radiation bombardment. If this shield were not present, life would not be possible on the Earth. The only other rocky planet to have any magnetic field is Mercury - but its field strength is 100 times less than the Earth's. Even Venus, our sister planet, has no magnetic field. The Van-Allen radiation shield is a design unique to the Earth.⁽¹⁾

The energy transmitted in just one of these bursts detected in recent years was calculated to be equivalent to 100 billion atomic bombs similar to the one dropped on



Hiroshima. Fifty-eight hours after the burst, it was observed that the magnetic needles of compasses displayed unusual movement and 250 kilometers above the earth's atmosphere, the temperature suddenly increased to 2,500° C.

In short, a perfect system is at work high above the Earth. It surrounds our world and protects it against external threats. Scientists only learned about it recently, yet centuries ago, God informed us in the Qur'an of the world's atmosphere functioning as a protective shield.

The Returning Sky

The verse 11 of Sura Tarik in the Qur'an, refers to the "returning" function of the sky.

"By Heaven with its cyclical systems."
(The Qur'an, 86:11)

This word interpreted as "cyclical" in Qur'an translations also has meanings of "sending back" or "returning".

As known, the atmosphere surrounding the Earth consists of many layers. Each layer serves an important purpose for the benefit of life. Research has revealed that these layers have the function of turning the materials or rays they are exposed to back into space or back down to the Earth. Now let us examine with a few examples of this "recycling" function of the layers encircling the Earth.

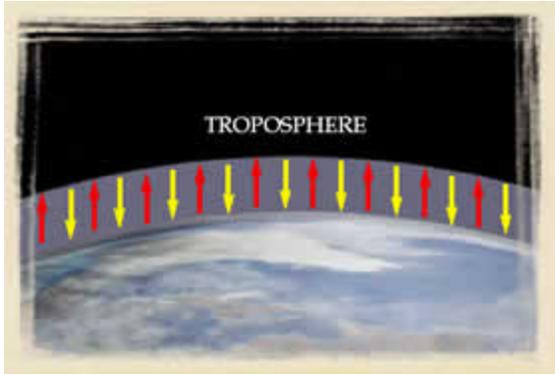
The troposphere, 13 to 15 kilometers above the Earth, enables water vapor rising from the surface of the Earth to be condensed and **turn back** as rain.

The ozone layer, at an altitude of 25 kilometers, reflects harmful radiation and ultraviolet light coming from space and **turns both back** into space.

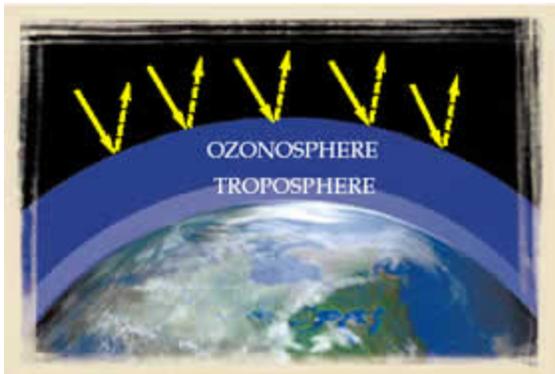
The ionosphere, **reflects** radio waves broadcast from the Earth **back** down to different parts of the world, just like a passive communications satellite, and thus makes wireless communication, radio, and television broadcasting possible over long distances.

The magnetosphere layer **turns** the harmful radioactive particles emitted by the Sun and other stars **back** into space before they reach the Earth.

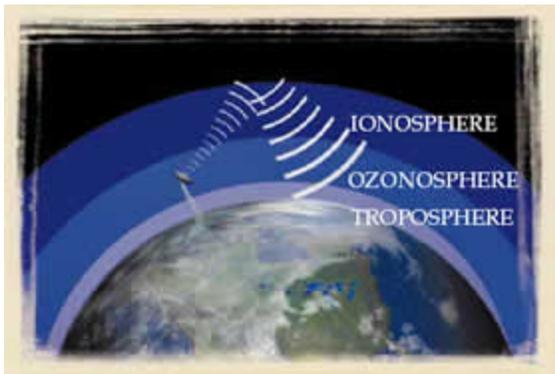
The fact that this property of the atmosphere's layers, that was only demonstrated in the recent past was announced centuries ago in the Qur'an, once again demonstrates that the Qur'an is the word of God.



The presence of water is essential for life on Earth. One of the factors acting in the formation of water is the Troposphere, one of the layers of the atmosphere. The troposphere layer enables water vapour rising from the surface of the Earth to be condensed and turn back down to the Earth as rain.



The atmosphere layer that blocks the rays that might be fatal to life on Earth is the Ozonosphere. The Ozonosphere turns harmful cosmic rays like ultraviolet back to space, hence preventing them from reaching the Earth and harming life.



Each layer of the atmosphere has beneficial attributes for human beings. The Ionosphere layer, one of the upper layers of the atmosphere, for example, reflects radio waves broadcast from a certain centre back down to the Earth, thus enabling broadcasts to be received from long distances.

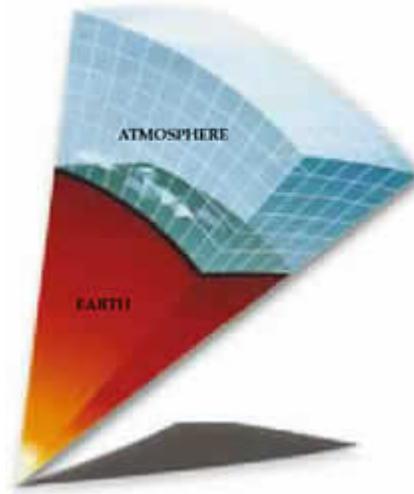
The Layers of the Atmosphere

One fact about the universe revealed in the verses of the Qur'an is that the sky is made up of seven layers.

"It is He Who created everything on the earth for you and then directed His attention up to heaven and arranged it into seven regular heavens. He has knowledge of all things."
(The Qur'an, 2:29)

"Then He turned to heaven when it was smoke. In two days He determined them as seven heavens and revealed, in every heaven, its own mandate."
(The Qur'an, 41:12)

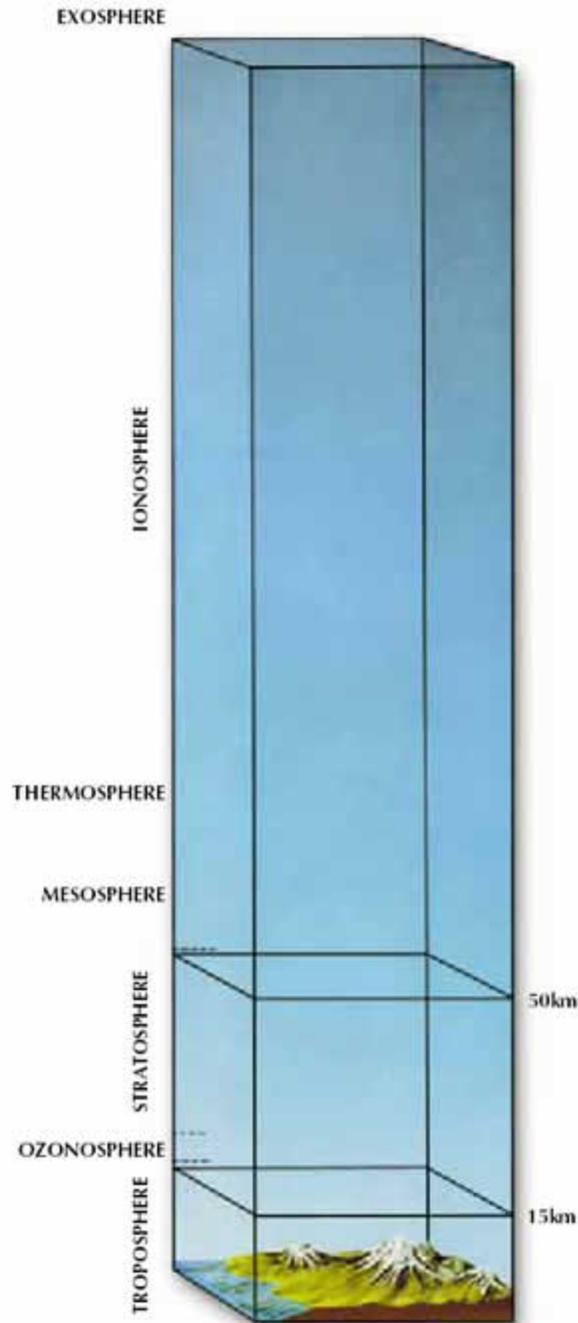
The word "heavens", which appears in many verses in the Qur'an, is used to refer to the sky above the Earth, as well as the entire universe. Given this meaning of the word, it is seen that the Earth's sky, or the atmosphere, is made up of seven layers.



Qur'an.

The Earth has all the attributes that are needed for life. One of them is the atmosphere, which serves as a shield protecting living things. Today, it is an established fact that the atmosphere is made up of different layers lying on top of one another. Just as it is described in the Qur'an, the atmosphere is made up of exactly seven layers. This is certainly one of the miracles of the

Indeed, today it is known that the world's atmosphere consists of different layers that lie on top of each other. Furthermore, it consists, just as is described in the Qur'an, of exactly seven layers. In a scientific source, the subject is described as follows:



Scientists have found that the atmosphere consists of several layers. The layers differ in such physical properties as pressure and the types of gasses. The layer of the atmosphere closest to Earth is called the **TROPOSPHERE**. It contains about 90% of the total mass of the atmosphere. The layer above the troposphere is called the **STRATOSPHERE**. The **OZONE LAYER** is the part of the stratosphere where absorption of ultraviolet rays occurs. The layer above the stratosphere is called the **MESOSPHERE**. The **THERMOSPHERE** lies above the mesosphere. The ionized gases form a layer within the thermosphere called the **IONOSPHERE**. The outermost part of Earth's atmosphere extends from about 480 km out to 960 km. This part is called the **EXOSPHERE**. (2)

If we count the number of layers cited in this source, we see that the atmosphere consists of exactly seven layers, just as stated in the verse.

