

# ISLAM & SCIENCE

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## Contribution of Islam to the world's civilization

Let us remember our great and glorious heritage by briefly surveying what Islam has already contributed to the world's civilization, education, culture and to scientific development, unlike Christianity where Religion and Science are two separate elements, the study of Science has always been compatible with Islam. Many young Muslims are discouraged when they see the poor standard of living of Muslims throughout the world and their limited opportunities. They also know the undeveloped status of technology within the Muslim countries in comparison with the West. From these observations, they immediately leap to the conclusion that Muslim countries are backward, because Islam cannot adapt itself to the changing conditions; cannot assimilate new knowledge. Let us do a brief review of the contributions of Islam to civilization as we know it.

**Trigonometry, Sine, Tangent, Co-Tangent** - The Arabs developed these functions in trigonometry. Ibn Musa's work *Hisaab-Al Jab-Wal Muqaabala* (The Calculation of Integration and Equation) presented 800 examples in the 8th century. His work was translated from Arabic into Latin and up to the 16th century, it was Europe's main textbook on the subject.

**Algebra and Geometry** - Muhammad bin Musa Al-Khawaarizmi is considered to be one of the founders of Algebra. He adopted the use of 'cipher' (zero) that was devised in India some centuries earlier, a numeral of fundamental importance, leading up to the so-called arithmetic of positions and the decimal system. The very word 'zero' is a derivative of the Arabic 'sifr' or 'cipher'. His pioneering work on the system of numerals is well known as "Algorithm." In addition to introducing the Arabic numerals, he developed several arithmetical procedures, including operations on fractions. Another great mathematician was Omar Khayyaam, who offered the world geometric and algebraic solutions of the second degree. Naseeruddeen wrote the treatise on quadrilateral trigonometry, as well as plain and spherical geometry.

**Physics and Chemistry** - Kamaaluddeen examined the refraction of sunlight in raindrops and offered an explanation of the genesis of primary and secondary rainbows. The story of the invention of the pendulum and the presentation of a water clock to Emperor Charlemagne by Haroon Rasheed is well known. The great historian Gibbons wrote in his *Decline and fall of the Roman Empire* that the science of chemistry owes its origin and improvements to the Muslims.

**Science of Mechanics** - The development of science mechanics in Islam is an act of genius. Musa bin Shaakir described one hundred pieces of mechanical equipment in his book of artifices. Other outstanding Muslim treatises included The Book of the Knowledge of Ingenious Geometrical Contrivances by Abul Fiaz bin Al Raz and Al Kitaab Meezanal-Hikmah (The Book of Balance and Wisdom) by Al-Khazini. He also did work on accurate weighing and determination of the specific gravity of substances.

**Camera Obscures** - In the field of optics, Camera Obscure was invented by Ibn Haytham in 1038.

**Theory of Relativity** - Qaadhi Abu Bakr developed the theory of relativity in the 8th century in terms of time and space by means of mathematical equations and astrophysics. Imagine, Einstein was not even born in the Western world, who propounded the same theory of relativity much later in the 20<sup>th</sup> century.

**Geography** - As far as geography was concerned, Muslim scientists established that the world was round in the 9th century and the first map of the globe was made during the Caliphate of Ma 'moon.

**Paper Making** - This was one of the earliest skills attained by Muslims. As early as the 8th century, high quality paper was being manufactured in Samarqand. Egypt had its first paper mill in the year 900. The earliest Arabic manuscript written on paper that has been discovered is the Ghareeb Al Hadeeth by Abu Ubayed, dated 837. It can be seen in Holland preserved in the library at the University of Leyden.

**Advances in Industry** - Under Islamic rule, Spain was an industrial centre. It was one of the wealthiest and most thickly populated European countries. Muslims were leading in weaving wool, producing silk, pottery, jewellery, leather and perfume industry. In the middle Ages, world trade was commanded by Muslims, and Baghdad, Bukhaara and Samarqand remained centres for world fairs until the 16th century. The Bayt Al-Hikmah in Cairo contained two million books, the library in Tripoli contained three million, but this library was burned down by the Christians during the first Crusade.