1. Troposphere
2. Stratosphere
3. Ozonosphere
4. Mesosphere
5. Thermosphere
6. Ionosphere
7. Exosphere

Another important miracle on this subject is mentioned in the statement "**(He) revealed, in every heaven, its own mandate.**", in verse 12 of Sura Fussilet. In other words, in the verse, God states that He assigned each heaven its own duty. Truly, as seen in previous chapters, each one of these layers has vital duties for the benefit of human kind and all other living things on the Earth. Each layer has a particular function, ranging from forming rain to preventing harmful rays, from reflecting radio waves, to averting the harmful effects of meteors.

One of these functions, for example, is stated in a scientific source as follows:

Earth's atmosphere has 7 layers. The lowest layer is called troposphere. Rain, snow and

14 centuries ago, when the sky was believed to be one unified body, the Qur'an miraculously stated that it consisted of layers, and what is more, "seven" layers. Modern science, on the other hand, discovered the fact that the atmosphere surrounding the Earth is made up of "seven" basic layers only very recently.

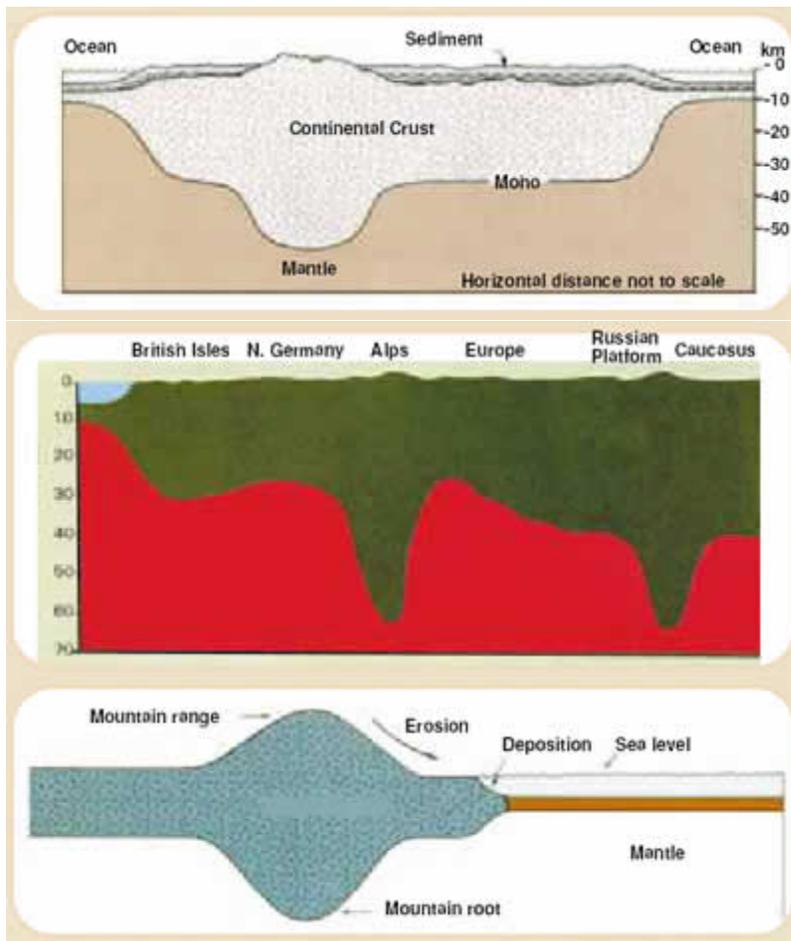
wind only take place in the troposphere. (3)

It is a great miracle that these facts, which could not possibly be discovered without the technology of the 20th century, were explicitly stated by the Qur'an 1,400 years ago.

The Function of Mountains

The Qur'an draws attention to a very important geological function of mountains.

"We placed firmly embedded mountains on the earth, so it would not move under them..."
(The Qur'an, 21:31)



Mountains have roots deep under the surface of the ground. (*Earth*, Press and Siever, p. 413)

Schematic section. Mountains, like pegs, have deep roots embedded in the ground. (*Anatomy of the Earth*, Cailleux, p.220)
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Another illustration shows how mountains are peg-like in shape, due to their deep roots. (*Earth Science*, Tarbuck and Lutgens, p.158)
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As we have noticed, it is stated in the verse that mountains have the function of preventing shocks in the Earth.

This fact was not known by anyone at the time the Qur'an was revealed. It was in fact brought to light only recently as a result of the findings of modern geology.

According to these findings, mountains emerge as a result of the movements and collisions of massive plates forming the Earth's crust. When two plates collide, the stronger one slides under the other, the one on the top bends and forms heights and mountains. The layer beneath proceeds under the ground and makes a deep extension downward. That means that mountains have a portion stretching downwards, as large as their visible parts on the Earth.

In a scientific text, the structure of mountains is described as follows:



Where continents are thicker, as in mountain ranges, the crust sinks deeper into the mantle. (4)

In a verse, this role of the mountains is pointed out by a comparison with "pegs":

"Have We not made the earth as a bed and the mountains its pegs?"
(The Qur'an, 78:6-7)

Mountains, in other words, clench the plates in the Earth's crust together by extending above and beneath the Earth's surface at the conjunction points of these plates. In this way,



With extensions that mountains extend out towards under the ground as well as over the ground, they clench different plates of the earth together like a peg. The Earth's crust consists of plates that are in constant motion. This clenching property of mountains prevents shocks to a great extent, by fixing the earth's crust, which has a very movable structure.

they fix the Earth's crust, and prevent it from drifting over the magma stratum or among its plates. Briefly, we may liken mountains to nails that keep pieces of wood together.

This fixing function of the mountains is described in scientific literature by the term "isostasy". Isostasy means the following:

Isostasy: general equilibrium in the Earth's crust maintained by a yielding flow of rock material beneath the surface under gravitational stress. (5)

This vital role of mountains, that was discovered by modern geology and seismic research, was revealed in the Qur'an centuries ago as an example of the supreme wisdom in God's creation.

"We placed firmly embedded mountains on the earth, so it would not move under them..." (The Qur'an, 21:31)

The Movement of Mountains

In one verse, we are informed that mountains are not motionless as they seem, but are in constant motion.

"You will see the mountains you reckoned to be solid going past like clouds." (The Qur'an, 27:88)

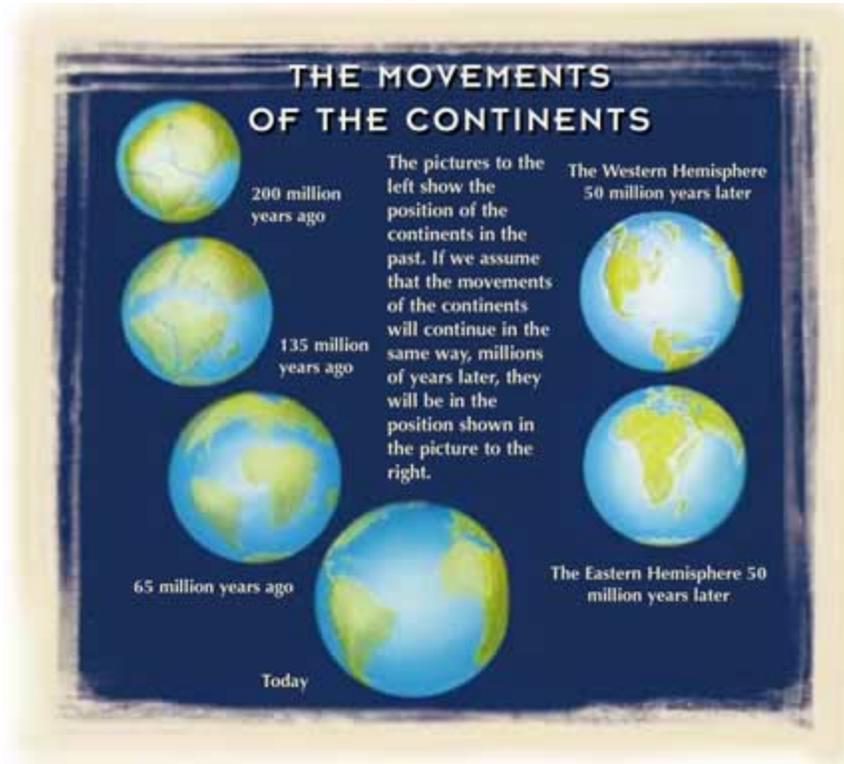
This motion of the mountains is caused by the movement of the Earth's crust that they are located on. The Earth's crust 'floats' over the mantle layer, which is denser. It was at the beginning of the 20th century when, for the first time in history, a German scientist by the name of Alfred Wegener proposed that the continents of the earth had been attached together when it first formed, but then drifted in different directions, and thus separated as they moved away from each other.

Geologists understood that that Wegener was right only in the 1980s, 50 years after his death. As Wegener pointed out in an article published in 1915, the land masses on the earth were joined together about 500 million years ago. As Wegener pointed out in a 1915 article, the land masses of the earth were joined together some 500 million years ago, and this large mass, called *Pangaea*, was located in the South Pole.

Approximately 180 million years ago, *Pangaea* divided into two parts, which drifted in different directions. One of these giant continents was *Gondwana*, which included Africa, Australia, Antarctica and India. The second one was *Laurasia*, which included Europe, North America and Asia, except for India. Over the next 150 million years following this separation, *Gondwana* and *Laurasia* divided into smaller parts.

These continents that emerged after the split of *Pangaea* have been constantly moving on the Earth's surface at several centimetres per year, in the meantime changing the sea and land ratios of the Earth.

Discovered as a result of the geological research carried out at the beginning of the 20th century, this movement of the Earth's crust is explained by scientists as follows:



The crust and the uppermost part of the mantle, with a thickness of about 100 kms., are divided into segments called plates. There are six major plates, and several small ones. According to the theory called plate tectonics, these plates move about on Earth, carrying continents and ocean floor with them. Continental motion has been measured at from 1-5 cm per year. As the plates continue to move about, this will produce a slow change in Earth's geography. Each year, for instance, the Atlantic Ocean becomes slightly wider. (6)

There is a very important point to be stated here: God has referred to the motion of mountains as a drifting action in the verse. Today, modern scientists also use the term "**Continental Drift**" for this motion. (7)

Unquestionably, it is one of the miracles of the Qur'an that this scientific fact, which has recently been discovered by science, was announced in the Qur'an.

The Miracle in the Iron

Iron is one of the elements highlighted in the Qur'an. In Sura Hadid, meaning Iron, we are informed:

"...And We sent down iron in which there lies great force and which has many uses for mankind...."
(The Qur'an, 57:25)

The word "sent down," particularly used for iron in the verse, could be thought of having a metaphorical meaning to explain that iron has been given to benefit people. But when we take into consideration the literal meaning of the word, which is, "being physically sent down from the sky", we realize that this verse implies a very significant scientific miracle.

This is because modern astronomical findings have disclosed that the iron found in our world has come from the giant stars in outer space.

The heavy metals in the universe are produced in the nuclei of big stars. Our solar system, however, does not possess a suitable structure for producing iron on its own. Iron can only be produced in much bigger stars than the Sun, where the temperature reaches a few hundred million degrees. When the amount of iron exceeds a certain level in a star, the star can no longer accommodate it, and eventually it explodes in what is called a "nova" or a "supernova".

As a result of this explosion, meteors containing iron are scattered around the universe, and they move through the void until attracted by the gravitational force of a celestial body.

All this shows that iron did not form on the Earth, but was carried from exploding stars in space via meteors, and was "**sent down to earth**", in exactly the same way as stated in the verse: It is clear that this fact could not have been scientifically known in the 7th century, when the Qur'an was revealed.



Iron ingot

The Pairs in Creation

Glory be to Him Who created all the pairs: from what the earth produces and from themselves and from things unknown to them."
(The Qur'an, 37:36)

Although the concept of "pair" or "couple" commonly stands for male and female, the statement of "from things unknown to them" has wider implications. Today, one of the implications of the verse has been revealed. The British scientist Paul Dirac, who proposed that matter is created in pairs, was awarded the Nobel Prize for physics in 1933. This discovery, called "parité", maintains that matter is paired with its opposite: anti-matter. Anti-matter carries the opposite properties to matter. For instance, as opposed to matter, the electron of anti-matter is positively charged and its protons are negatively charged. This fact is stated in a scientific source in this way:



Prof. Paul Dirac

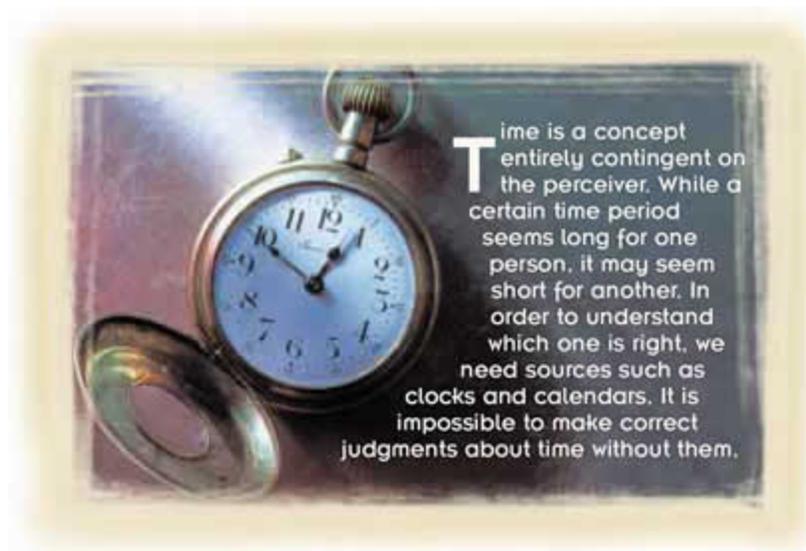
"...every particle has its antiparticle of opposite charge... ..and the uncertainty relation tells us that pair creation and pair annihilation happen in the vacuum at all times, in all places."(8)

The Relativity of Time

Today, the relativity of time is a proven scientific fact. This was revealed by Einstein's theory of relativity at the early years of the 20th century. Until then, people did not know that time was a relative concept, and that it could change according to the environment. Yet, the great scientist Albert Einstein openly proved this fact with the theory of relativity. He showed that time is dependent on mass and velocity. In the history of humanity, no one had expressed this fact clearly before.

With one exception though; the Qur'an included information about time's being relative! Some verses about the subject read:

**"They ask you to hasten the punishment. God will not break His promise. A day with your Lord is equivalent to a thousand years in the way you count."
(The Qur'an, 22:47)**

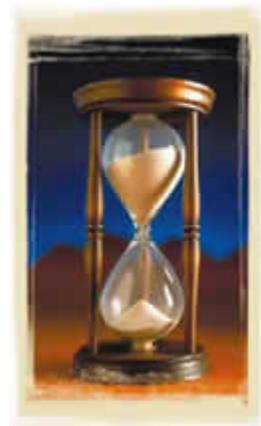


**"He directs the whole affair from heaven to earth. Then it will again ascend to Him on a Day whose length is a thousand years by the way you measure."
(The Qur'an, 32:5)**

**"The angels and the Spirit ascend to Him in a day whose length is fifty thousand years."
(The Qur'an, 70:4)**

In some verses, it is indicated that people perceive time differently and that sometimes people can perceive a very short period of time as a very lengthy one. The following conversation of people held during their judgement in the Hereafter is a good example of this:

"He will say, 'How many years did you tarry on the earth?' They will say, 'We tarried there for a day or part of a day. Ask those able to count!' He will say, 'You only tarried there for a little while if you did but know!'
(The Qur'an, 23:12)



The fact that the relativity of time is so clearly mentioned in the Qur'an, which started to be revealed in 610, is another evidence that it is a holy book.

The Proportion of Rain

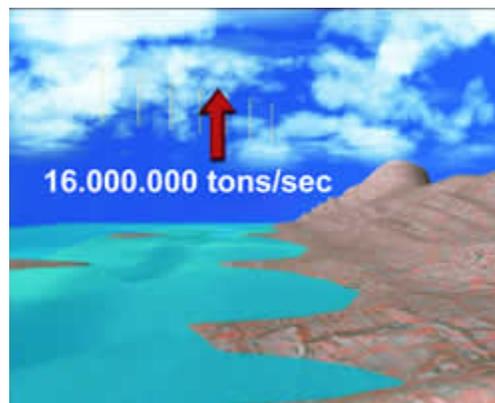
One of the items of information given in the Qur'an about rain is that it is sent down to Earth in due measure. This is mentioned in Sura Zukhruf as follows;

"It is He who sends down water in due measure from the sky by which We bring a dead land back to life. That is how you too will be raised (from the dead)."
(The Qur'an, 43:11)

This measured quantity in rain has again been discovered by modern research. It is estimated that in one second, approximately 16 million tons of water evaporates from the Earth. This figure amounts to 513 trillion tons of water in one year. This number is equal to the amount of rain that falls on the Earth in a year. This means that water continuously circulates in a balanced cycle, in a "measure". Life on Earth depends on this water cycle. Even if people used all the available technology in the world, they would not be able to reproduce this cycle artificially.



Even a minor deviation in this equilibrium would very soon give rise to a major ecological imbalance that would bring about the end of life on Earth. Yet, this never happens, and rain keeps falling every year in exactly the same quantity just as revealed in the Qur'an.



Every year, the amount of water that evaporates and that falls back to the Earth in the form of rain is "constant": 513 trillion tons. This constant amount is declared in the Qur'an by the expression "sending down water in due measure from the sky". The constancy of this quantity is very important for the continuity of the ecological balance, and therefore, life.



The Formation of Rain

How rain forms remained a great mystery for a long time. Only after weather radar was invented was it possible to discover the stages by which rain is formed.

According to this, the formation of rain takes place in three stages. First, the "raw material" of rain rises up into the air with the wind. Later, clouds are formed, and finally raindrops appear.

The Qur'an's account of the formation of rain refers exactly to this process. In one verse, this formation is described in this way:

"It is God Who sends the winds which stir up clouds which He spreads about the sky however He wills. He forms them into dark clumps and you see the rain come pouring out from the middle of them. When He makes it fall on those of His slaves He wills, they rejoice" (The Qur'an, 30: 48)

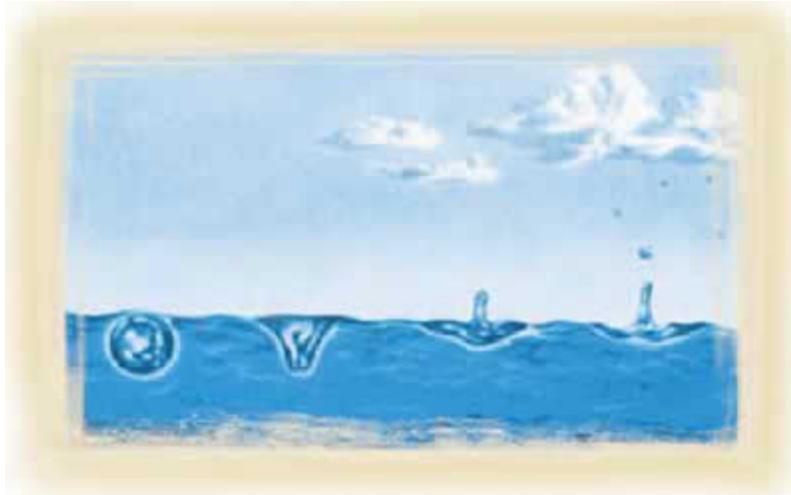
Now, let us examine these three stages outlined in the verse more technically.