**Miracles of the Qur'an** - Let us consider the hundreds of scientific facts mentioned in the Holy Qur'an. For example, the fact that the earth was previously part of the sun and after its separation, it became a habitable place for humankind, as mentioned in chapter 21, verse 30. That matter is made up of sub-atomic particles (chapter 10,

verse 61). That the embryo in the mother's womb is enclosed by three epithelial coverings (chapter 39, verse 6). That each human being has a unique fingerprint (chapter 75, verse 4) etc. There are thousands of other scientific facts in the Holy Qur'an. Regrettably, today the West is at its peak and we have lagged behind, so far. However, our downfall is not due to Islam, as the West would like us to believe, but due to our sheer neglect of Islamic principles. We must realize that Islam is undeniably the most progressive religion, which is in fact a way of life with a very wide scope. Of course, life is a struggle. However, struggle is an inbuilt instinct of human nature. Struggle is a way but not an accomplishment or attainment in itself. We should make an effort and struggle but at the same time make Du'as (supplication). This is where Tawakkul, i.e. trust in Allah comes, because destiny supersedes thought. We must trust in Allah, because if success depended merely upon one's personal struggle, then nobody in the world would be unsuccessful. Furthermore, struggle is itself predestined by Allah. Man should do his best, then leave the rest to Allah, Most High.

## Holy Qur'an and Modern Science

Ever since the dawn of human life on this planet, Man has always sought to understand Nature, his own place in the scheme of Creation and the purpose of Life itself. In this quest for Truth, spanning many centuries and diverse civilizations, organized religion has shaped human life and determined to a large extent, the course of history. While some religions have been based on books, claimed by their followers to be divinely inspired, others have relied solely on human experience. Al-Qur'an, the main source of the Islamic faith, is a book believed by Muslims, to be of Divine origin. Muslims also believe that it contains guidance for all mankind. Since the message of the Qur'an is believed to be for all times, it should be relevant to every age. Does the Qur'an pass this test?

**The Challenge of the Qur'an** - Literature and poetry have been instruments of human expression and creativity, in all cultures. The world also witnessed an age when literature and poetry occupied pride of position, similar to that now enjoyed by science and technology. Muslims as well as non-Muslims agree that Al-Qur'an is Arabic literature par excellence, the best Arabic literature on the face of the earth. The Qur'an, challenges mankind in the following verses: "And if you are in doubt As to what We have revealed From time to time to Our Servant, then produce a Surah Like this; And

call your witnesses or helpers (If there are any) besides Allah, If your doubts are true. But if you cannot, you of a surety you cannot. Then fear the Fire whose fuel is Men and Stones, which is prepared for those who reject Faith.”

**Qur'an and Modern Science are compatible or incompatible** - The Qur'an is not a book of science but a book of signs, i.e. Ayats. There are more than six thousand 'signs' in the Quran of which more than a thousand deal with science. We all know that many a times Science takes a 'U-turn'. Here we only considered established scientific facts and not mere hypotheses and theories that are based on assumptions and are not backed by proof.

## Astronomy

**Creation of the Universe: The Big Bang** - The creation of the universe is explained by astrophysicists in a widely accepted phenomenon, popularly known as the 'Big Bang'. It is supported by observational and experimental data gathered by astronomers and astrophysicists for decades. According to the 'Big Bang', the whole universe was initially one big mass (Primary Nebula). Then there was a 'Big Bang' (Secondary Separation) which resulted in the formation of Galaxies. These then divided to form stars, planets, the sun, the moon, etc. The origin of the universe was unique and the probability of it occurring by 'chance' is zero. The Qur'an contains the following verse, regarding the origin of the universe: "Do not the Unbelievers see that the heavens and the earth were joined together (as one Unit of Creation), before we split them apart." The striking match between the Qur'anic verse and the 'Big Bang' is inescapable! How could a book, which first appeared in the deserts of Arabia 1400 years ago, contain this profound scientific truth?

**There was an initial Gaseous Mass before the Creation of Galaxies** - Scientists say that before the galaxies in the universe were formed, celestial matter was initially in the form of gaseous matter. In short, huge gaseous matter or clouds were present before the formation of the galaxies. To describe initial celestial matter, the word 'smoke' is more appropriate than gas. The following Qur'anic verse refers to this state of the universe by the word "dhukhan" which means smoke. Moreover, Allah Comprehended In His design the sky, and it had been as smoke: "He said to it and to the earth: 'Come ye together, willingly or unwillingly.' They said: 'We come together, in willing obedience.'" Again, this fact, the 'Big Bang' was not known to the Arabs during

the time of Prophet Muhammad. What then, could have been the source of this knowledge?