FIRST STAGE: " It is God Who sends the winds..."

Countless air bubbles formed by the foaming of the oceans continuously burst and cause water particles to be ejected towards the sky. These particles, which are rich in salt, are then carried away by winds and rise upward in the atmosphere. These particles, which are called aerosols, function as water traps, and form cloud drops by collecting around the water vapour themselves, which rises from the seas as tiny droplets.

SECOND STAGE: "... which stir up clouds which He spreads about the sky however He wills. He forms them into dark clumps..."

The clouds are formed from water vapour that condenses around the salt crystals or dust particles in the air. Because the water droplets in these clouds are very small (with a diameter between 0.01 and 0.02 mm), the clouds are suspended in the air, and spread across the sky. Thus, the sky is covered in clouds.



The above illustration shows the water droplets being released into the air. This is the first stage in the formation of rain. After that, the water droplets in the newly formed clouds will be suspended in the air and then condense to form rain. All of these stages are related in the Qur'an.

THIRD STAGE: "...and you see the rain come pouring out from the middle of them"

The water particles that surround salt crystals and dust particles thicken and form raindrops, so, drops that become heavier than the air leave the clouds and start to fall to the ground as rain.

As we have seen, every stage in the formation of rain is related in the verses of the Qur'an. Furthermore, these stages are explained in exactly the right sequence. Just as with many other natural phenomena on the Earth, God gives the most correct explanation of this phenomenon as well, and made it known to people in the Qur'an centuries before it was discovered.

In another verse, the following information is given about the formation of rain:

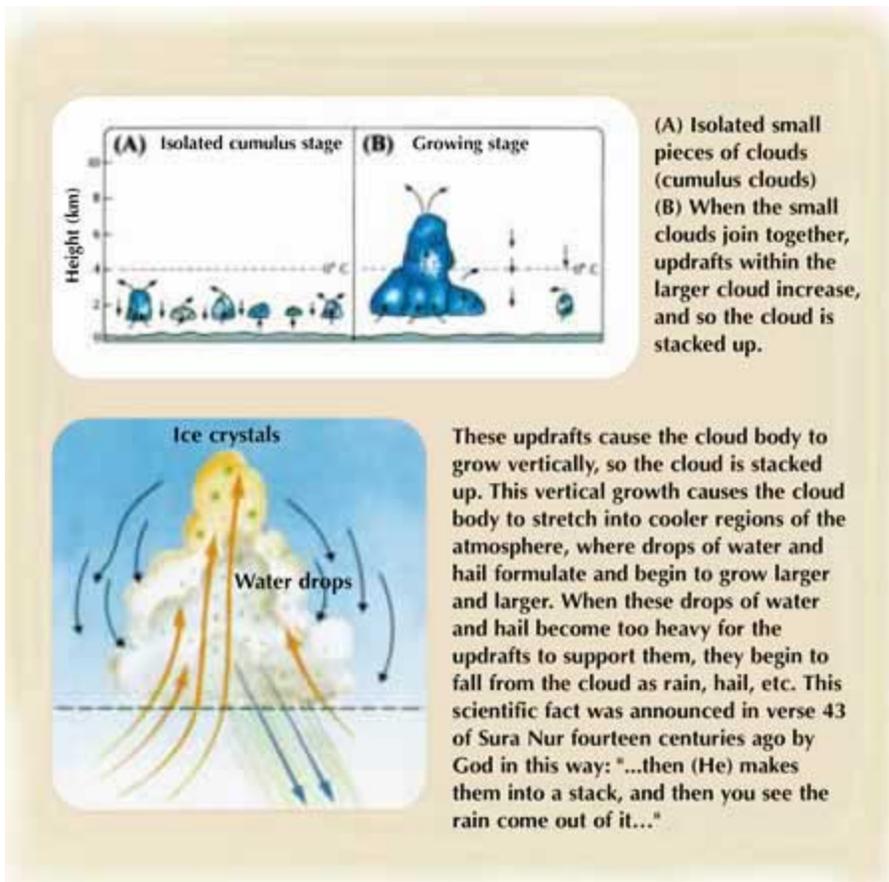
"Have you not seen how God drives along the clouds, then joins them together, then makes them into a stack, and then you see the rain come out of it? And He sends down from the sky mountain masses (of clouds) with cold hail in them, striking with it anyone He wills and averting it from anyone He wills. The brightness of His lightning almost blinds the sight."
(The Qur'an, 24:43)



Scientists studying cloud types came across surprising results regarding the formation of rain clouds. Rain clouds are formed and shaped according to definite systems and stages. The formation stages of cumulonimbus, one kind of rain cloud, are these:

1.STAGE, Being driven along: Clouds are carried along, that is, they are driven along, by the wind.

2.STAGE, Joining: Then, small clouds (cumulus clouds) driven along by the wind join together, forming a larger cloud.(9)



3. STAGE, Stacking: When the small clouds join together, updrafts within the larger cloud increase. The updrafts near the centre of the cloud are stronger than those near the edges. These updrafts cause the cloud body to grow vertically, so the cloud is stacked up. This vertical growth causes the cloud body to stretch into cooler regions of the atmosphere, where drops of water and hail formulate and begin to grow larger and larger. When these drops of water and hail become too heavy for the updrafts to support them, they begin to fall from the cloud as rain, hail, etc. (10)

We must remember that meteorologists have only recently come to know these details of cloud formation, structure and function, by using advanced equipment like planes, satellites, computers etc. It is evident that God has given us a piece of information that could not have been known 1,400 years ago.



Small clouds (cumulus clouds) are carried along and joined together by the wind, that is, as the verse says: "...God drives along the clouds, then joins them together ..."

The Fecundating Winds

In one verse of the Qur'an, the "fecundating" characteristic of the winds, and the formation of rain as a result are mentioned.

"And We send the fecundating winds, then cause water to descend from the sky, therewith providing you with water in abundance."
(The Qur'an, 15:22)

In this verse, it is pointed out that the first stage in the formation of rain is wind. Until the beginning of the 20th century, the only relationship between the wind and the rain that was known, was that the wind drove the clouds. However, modern meteorological findings have demonstrated the "fecundating" role of the wind in the formation of rain.

This fecundating function of the wind works in the following way:

On the surface of oceans and seas, countless air bubbles form because of the water's foaming action. The moment these bubbles burst, thousands of tiny particles, with a diameter of just one hundredth of a millimeter, are thrown up into the air. These particles, known as "aerosols", mix with dust carried from the land by the wind, and are carried to the upper layers of the atmosphere. These particles carried to higher altitudes by winds come into contact with water vapour up there. Water vapour condenses around these particles and turns into water droplets. These water droplets first come together and form clouds, and then fall to the Earth in the form of rain.

As seen, winds "fecundate" the water vapour floating in the air with the particles they carry from the sea, and eventually help the formation of rain clouds.

If winds did not possess this property, water droplets in the upper atmosphere would never form, and there would be no such thing as rain.

The most important point here is that this critical role of the wind in the formation of rain was stated centuries ago in a verse of the Qur'an, at a time when people knew very little about natural phenomena...



The picture above shows the stages in the formation of a wave. Waves are formed by the wind blowing above the surface of the water. With the wind, water particles start to move in a circular motion. This movement soon forms waves, one after the other, and bubbles formed by the waves spread in the air. This is the first stage in the formation of rain. This process is declared in the verse as "We send the fecundating winds and then cause water to descend from the sky."



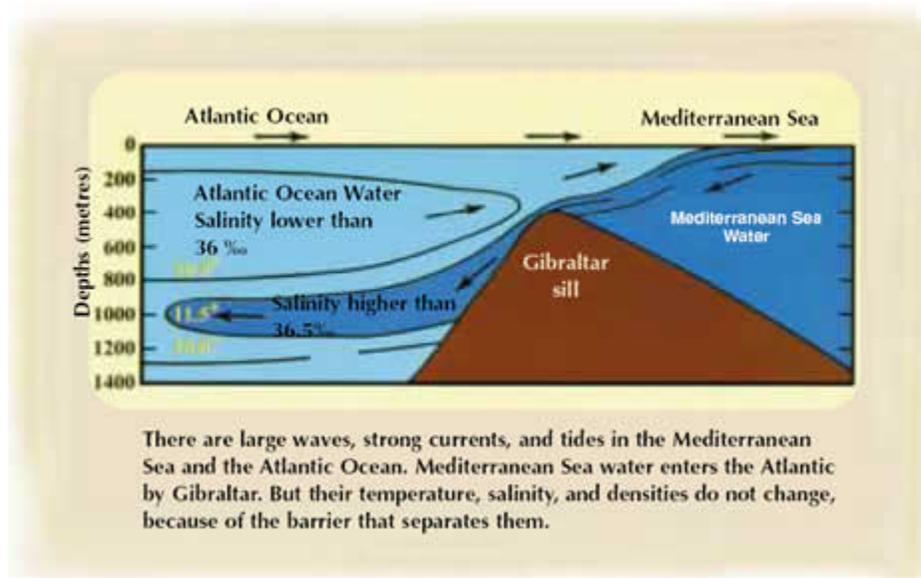
The Seas not Mingling with One Another

One of the properties of seas that has only recently been discovered is related in a verse of the Qur'an as follows:

"He has let loose the two seas, converging together, with a barrier between them they do not break through."
(The Qur'an, 55:19-20)

This property of the seas, that they come together yet do not mingle with one another at all, has only very recently been discovered by oceanographers. Because of the physical force called "surface tension", the waters of neighboring seas do not mix. Caused by the difference in the density of their waters, surface tension prevents them from mingling with one another, just as if a thin wall were between them.[\(11\)](#)

The interesting side to this is that during a period when people had no knowledge of physics, surface tension, or oceanography; this was revealed in the Qur'an.