**The Spherical shape of the Earth** - In early times, people believed the earth was flat. For centuries, men were afraid to venture out too far, lest they should fall off the edge. Sir Francis Drake was the first person who proved that the earth is spherical when he sailed around it in 1597. Consider the following Qur'anic verse regarding the alternation of day and night: "Do you see how Allah merges Night into Day and He merges Day into Night." This phenomenon can only take place if the earth is spherical. If the earth was flat, there would have been a sudden change from night to day and day to night. The following verse also alludes to the spherical shape of the earth: "He created the heavens and the earth in true proportions: He makes the Night Overlap the Day, and the Day Overlap the Night." The overlapping or coiling of the day and night can only take place if the earth is spherical. The earth is not exactly round like a ball, but geo-spherical i.e. it is flattened at the poles. The following verse contains a description of the earth's shape: "And the earth, moreover, He made, in the shape of an egg." Thus the Qur'an correctly describes the shape of the earth.

**The Light of the Moon is Reflected Light** - It was believed by earlier civilizations that the moon emanates its own light. Science now tells us that the light of the moon is reflected light. However this fact was mentioned in the Qur'an 1,400 years ago in the following verse: "Blessed is He Who made Constellations in the skies, and placed therein a Lamp and a Moon giving light." The Arabic word for the sun in the Qur'an, is sham. It is referred to as siraaj, which means 'torch' or as wahhaaj which means 'a blazing lamp' or as diya which means 'shining glory'. All three descriptions are appropriate to the sun, since it generates intense heat and light by its internal combustion. The Arabic word for the moon is qamar and it is described in the Qur'an as muneer, which is a body that gives nur i.e. light. Again, The Qur'anic description matches perfectly with the true nature of the moon, which does not give off light itself and is an inert body that reflects the light of the sun. Not once in the Qur'an, is the moon mentioned as siraaj, wahhaaj or diya or the sun as nur or muneer. This implies that the Qur'an recognizes the difference between the nature of sunlight and moonlight. Consider the following verses related to the nature of light from the sun and the moon: "It is He who made the sun to be a shining glory and the moon to be a light of beauty." "Do you not see how Allah has created the seven heavens One above

another, "And made the moon A light in their midst, and made the sun as a Glorious Lamp?"

**The Sun Rotates** - For a long time European philosophers and scientists believed that the earth stood still in the centre of the universe and every other body including the sun moved around it. In the West, this geocentric concept of the universe was prevalent right from the time of Ptolemy in the second century. In 1512, Nicholas Copernicus put forward his Heliocentric Theory of Planetary Motion, which asserted that the sun is motionless at the centre of the solar system with the planets revolving around it. In 1609, the German scientist Yohannus Keppler published the 'Astronomical Nova'. In this he concluded that not only do planets move in elliptical orbits around the sun, they also rotate upon their axes at irregular speeds. With this knowledge it became possible for European scientists to explain correctly many of the mechanisms of the solar system including the sequence of night and day. After these discoveries, it was thought that the Sun was stationary and did not rotate about its axis like the Earth. Consider the following Qur'anic verse: "It is He who created The Night and the Day, and the sun and the moon: All (the celestial bodies) Swim along, each in its Rounded course." The sun has spots which complete a circular motion once every 25 days i.e. the sun takes approximately 25 days to rotate around its axis. In fact, the sun travels through space at roughly 150 miles per second, and takes about 200 million years to complete one revolution around the centre of our Milky Way Galaxy. "It is not permitted To the Sun to catch up The Moon, nor can The Night outstrip the Day: Each (just) swims along in (its own) orbit (According to Law)." This verse mentions an essential fact discovered by modern astronomy, i.e. the existence of the individual orbits of the Sun and the Moon, and their journey through space with their own motion. The 'fixed place' towards, which the sun travels, carrying with it the solar system, has been located exactly by modern astronomy. It has been given a name, the Solar Apex. The solar system is indeed moving in space towards a point situated in the constellation of Hercules whose exact location is firmly established. The moon rotates around its axis in the same duration that it takes to revolve around the earth. It takes approximately 29½ days to complete one rotation. One cannot help but be amazed at the scientific accuracy of the Qur'anic verses. Should we not ponder over the question: What was the source of knowledge contained in the Qur'an?

**The Sun will extinguish after a certain period** - The light of the sun is due to a chemical process on its surface that has been taking place continuously for the past five billion years. It will come to an end, the sun will extinguish leading to extinction of all life on earth. Regarding the sun's existence, the Qur'an says: "And the Sun Runs its course for a period determined for it; that is the decree of (Him) The exalted in Might, The All-Knowing." Thus the Qur'an says that the sun runs towards a determined place, and will do so only up to a pre-determined period of time, meaning that it will end or extinguish.

**The presence of Interstellar Matter** - Space outside organized astronomical systems was earlier assumed to be a vacuum. Astrophysicists later discovered the presence of bridges of matter in interstellar space. These bridges of matter are called plasma, and consist of completely ionized gas containing equal number of free electrons and positive ions. Plasma is sometimes called the fourth state of matter (besides the three known states viz. solid, liquid and gas). The Qur'an mentions the presence of interstellar material in the following verse: "He who created the heavens and the earth and all that in between." It would be ridiculous, for anybody to even suggest that the presence of interstellar galactic material was known 1400 years ago.

**The Expanding Universe** - In 1925, an American astronomer by the name of Edwin Hubble, provided observational evidence that all galaxies were moving away from one another, which implies that the universe is expanding. The expansion of the universe is now an established scientific fact. This is what Al-Qur'an says regarding the nature of the universe: "With the power and skill did we construct The Firmament: For it is We Who create the vastness of Space." Stephen Hawking, in his book, 'A Brief History of Time', says, "The discovery that the universe is expanding was one of the great intellectual revolutions of the 20th century." The Qur'an mentioned the expansion of the universe, before man even learnt to build a telescope! Some may say that the presence of astronomical facts in the Qur'an is not surprising since the Arabs were advanced in the field of astronomy. They are correct in acknowledging the advancement of the Arabs in the field of astronomy. However they fail to realize that the Qur'an was revealed centuries before the Arabs excelled in astronomy. Moreover many of the scientific facts mentioned above regarding astronomy, such as the origin of the universe with a Big Bang, were not known to the Arabs even at the peak of their scientific advancement. The scientific facts mentioned in the Qur'an are therefore not

due to the Arabs' advancement in astronomy. Indeed, the reverse is true. The Arabs advanced in astronomy, because astronomy occupies a place in the Qur'an.

## Physics

**The existence of Subatomic Particles** - In ancient times a well-known theory by the name of 'Theory of Atomism' was widely accepted. This theory was originally proposed by the Greeks, in particular by a man called Democritus, who lived about 23 centuries ago. Democritus and the people that came after him, assumed that the smallest unit of matter was the atom. The Arabs used to believe the same. The Arabic word dharrah most commonly meant 'atom'. In recent times modern science has discovered that it is possible to split even an atom. The atom split further is a development of the 20th century. Fourteen centuries ago this concept would have appeared unusual even to an Arab. For him the dharrah was the limit beyond which one could not go. The following Qur'anic verse however, refuses to acknowledge this limit: "The Unbelievers say, 'The Hour will never come to us': say, 'Nay! But most surely, By my Lord, it will come Upon you – by Him Who knows the unseen – From Whom is not hidden The least little atom In the Heavens or on earth: Nor is there anything less Than that or greater, but Is in the Record Perspicuous.'" This verse refers to the Omniscience of God, His knowledge of all things, hidden or apparent. It then goes further and says that God is aware of everything, including what is smaller or bigger than an atom. Thus the verse clearly shows that it is possible for something smaller than an atom to exist, a fact discovered only recently by modern science.

## Geography

**The Water Cycle** - In 1580, Bernard Palissy was the first man to describe the present day concept of 'water cycle'. He described how water evaporates from the oceans and cools to form clouds. The clouds move inland where they rise, condense and fall as rain. This water gathers as lakes and streams and flows back to the ocean in a continuous cycle. In the 7th century, Thales of Miletus believed that surface spray of the oceans was picked up by the wind and carried inland to fall as rain. In earlier times people did not know the source of underground water. They thought the water of the oceans, under the effect of winds, was thrust towards the interior of the continents. They also believed that the water returned by a secret passage or a Great Abyss. This passage is connected to the oceans and has been called the 'Tartarus', since Plato's

time. Even Descartes, a great thinker of the eighteenth century, subscribed to this view. Till the nineteenth century, Aristotle's theory was prevalent. According to this theory, water was condensed in cool mountain caverns and formed underground lakes that fed springs. Today, we know that the rainwater that seeps into the cracks of the ground is responsible for this. The water cycle is described by the Qur'an in the following verses: "Do you not see that Allah Sends down rain from the sky, and leads it through springs in the earth? Then He causes to grow, therewith, produce of various Colours. He sends down rain from the sky and with it gives life to the earth after it is dead: Verily in this are Signs for those who are wise. And we send down water from the sky according to (Due) measure, and we cause it to soak into the soil; and we certainly are able to drain it off (with ease)". No other text dating back 1400 years ago gives such an accurate description of the water cycle.