Darkness in the Seas and Internal Waves

"Or (the unbelievers' state) are like the darkness of a fathomless sea which is covered by waves above which are waves above which are clouds, layers of darkness, one upon the other. If he puts out his hand, he can scarcely see it. Those God gives no light to, they have no light."

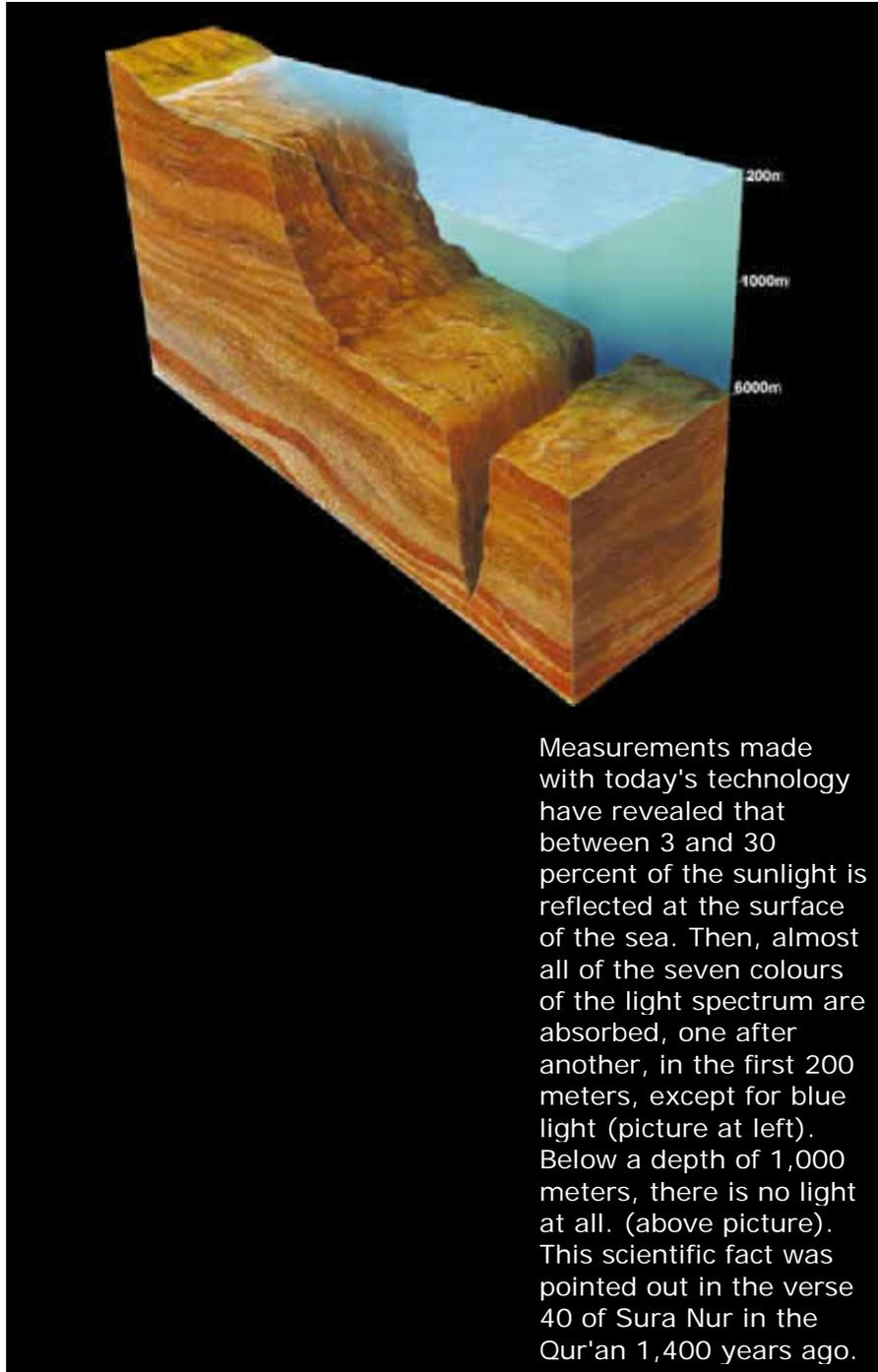
(The Qur'an, 24:40)

The general environment in deep seas is described in the book named Oceans:

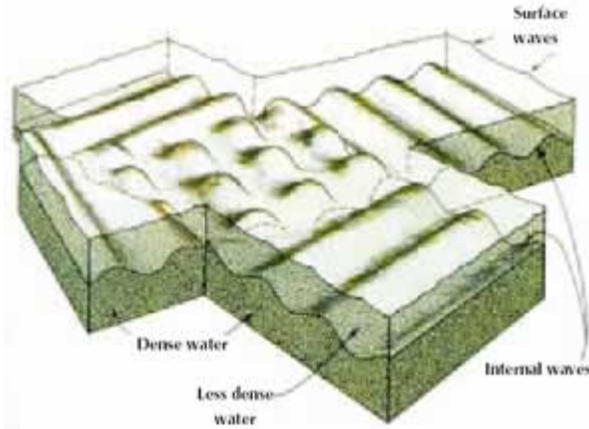
The darkness in deep seas and oceans is found around a depth of 200 meters and below. At this depth, there is almost no light. Below a depth of 1000 meters there is no light at all. [\(12\)](#)

Today, we know about the general structure of the sea, the characteristics of the living things in it, its salinity, as well as the amount of water it contains, its surface area and depth. Submarines and special equipment, developed with modern technology, enable scientists to obtain this information.

Human beings are not able to dive more than 40 meters down without the aid of special equipment. They cannot survive unaided in the deep, dark parts of the oceans, such as at a depth of 200 meters. For these reasons, scientists have only recently been able to discover these detailed pieces of information about seas. However, the statement of "darkness in a deep sea" was used in Sura Nur 1,400 years ago. It is certainly one of the miracles of the Qur'an that such information was given at a time where no equipment to enable man to dive into the depths of the oceans was available.



In addition, the statement in verse 40 of Sura Nur "...like the darkness of a fathomless sea which is covered by waves above which are waves above which are clouds..." draws our attention to another miracle of the Qur'an.



The picture to the left represents internal waves at interface between two layers of water of different densities. The lower layer is denser than the upper one. This scientific fact, declared in verse 40 of Sura Nur of the Qur'an 14 centuries ago, has been discovered by today's scientists only very recently.

Scientists have recently discovered that there are internal waves, which "occur on density interfaces between layers of different densities." These internal waves cover the deep waters of seas and oceans because deep water has a higher density than the water above it. Internal waves act like surface waves. They can break, just like surface waves. Internal waves cannot be seen by the human eye, but they can be detected by studying temperature or salinity changes at a given location. (13)

The statements in the Qur'an run absolutely parallel to the above explanation. Without research, one can only see the waves on the surface of the sea. It is impossible for one to know about the internal waves beneath the sea. Yet, in Sura Nur, God draws our attention to another type of wave that occurs in the depths of the oceans. Certainly, this fact, which scientists has discovered very recently, shows once again that the Qur'an is the word of God.

The Region That Controls Our Movements

"No indeed! If he does not stop, We will grab him by the forelock, a lying, sinful forelock."
(The Qur'an, 96:15-16)

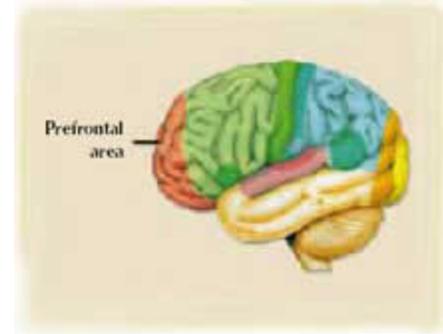
The expression "the lying, sinful forelock" in the above verse is most interesting. Research carried out in recent years revealed that the prefrontal area, which is responsible for the management of particular functions of the brain, lies in the frontal part of the skull. Scientists only discovered the functions of this area, which the Qur'an pointed out 1,400 years ago, in the last 60 years. If we look inside the skull at the front of the head, we will find the frontal area of the cerebrum. A book entitled *Essentials of Anatomy and Physiology*, which includes the results of the latest research on the functions of this area, says:

The motivation and the foresight to plan and initiate movements occur in the anterior portion of the frontal lobes, the prefrontal area. This is a region of association cortex... (14)

The book also says:

In relation to its involvement in motivation, the prefrontal area is also thought to be the functional center for aggression...[\(15\)](#)

So, this area of the cerebrum is responsible for planning, motivation, and initiating good and sinful behaviour, and is responsible for telling lies and the truth.



It is clear that the statement "the lying, sinful forelock" corresponds completely to the above explanations. This fact, which scientists have only discovered in the last 60 years, was stated by God in the Qur'an long years ago.

The Birth of a Human Being

Many diverse subjects are mentioned in the Qur'an in the course of inviting people to believe. Sometimes the heavens, sometimes animals, and sometimes plants are shown as evidence to man by God. In many of the verses, people are called upon to turn their attention to their own creation. They are often reminded how man came into the world, which stages he has passed through, and what his essence is:

"It is We Who have created you. Why, then, do you not accept the truth? Have you ever considered that (seed) which you emit? Is it you who create it? Or are We the Creator?"
(The Qur'an, 56:57-59)

The creation of man, and the miraculous aspect of this, is stressed in many other verses. Some items of information within these verses are so detailed that it is impossible for anyone living in the 7th century to have known them. Some of these are as follows:

1. Man is not created from the entire semen, but only a very small portion of it (sperm).
2. It is the male that determines the sex of the baby.
3. The human embryo adheres to the mother's uterus like a leech.
4. The embryo develops in three dark regions in the uterus.