**Winds impregnate the Clouds** – The Qur'an quotes; "And we send the fertilized winds, then cause rain to descend from the sky, therewith providing you with water in abundance." In this context, impregnate means that the wind pushes the clouds together increasing the condensation that causes lightning and thus rain. A similar description is found in the Qur'an: "It is Allah who sends the winds, which raise the clouds: then He Spread them in the sky as He wills, and break them Into fragments, until you see raindrops released from the midst Thereof: then when He has Made them reach such of His servants as He wills, Behold, they do rejoice!" The Qur'anic descriptions are absolutely accurate and agree perfectly with modern data on hydrology.

## Geology

**Mountains are like Pegs (stakes / roots)** - In Geology, the phenomenon of 'folding' is a recently discovered fact. Folding is responsible for the formation of mountain ranges. The earth's crust, on which we live, is like a solid shell, while the deeper layers are hot and fluid, and thus inhospitable to any form of life. It is also known that the stability of the mountains is linked to the phenomenon of folding, for it was the folds that provide the foundations for the reliefs that constitute the mountains. Geologists tell us that the radius of the Earth is about 3,750 miles and the crust on which we live is very thin, ranging between 1 to 30 miles. Since the crust is thin, it has a high possibility of shaking. Mountains act like stakes or tent pegs that hold the earth's crust and give it

stability. The Qur'an contains exactly such a description in the following verse: "Have we not made the earth wide and spacious, and the mountains as pegs?" Mountains play an important role in stabilizing the crust of the earth. The Qur'an clearly mentions this function of the mountains: "And we have set on the earth Mountains standing firm, lest it should shake with them." The Qur'anic descriptions are in perfect agreement with modern geological data.

**Mountains firmly fixed** - The surface of the earth is broken into many rigid plates that are about 100 km in thickness. These plates float on a partially molten region called asthenosphere. Mountain formations occur at the boundary of the plates. The earth's crust is 5 km thick below oceans, about 35 km thick below flat continental surfaces and almost 80 km thick below great mountain ranges. These are the strong foundations on which mountains stand. The Qur'an also speaks about the strong mountain foundations in the following verse: "And the mountains, has He firmly fixed."

## Oceanology

**Barrier between sweet and salt waters** - Consider the following Qur'anic verses: "He has let free two bodies of flowing water, Meeting together: Between them is a Barrier which they do not transgress." Modern Science has discovered that where the two different seas meet, there is a barrier between them. This barrier divides the two seas so that each sea has its own temperature, salinity and density. Oceanologists are now in a better position to explain this verse. There is a slanted unseen water barrier between the two seas through which water from one sea passes to the other. But when the water from one sea enters the other sea, it loses its distinctive characteristic and merges with the other water. This scientific phenomenon mentioned in the Qur'an was also confirmed by Dr. William Hay who is a well-known marine scientist and Professor of Geological Sciences at the University of Colorado, U.S.A. The Qur'an mentions this phenomenon also in the following verse: "And we made a separating bar between the two bodies of flowing water? This phenomenon occurs in several places, including the divider between the Mediterranean and the Atlantic Ocean in Gibraltar. But when the Qur'an speaks about the divider between fresh and salt water, it mentions the existence of "a forbidding partition" with the barrier. "It is He Who has Let free the two bodies of flowing water: One palatable and sweet, and the other salty and bitter; yet has He Made a barrier between them, and a partition that is forbidden To be passed."

Modern science has discovered that in estuaries (river meets the sea), where fresh sweet and salt water meet, the situation is somewhat different from that found in places where two seas meet. It has been discovered that what distinguishes fresh water from salt water in estuaries is a "pycnocline zone with a marked density discontinuity separating the two layers." This partition (zone of separation) has salinity different from both the fresh water and the salt water. This phenomenon occurs in several places, including Egypt, where the river Nile flows into the Mediterranean Sea.

**Darkness in the depths of the Ocean** - Durga Rao is an expert in the field of Marine Geology and was a professor at King Abdul Aziz University in Jeddah. He was asked to comment on the following verse: "the Unbelievers' state is like the depths of darkness in a vast deep ocean, Overwhelmed with waves, Topped by waves and Topped by dark clouds: Depths of darkness, one above another: if a man stretches his hand out, He can hardly see it! For any to whom Allah does not give light, there is no light!" Prof. Rao said that scientists have only now been able to confirm, with the help of modern equipment that there is darkness in the depths of the ocean. Humans are unable to dive unaided underwater for more than 20 to 30 meters, and cannot survive in the deep oceanic regions at a depth of more than 200 meters. This verse does not refer to all seas because not every sea can be described as having accumulated darkness layered one over another. It refers especially to a deep sea or Deep Ocean, as the Qur'an says, "Darkness in a vast deep ocean". This layered darkness in a deep ocean is the result of two causes:

1) Light ray is composed of seven colours. These seven colours are Violet, Indigo, Blue, Green, Yellow, Orange and Red. The light ray undergoes refraction when it hits water. The upper 10 to 15 metres of water absorb the red colour. Therefore if a diver is 25 metres under water and gets wounded, he would not be able to see the red colour of his blood, because the red colour does not reach this depth. Similarly orange rays are absorbed at 30 to 50 metres, yellow at 50 to 100 metres, green at 100 to 200 metres and finally, blue beyond 200 metres and violet and indigo above 200 metres. Due to successive disappearance of colour, one layer after another, the ocean progressively becomes darker, i.e. darkness takes place in layers of light. Below a depth of 1000 meters there is complete darkness.

2) The sun's rays are absorbed by clouds, which in turn scatter light rays thus causing a layer of darkness under the clouds. This is the first layer of darkness. When light rays reach the surface of the ocean they are reflected by the wave surface giving it a shiny appearance. Therefore it is the waves which reflect light and cause darkness. The unreflected light penetrates into the depths of the ocean. Therefore the ocean has two parts. The surface characterized by light and warmth and the depth characterized by darkness. The surface is further separated from the deep part of the ocean by waves. The internal waves cover the deep waters of seas and oceans because the deep waters have a higher density than the waters above them. The darkness begins below the internal waves. Even the fish in the depths of the ocean cannot see; their only source of light is from their own bodies. The Qur'an rightly mentions: "Darkness in a vast deep ocean overwhelmed with waves topped by waves". In other words, above these waves there are more types of waves, i.e. those found on the surface of the ocean. The Qur'anic verse continues, "Topped by dark clouds; depths of darkness, one above another." These clouds as explained are barriers one over the other that further cause darkness by absorption of colours at different levels. Prof. Durga Rao concluded by saying, "1400 years ago a normal human being could not explain this phenomenon in so much detail. Thus the information must have come from a supernatural source."

## Biology

**Every living thing is made of Water** - Consider the following Qur'anic verse: "Do the unbelievers not see that the heavens and the earth were joined together as one unit of Creation, before we split them apart? We made every living thing from water. Will they not then believe?" Only after advances have been made in science, do we now know that cytoplasm, the basic substance of the cell is made up of 80% water. Modern research has also revealed that most organisms consist of 50% to 90% water and that every living entity requires water for its existence. Was it possible 14 centuries ago for any human-being to guess that every living being was made of water? Moreover would such a guess be conceivable by a human being in the deserts of Arabia where there has always been scarcity of water? The following verse refers to the creation of animals from water: "And Allah has created every animal from water." The following verse refers to the creation of human beings from water: "It is He who created man

from water: Then He established Relationships of lineage and marriage: for thy Lord has power over all things.”

## Botany

**Plants created in Pairs, Male and Female** - Previously humans did not know that plants had a gender distinction. Botany states that every plant has a male and female gender. Even the plants that are unisexual have distinct elements of both male and female. "‘And has sent down water from the sky.’ With it have we produced diverse pairs of plants each separate from the others. And fruit of every kind He made in pairs, two and two." Fruit is the end product of reproduction of the superior plants. The stage preceding fruit is the flower, which has male and female organs. Once pollen has been carried to the flower, they bear fruit, which in turn matures and frees its seed. All fruits therefore imply the existence of male and female organs; a fact that is mentioned in the Qur’an. In certain species, fruit can come from non-fertilized flowers; bananas, certain types of pineapple, figs, oranges, vine, etc. They also have definite sexual characteristics.

**Everything made in pairs** - "And of everything we have created pairs." This refers to things other than humans, animals, plants and fruits. It may also be referring to a phenomenon like electricity in which the atoms consist of negatively and positively charged electrons and protons. "Glory to Allah, Who created in pairs all things that the earth produces, as well as their own (human) kind and (other) things of which they have no knowledge." The Qur’an here says that everything is created in pairs, including things that humans do not know at present and may discover later.