People living when the Qur'an was revealed, to be sure, knew that the basic substance of birth was related to the semen of the male emitted during sexual intercourse. And the fact that the baby was born after a nine-month period was obviously an observable event not calling for any further investigation. However, the items of information just quoted were far above the level of learning of the people living at that time. These were verified by 20th century science.

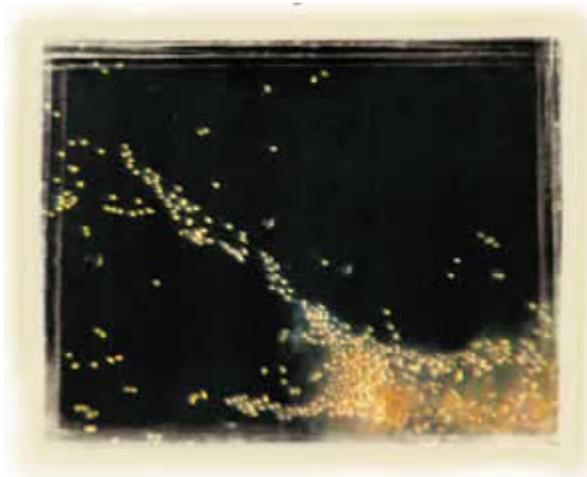
Now, let us go over them one by one.

A Drop of Semen

During sexual intercourse, 250 million sperms are emitted from the male at a time. The sperms undertake an arduous journey in the mother's body until they make it to the ovum. Only a thousand out of 250 million sperms succeed in reaching the ovum. At the end of this five-minute race, the ovum, half the size of a grain of salt, will let only one of the sperms in. That is, the essence of man is not the whole semen, but only a small part of it. This is explained in the Qur'an:

"Does man reckon he will be left uncontrolled (without purpose)? Was he not once a drop of ejected semen?"
(The Qur'an, 75:36-37)

As we have seen, the Qur'an informs us that man is made not from the entire semen, but only a small part of it. That the particular emphasis in this statement announces a fact only discovered by modern science is evidence that the statement is divine in origin.



In the picture to the left, we see semen ejected into the uterus. Only very few sperms out of 250 million sperms emitted from the male can make it to the ovum. The sperm that will fertilise the egg is the only one out of a thousand sperms that have managed to survive. The fact that man is made not from the entire semen, but only a small part of it, is related in the Qur'an with the expression, "a drop of ejected semen".

The Mixture in the Semen

The fluid called semen, which contains the sperms, does not consist of sperms alone. On the contrary, it is made up of a mixture of different fluids. These fluids have different functions, such as containing the sugar necessary for providing energy for the sperms, neutralising the acids at the entrance of the uterus, and creating a slippery environment for the easy movement of the sperms.

Interestingly enough, when semen is mentioned in the Qur'an, this fact, which was discovered by modern science, is also referred to, and semen is defined as a mixed fluid:

"We created man from a mingled drop to test him, and We made him hearing and seeing."
(The Qur'an, 76:2)

In another verse, semen is again referred to as a mixture, and it is stressed that man is created from the "extract" of this mixture:



"He who has created all things in the best possible way. He commenced the creation of man from clay; then He made his progeny from an extract of discarded fluid."

(The Qur'an, 32:7-8)

The Arabic word "sulala", translated as "extract", means the essential or best part of something. By either implication, it means "part of a whole". This shows that the Qur'an is the word of a Will that knows the creation of man down to its slightest detail. This Will is God, the Creator of man.

The Sex of the Baby

Until fairly recently, it was thought that a baby's sex was determined by the mother's cells. Or at least, it was believed that the sex was determined by the male and female cells together. But we are given different information in the Qur'an, where it is stated that masculinity or femininity is created out of "a drop of sperm which has been ejected".

"He has created both sexes, male and female from a drop of semen which has been ejected."

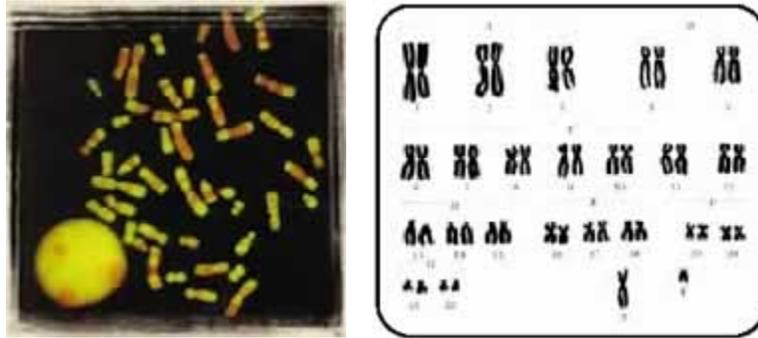
(The Qur'an, 53:45-46)



In the Qur'an, it is said that masculinity or femininity are created out of "a drop of semen which has been ejected". However, until fairly recently, it was believed that a baby's sex was determined by the mother's cells. Science only discovered this information given in the Qur'an in the 20th century. This and many other similar details about the creation of man were stated in the Qur'an centuries

ago.

The developing disciplines of genetics and molecular biology have scientifically validated the accuracy of this information given by the Qur'an. It is now understood that sex is determined by the sperm cells from the male, and that the female has no role in this process.



The Y chromosome carries characteristics of masculinity, while the X chromosome carries those of femininity. In the mother's egg, there is only the X chromosome, which determines female characteristics. In the semen from the father, there are sperms that includes either X or Y chromosomes. Therefore, the sex of the baby depends on whether the sperm fertilising the egg contains an X or Y chromosome. In other words, as stated in the verse, the factor determining the sex of the baby is the semen, which comes from the father. This knowledge, which could not have been known at the time when the Qur'an was revealed, is evidence to the fact that the Qur'an is the word of God.

Chromosomes are the main elements in determining sex. Two of the 46 chromosomes that determine the structure of a human being are identified as the sex chromosomes. These two chromosomes are called "XY" in males, and "XX" in females, because the shapes of the chromosomes resemble these letters. The Y chromosome carries the genes that code for masculinity, while the X chromosome carries the genes that code for femininity.

The formation of a new human being begins with the cross combination of one of these chromosomes, which exist in males and females in pairs. In females, both components of the sex cell, which divides into two during ovulation, carry X chromosomes. The sex cell of a male, on the other hand, produces two different kinds of sperm, one that contains X chromosomes and the other Y chromosomes. If an X chromosome from the female unites with a sperm that contains an X chromosome, then the baby is female. If it unites with the sperm that contains a Y chromosome, the baby is male.

In other words, a baby's sex is determined by which chromosome from the male unites with the female's ovum.

None of this was known until the discovery of genetics in the 20th century. Indeed, in many cultures, it was believed that a baby's sex was determined by the female's body. That was why women were blamed when they gave birth to girls.

Thirteen centuries before human genes were discovered, however, the Qur'an revealed information that denies this superstition, and referred to the origin of sex lying not with women, but with the semen coming from men.

The Clot Clinging to the Uterus

If we keep on examining the facts announced to us in the Qur'an about the formation of human beings, we again encounter some very important scientific miracles.

When the sperm of the male unites with the ovum of the female, the essence of the baby to be born is formed. This single cell, known as a "zygote" in biology, will instantly start to reproduce by dividing, and eventually become a "piece of flesh" called an embryo. This of course can only be seen by human beings with the aid of a microscope.

The embryo, however, does not spend its developmental period in a void. It clings to the uterus just like roots that are firmly fixed to the earth by their tendrils. Through this bond, the embryo can obtain the substances essential to its development from the mother's body. (16)

Here, at this point, a very significant miracle of the Qur'an is revealed. While referring to the embryo developing in the mother's womb, God uses the word "alaq" in the Qur'an:

"Recite: In the name of your Lord Who created man from alaq.
Recite: And your Lord is the Most Generous."
(The Qur'an, 96:1-3)

The meaning of the word "alaq" in Arabic is "a thing that clings to some place". The word is literally used to describe leeches that cling to a body to suck blood.

Certainly, the use of such an appropriate word for the embryo developing in the mother's womb, proves once again that the Qur'an is a revelation from God, the Lord of all the Worlds.

The wrapping of muscles over the bones

Another important aspect of the information given in the verses of the Qur'an is the developmental stages of a human being in



In the first phase of its development, the baby in the mother's womb is in the form of a zygote, which clings to the uterus in order to take nourishment from the mother's blood. In the picture above is a zygote, which looks like a piece of flesh. This formation, which has been discovered by modern embryology, was miraculously stated in the Qur'an 14 centuries ago with the word "alaq", which means "a thing that clings to some place" and is used to describe leeches that cling to a body to suck blood.

the mother's womb. It is stated in the verses that in the mother's womb, the bones develop first, and then the muscles form which wrap around them.

"(We) then formed the drop into a clot and formed the clot into a lump and formed the lump into bones and clothed the bones in flesh; and then brought him into being as another creature. Blessed be God, the Best of Creators!"
(The Qur'an, 23:14)

Embryology is the branch of science that studies the development of the embryo in the mother's womb. Until very recently, embryologists assumed that the bones and muscles in an embryo developed at the same time. For this reason, for a long time, some people claimed that these verses conflicted with science. Yet, advanced microscopic research conducted by virtue of new technological developments has revealed that the revelation of the Qur'an is word for word correct.

These observations at the microscopic level showed that the development inside the mother's womb takes place in just the way it is described in the verses. First, the cartilage tissue of the embryo ossifies. Then muscular cells that are selected from amongst the tissue around the bones come together and wrap around the bones.