## Zoology

**Animals and Birds live in communities** – “There is not an animal that lives on the earth, Nor a being that flies on its wings, but forms part of a community like you." Research has shown that animals and birds live in communities, i.e. they organize, and live and work together.

**Flight of Birds** – The Qur’an says: "Do they not look at the birds, held poised In the midst of the air and the sky? Nothing holds them up but the power Of Allah. Verily in this Are Signs for those who believe." A similar message is repeated in the Qur’an in

the verse: "Do they not observe the birds above them, spreading their wings and folding them in? None can uphold them Except, Allah Most Gracious: Truly it is He that watches over all things." Modern scientific data has shown the degree of perfection attained by certain species of birds with regard to the programming of their movements. It is only the existence of a migratory programme in the genetic code of the birds that can explain the long and complicated journey that very young birds, without any prior experience and without any guide, are able to accomplish. They are also able to return to the departure point on a definite date. Prof. Hamburger in his book 'Power and Fragility' gives the example of 'mutton-bird' that lives in the Pacific with its journey of over 15,000 miles in the shape of figure '8'. It makes this journey over a period of 6 months and comes back to its departure point with a maximum delay of one week. The highly complicated instructions for such a journey have to be contained in the birds' nervous cells. They are definitely programmed. Should we not reflect on the identity of this programmer?

**The Bee** - "And thy Lord taught the Bee To build its cells in hills, On trees, and in men's habitations; Then to eat of all The produce (of the earth), And find with skill the spacious Paths of its Lord." Von-Frisch received the Nobel Prize in 1973 for his research on the behaviour and communication of the bees. The bee, after discovering any new garden or flower, goes back and tells its fellow bees the exact direction to get there, which is known as 'bee dance'. The Qur'an mentions in the above verse how the bee finds with skill the spacious paths of its Lord. The worker bee or the soldier bee is a female bee. In Surah Al-Nahl chapter no. 16, verses 68 and 69 the gender used for the bee is the female gender (fa'slukî and kulî), indicating that the bee leaves its home for gathering food is the female bee. The worker bees are females and they do not report to a king bee but to a queen bee. But it took modern investigations in the last 300 years to discover this.

**Spiders Web, Home is Fragile** - The Qur'an mentions in Surah Al-'Ankabût, "The parable of those who Take protectors other than Allah Is that of the Spider, Who builds a house for itself; but truly the flimsiest of houses is the Spider's house If they but knew." Besides giving the physical description of the spider's web as being very flimsy, delicate and weak, the Qur'an also stresses on the flimsiness of the relationship in the spider's house, where the female spider many a times kills its mate, the male spider.

Lifestyle and communication of Ants - Consider the following Qur'anic verse: "And before Solomon, his hosts were marshalled, Jinns, men and birds, they were all Kept in order and ranks. At length, when they came to a lowly valley of ants, one of the ants said: 'O you ants, get into your habitations, lest Solomon and his hosts might crush you without knowing it.'" In the past, some people would have probably mocked the Qur'an. In recent times, research has shown us several facts about the lifestyle of ants, which were not known earlier to humankind. Research has shown that the animals or insects whose lifestyle is closest in resemblance to the lifestyle of human beings are the ants. This can be seen from the following findings regarding ants:

- 1) Ants bury their dead in a manner similar to the humans.
- 2) They have a sophisticated system of division of labour, i.e. managers, supervisors, foremen, workers, etc.
- 3) They meet for a chat.
- 4) They have an advanced method of communication.
- 5) They hold regular markets wherein they exchange goods
- 6) They store grains for long winters, if the grain begins to bud, they cut the roots. If the grains stored by them get wet due to rains, they take these grains out into the sunlight to dry, once dry, they take them inside as though they know that humidity will cause development of root systems and thereafter rotting of the grain.

## Medicine

**Honey has Healing Properties** - The bee assimilates juices of various kinds of flowers and fruit and forms within its body the honey, which it stores in its cells of wax. Only a couple of centuries ago man came to know that honey comes from the belly of the bee. This fact was mentioned in the Qur'an 1,400 years ago in the following verse: "There issues from within their bodies A drink of varying colours, wherein is healing for men." We are now aware that honey has a healing property and also a mild antiseptic property. The Russians used honey to cover their wounds in World War II. The wound would retain moisture and would leave very little scar tissue. Due to the density of honey, no fungus or bacteria would grow in the wound. A person suffering from an allergy of a particular plant may be given honey from that plant so that the person develops resistance to that allergy. Honey is rich in fructose and vitamin K.