This event is described in a scientific publication titled *Developing Human* in the following words:

During the seventh week, the skeleton begins to spread throughout the body and the bones take their familiar shapes. At the end of the seventh week and during the eighth week the muscles take their positions around the bone forms. [\(17\)](#)



The bones of the baby completing its development in the mother's womb are clothed with flesh during one particular stage.



Many stages of a baby's development in the mother's womb are related in the Qur'an. As described in verse 14 of Sura Muminun, the cartilage of the embryo in the mother's womb ossifies first. Then these bones are covered with muscle cells. God describes this development with the verse:

"...(We then) formed
the lump into bones
and clothed the
bones in flesh"

In short, man's developmental stages as described in the Qur'an are in perfect harmony with the findings of modern embryology.

Three Stages of the Baby in the Womb

In the Qur'an, it is related that man is created in a three-stage process in the mother's womb.

"... He creates you stage by stage in your mothers' wombs in a threefold darkness. That is God, your Lord. Sovereignty is His. There is no god but Him. So what has made you deviate?"
(The Qur'an, 39:6)

As will be understood, it is pointed out in this verse that a human being is created in the mother's womb in three distinct stages. Indeed, modern biology has revealed that the baby's embryological development takes place in three distinct regions in the mother's womb. Today, in all the embryology textbooks studied in faculties of medicine, this subject is taken as an element of basic knowledge. For instance in *Basic Human Embryology*, a fundamental reference text in the field of embryology, this fact is stated as follows: "*The life in the uterus has three stages: pre-embryonic; first two and a half weeks, embryonic; until the end of the eight week, and fetal; from the eight week to labor.*"(18)

These phases refer to the different developmental stages of a baby. In brief, the main characteristics of these developmental stages are as follows:

- **Pre-embryonic stage**

In this first phase, the zygote grows by division, and when it becomes a cell cluster, it buries itself in the wall of the uterus. While they continue growing, the cells organise themselves in three layers.

- **Embryonic Stage**

The second phase lasts for five and a half weeks, during which the baby is called an "embryo". In this stage, the basic organs and systems of the body start to appear from the cell layers.

- **Fetal stage**

From this stage on, the embryo is called a "foetus". This phase begins at the eighth week of gestation and lasts until the moment of birth. The distinctive characteristic of this stage is that the foetus looks just like a human being, with its face, hands and feet. Although it is only 3 cm. long initially, all of its organs have become apparent. This phase lasts for about 30 weeks, and development continues until the week of delivery.



In the verse 6 of Sura Zumar, it is pointed out that man is created in the mother's womb in three distinct stages. Indeed, modern embryology has revealed that the baby's embryological development takes place in three distinct regions in the mother's womb.



Information on the development in the mother's womb became available only after observations with modern devices. Yet, just like many other scientific facts, these pieces of information are imparted in the verses of the Qur'an in a miraculous way. The fact that such detailed and accurate information was given in the Qur'an at a time when people had scarce information on medical matters is clear evidence that the Qur'an is not the word of man, but the word of God.

Mother's Milk

Mother's milk is an unmatched mixture that is created by God as both an excellent food-source for the newborn baby, and a substance that increases its resistance to diseases. Even artificial baby food produced by today's technology cannot substitute for this miraculous source of nutrition.

Every day, a new benefit of mother's milk to the baby is discovered. One of the facts that science has discovered about mother's milk is that suckling up to two years after birth is very beneficial. [\(19\)](#) God gives us this important information, which was discovered by science only very recently, with the verse "...his weaning was in two years.." 14 centuries

ago.

"And We have enjoined upon man goodness towards his parents: his mother bore him by bearing strain upon strain, and his weaning was in two years: (hence, O man,) be grateful to Me and to your parents; to Me is the eventual coming."
(The Qur'an, 31:14)

19- Rex D. Russell, Design in Infant Nutrition, [http:// www. icr.org/pubs/imp-259.htm](http://www.icr.org/pubs/imp-259.htm)

The Identity in the Fingerprint

While it is stated in the Qur'an that it is easy for God to bring man back to life after death, peoples' fingerprints are particularly emphasized:

"Yes, We are able to put together in perfect order the very tips of his fingers."
(The Qur'an, 75:3-4)



Everyone, including identical twins, has a unique fingerprint. In other words, people's identities are coded at their fingertips. This coding system may also be compared to the barcode system that is used today.

The emphasis on fingerprints has a very special meaning. This is because everyone's fingerprint is unique to himself. Every person who is alive or who has ever lived in this world has a set of unique fingerprints.

That is why fingerprints are accepted as a very important proof of identity, exclusive to their owner, and are used for this purpose around the world.

But what is important is that this feature of fingerprints was only discovered in the late 19th century. Before then, people regarded fingerprints as ordinary curves without any specific importance or meaning. However in the Qur'an, God points to the fingertips, which did not attract anyone's attention at that time, and calls our attention to their importance-an importance that was only finally understood in our day.

PART TWO: THE INFORMATION GIVEN ABOUT THE FUTURE IN THE QUR'AN

INTRODUCTION

Another miraculous aspect of the Qur'an is that it revealed beforehand a number important events that would occur in the future. Verse 27 of Sura Fath, for example, gave the believers the glad tidings that they would conquer Mecca, which was then under pagan occupation:

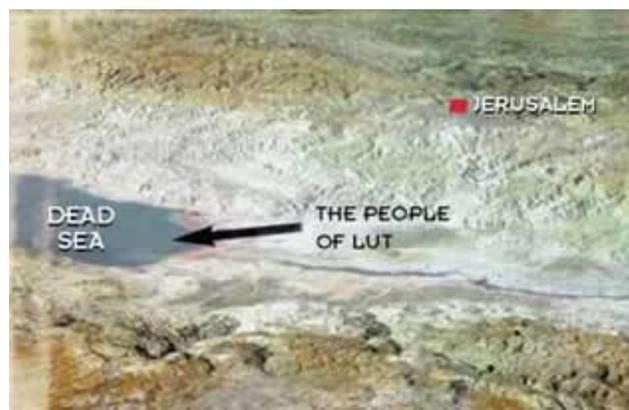
"God has confirmed His Messenger's vision with truth: 'You will enter the Masjid al-Haram in safety, God willing, shaving your heads and cutting your hair without any fear.' He knew what you did not know and ordained, in place of this, an imminent victory." (The Qur'an, 48:27)

On close consideration, the verse can be seen to announce yet another victory that will take place before the victory of Mecca. Indeed, as stated in the verse, the believers first conquered the Khyber Fortress, which was under the control of the Jews, and then entered Mecca.

The announcement of the events that will take place in the future is only one of the pieces of wisdom in the Qur'an. This is also evidence to the fact that the Qur'an is the word of God, Who has infinite knowledge. The defeat of Byzantium is one of the pieces of news given about the future, accompanied by other information that could not have been known by the people of that time. The most interesting point about this historical event, which will be examined in detail in the following pages, is that the Romans were defeated in the lowest region in the world. This is interesting because "the lowest point" is particularly stressed in the relevant verse. With the technology of that time, it was obviously impossible to make such a measurement and to determine the lowest point in the world. This is a revelation to people from God, the All-Knowing.

The Victory of Byzantium

Another astonishing piece of revelation that the Qur'an gives about the future is to be found in the first verses of Sura Rum, which refers to the Byzantine Empire, the eastern



part of the later Roman Empire. In these verses, it is stated that the Byzantine Empire had met with a great defeat, but that it would soon gain victory.

"Elif, Lam, Mim. The Romans have been defeated in the lowest land, but after their defeat they will themselves be victorious in a few years' time. The affair is God's from beginning to end."

(The Qur'an, 30: 1-4)



The Dead Sea basin where Byzantium was defeated by Persians. Above is a satellite photograph of the region. The Lake of Lut region, which is the lowest region of the world, is 395 meter below the sea level.

These verses were revealed around 620 AD, almost seven years after the severe defeat of Christian Byzantium at the hands of the idolater Persians. Yet it was related in the verses that Byzantium would shortly be victorious. In fact, Byzantium had then suffered such heavy losses that it seemed impossible for it even to survive, let alone be victorious again. Not only the Persians, but also Avars, Slavs and Lombards posed serious threats to the Byzantine Empire. The Avars had reached as far as the walls of Constantinople. The Byzantine Emperor Heraclius had ordered the gold and silver in churches to be melted and turned into money in order to meet the expenses of the army. When these proved insufficient, even bronze statues were melted down to be turned into money. Many governors had revolted against

Emperor Heraclius, and the empire was on the point of collapse. Mesopotamia, Cilicia, Syria, Palestine, Egypt and Armenia, which had earlier belonged to Byzantium, were invaded by the idolater Persians. (20)

In short, everyone was expecting the Byzantine Empire to be destroyed. But right at that moment, the first verses of Sura Rum were revealed, announcing that Byzantium would triumph in a few years' time. This victory seemed so impossible that Arab polytheists had gone so far as to make fun of these verses. They thought that the victory announced in the Qur'an would never come true.

Around seven years after the revelation of the first verses of Sura Rum, in December 627 AD, a decisive battle between Byzantium and the Persian Empire was fought at Nineveh. And this time the Byzantine army unexpectedly defeated the Persians. A few months later, the Persians had to make an agreement with Byzantium, which obliged them to return the territories they had taken from it. (21)





At the end, "the victory of the Romans," proclaimed by God in the Qur'an, miraculously came true.

Another miracle revealed in these verses is the announcement of a geographical fact that could not have been known by anyone at that time.

In the third verse of Sura Rum, we are informed that the Romans had been defeated in the lowest region of the Earth. This expression, "Adna al Ard" in Arabic, is interpreted as "a nearby place" in many translations. Yet this is not the literal meaning of the original statement, but rather a figurative interpretation of it. The word "Adna" in Arabic is derived from the word "deni", which means "low" and "ard", which means "world". Therefore the expression "Adna al Ard" means "the lowest place on the Earth".

Most interestingly, the crucial stages of the war fought between the Byzantine Empire and the Persians, when the Byzantines were defeated and lost Jerusalem, had really taken place at the lowest point on earth. This specified region is the Dead Sea basin, which is situated at the intersection point of the lands belonging to Syria, Palestine, and Jordan. The "Dead Sea", lying 395 meters below sea level, really is the lowest region on Earth.

Above is a satellite photograph of the Dead Sea basin. The altitude of the Dead Sea could only be determined with modern measurement techniques. These measurements led to the discovery that this is the "lowest region on the Earth".

This means that the Byzantines were defeated at the lowest part of the world, just as stated in the verse.

The most interesting point lies in the fact that the altitude of the Dead Sea could only be measured with modern measurement techniques. Before that, it was impossible for anyone to know that it was the lowest region on the surface of the Earth. Yet, this region was stated to be the lowest point on the Earth in the Qur'an. Hence, this provides further evidence that the Qur'an is divine revelation.

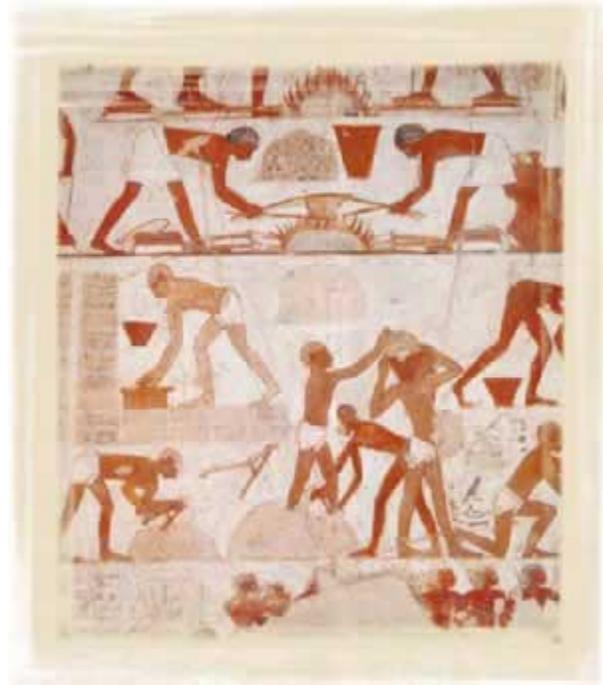
PART THREE: THE HISTORICAL MIRACLES OF THE QUR'AN

The Word "Haman" in the Qur'an

The information given in the Qur'an about ancient Egypt reveals many historical facts that had remained undisclosed until recent times. These facts also indicate to us that every word in the Qur'an has been revealed by sure wisdom.

Haman is a character whose name is mentioned in the Qur'an, along with the Pharaoh. He is recorded in six different places of the Qur'an as one of the closest men to the Pharaoh.

Surprisingly the name of Haman is never mentioned in those sections of the Torah pertaining to the life of Moses. However, the mention of Haman can be found in the last chapters of the Old Testament as the helper of a Babylonian king who inflicted many cruelties on the Israelites approximately 1,100 years after Moses.



The name "Haman" was not known until the decoding of Egyptian hieroglyphics in the 19th century. When the hieroglyphics were decoded, it was understood that Haman was a close helper of the Pharaoh, and was "the head of the stone quarries". (Above are shown ancient Egyptian construction workers). The really important point here is that Haman is mentioned in the Qur'an as the person who directed construction work under the command of the Pharaoh. This

Some non-Muslims, who claim that the Prophet Muhammad (peace be upon him) wrote the Qur'an by copying from the Torah and the Bible, also assert that during the process, he transferred some of the subjects related in these books into the Qur'an incorrectly.

means that information that could not have been known by anybody else at that time was given by the Qur'an.

The absurdity of these claims was demonstrated only after the Egyptian hieroglyphic alphabet had been deciphered, approximately 200 years ago, and the name "Haman" discovered in the ancient scripts.

Before these discoveries, the writings and inscriptions of ancient Egypt could not be understood. The language of ancient Egypt was hieroglyphic, which survived through the ages. However, with the spread of Christianity and other cultural influences in the 2nd and 3rd centuries AD, Egypt forsook its ancient beliefs as well as hieroglyphic writing. The last known example of the use of hieroglyphic writing was an inscription dated 394 AD. Then that language was forgotten, leaving nobody who could read and understand it. And that was the situation until some 200 years ago...

The mystery of ancient Egyptian hieroglyphics was solved in 1799 by the discovery of a tablet called the "Rosetta Stone" dating back to 196 B.C. The importance of this inscription was that it was written in three different forms of writing: Hieroglyphics, demotic (a simplified form of ancient Egyptian hieratic writing) and Greek. With the help of the Greek script, the ancient Egyptian writings were decoded. The translation of the inscription was completed by a Frenchman named Jean-François Champollion. Hence a forgotten language and the events related in it were brought to light. In this way, a great deal of knowledge about the civilization, religion and social life of ancient Egypt became available.

Through the decoding of hieroglyph, an important piece of knowledge was revealed: the name "Haman" was indeed mentioned in Egyptian inscriptions. This name was referred to in a monument in the Hof Museum in Vienna. [\(22\)](#)

In the dictionary of *People in the New Kingdom*, that was prepared based on the entire collection of inscriptions, Haman is said to be "the head of stone quarry workers". [\(23\)](#)

The result revealed a very important truth. Unlike the false assertion of the opponents of the Qur'an, Haman was a person who lived in Egypt at the time of Moses, who had been close to the Pharaoh, and had been involved in construction work, just as imparted in the Qur'an.

Furthermore, the verse in the Qur'an describing the event where the Pharaoh asked Haman to build a tower is in perfect agreement with this archaeological finding:

"Pharaoh said, 'Council, I do not know of any other god for you apart from Me. Haman, kindle a fire for me over the clay and build me a lofty tower so that perhaps I may be able to climb up to Moses' god! I consider him a blatant liar.'" (The Qur'an, 28: 38)

In conclusion, the existence of the name Haman in the ancient Egyptian inscriptions not only rendered the fabricated claims of the opponents of the Qur'an worthless, but also confirmed one more time the fact that the Qur'an comes from God. In a miraculous way,

the Qur'an conveys to us historical information that could not have been possessed or understood at the time of the Prophet.

Titles of Egyptian Rulers in the Qur'an

Moses was not the only prophet who lived in the lands of Egypt in the history of ancient Egypt. The Prophet Joseph had lived in Egypt long before the time of Moses.

We encounter a certain parallel while reading about the stories of Moses and Joseph. While addressing the Egyptian ruler at the time of Joseph, the word "malik" (the King) is used in the Qur'an:

"The King (malik) said, 'Bring him (Joseph) to me straight away! so I may draw him very close to me.' When he had spoken with him, he declared, 'Today you are trusted, established in our sight.'"
(The Qur'an, 12:54)

In contrast, the ruler at Moses' time is referred to as the "Pharaoh":

"We gave Moses nine Clear Signs. Ask the tribe of Israel about when he came to them and Pharaoh said to him, 'Moses, I think you are bewitched.'"
(The Qur'an, 17:101)



Historical records available today show us the reason for the different nomenclature of these rulers. The word "pharaoh" was originally the name given to the royal palace in ancient Egypt. The rulers of the old dynasty did not use the title. The use of the word pharaoh as the title of the ruler did not start until the "New Kingdom" era of Egyptian history. This period started with the 18th dynasty (1539-1292 BC), and by the 20th dynasty (945-730 BC) the word "pharaoh" was adopted as title of respect.

Therefore the miraculous nature of the Qur'an is manifested here once again: Joseph lived at the time of the Old Kingdom, and hence the word "malik" was used for the Egyptian ruler rather than "pharaoh". On the contrary, since Moses lived at the time of the New Kingdom, the ruler of Egypt is addressed as "pharaoh".

There is no doubt that one has to have a knowledge of the history of Egypt in order to make such a distinction. However, the history of Ancient Egypt was completely forgotten by the 4th century, as hieroglyphics could no longer be understood, and was not rediscovered until the 19th century. Therefore, there was no in-depth knowledge of Egyptian history available when the Qur'an was revealed. This fact is yet another one of countless pieces of evidence proving that the Qur'an is the word of God.

CONCLUSION

The Qur'an is the Word of God

All that we have seen so far shows us one clear fact: the Qur'an is such a book that all the news related in it has proved to be true. Facts about scientific subjects and the news given about the future, facts that no one could have known at the time, were announced in its verses. It is impossible for this information to have been known with the level of knowledge and technology of the day. It is clear that this provides clear evidence that the Qur'an is not the word of man. The Qur'an is the word of the Almighty God, the Originator of everything and the One Who encompasses everything with His knowledge. In one verse, God says on the Qur'an **"If it had been from other than God, they would have found many inconsistencies in it."** (The Qur'an, 4:82) Not only are there no inconsistencies in the Qur'an, but every piece of information it contains reveals the miracle of this divine book more and more each day.

What falls to man is to hold fast to this divine book revealed by God, and receive it as his one and only guide. In one of the verses, God calls out to us:

"And this is a Book We have sent down and blessed, so follow it and have fear of God so that hopefully you will gain mercy."
(The Qur'an, 6:155)

In His other verses, God remarks:

"Say: 'It is the truth from your Lord. Let anyone who wishes to, believe, and let anyone who wishes to, disbelieve.'
(The Qur'an, 18:29)

"No indeed! Truly it (the Qur'an) is a reminder, and whoever wills pays heed to it."
(The Qur'an, 80:11-12)