Thus the knowledge contained in the Qur'an regarding honey, its origin and properties, was far ahead in time as it was revealed.

## Physiology

**Blood Circulation and the Production of Milk** - The Qur'an was revealed 600 years before the Muslim scientist Ibn Nafees described the circulation of blood and 1,000 years before William Harvey brought this understanding to the Western world. Roughly thirteen centuries before it was known about what happens in the intestines to ensure that organs are nourished by the process of digestive absorption, a verse in the Qur'an described the source of the constituents of milk, in conformity with these notions. To understand the Qur'anic verse concerning the above concepts, it is important to know that chemical reactions occur in the intestines and that, from there, substances extracted from food pass into the blood stream via a complex system; sometimes by way of the liver, depending on their chemical nature. The blood transports them to all the organs in the body, among which are the milk-producing mammary glands. In simple terms, certain substances from the contents of the intestines enter into the vessels of the intestinal wall itself, and these substances are transported by the blood stream to the various organs. This concept must be fully appreciated if we wish to understand the following verse in the Qur'an: "And verily in cattle there is a lesson for you. We give you to drink of what is inside their bodies, coming from a conjunction between the contents of the Intestine and the blood, a milk pure and pleasant for those who drink it." The Qur'anic description of the production of milk in cattle is strikingly similar to what modern physiology has discovered.

## Embryology

**Man is created from Alaq (leech-like substance)** - A few years ago a group of Arabs collected all information concerning embryology from the Qur'an and followed the instruction of the Qur'an: "If you do not realise this, ask those who possess the Message." The information was translated into English and presented to Dr. Keith Moore, who was the Professor of Embryology and Chairman of the Department of Anatomy at the University of Toronto, in Canada. At present he is one of the highest authorities in the field of Embryology. He was asked to give his opinion regarding the information presented in the Qur'an concerning embryology. After carefully examining the translation, Dr. Moore said that most of the information concerning embryology

mentioned in the Qur'an is in perfect conformity with modern discoveries and does not conflict with them. He added that there were however a few verses, on whose scientific accuracy he could not comment. He could not say whether the statements were true or false, since he himself was not aware of the information contained therein. There was also no mention of this information in modern writings and studies on embryology. One such verse is: "Read! In the name Of thy Lord and Cherisher, Who created, Created man, out of a mere clot of congealed blood?" The word *Alaq*, besides meaning a congealed clot of blood also means something that clings, a leech-like substance. Dr. Keith Moore had no knowledge whether an embryo in the initial stages appears like a leech. To check this out he studied the initial stage of the embryo under a very powerful microscope in his laboratory and compared what he observed with a diagram of a leech and he was astonished at the striking resemblance between the two! In the same manner, he acquired more information on embryology that was not known to him, from the Qur'an. Dr. Keith Moore answered eighty questions dealing with embryological data mentioned in the Qur'an and Hadith. Noting that the information contained in the Qur'an and Hadith was in full agreement with the latest discoveries in the field of embryology, Prof. Moore said, "If I was asked these questions thirty years ago, I would not have been able to answer half of them for lack of scientific information" Dr. Keith Moore had earlier authored the book, 'The Developing Human'. After acquiring new knowledge from the Qur'an, he wrote, in 1982, the 3rd edition of the same book, 'The Developing Human'. The book was the recipient of an award for the best medical book written by a single author. In 1981, during the Seventh Medical Conference in Dammam, Saudi Arabia, Dr. Moore said, "It has been a great pleasure for me to help clarify statements in the Qur'an about human development. It is clear to me that these statements must have come to Muhammad from God or Allah, because almost all of this knowledge was not discovered until many centuries later. This proves to me that Muhammad must have been a messenger of God or Allah. Not only is there no conflict between genetics and Islam but in fact Islam may guide science by adding revelations to some of the traditional scientific approaches, it is clear that the knowledge in the Qur'an is derived from God.

**Man created from a drop** - Another such verse is; "Now let man think from what he is created! He is created from a drop emitted, proceeding from between the back bone and the ribs." In embryonic stages, the reproductive organs of the male and female, i.e. the testicles and the ovaries, begin their development near the kidney between the

spinal column and the eleventh and twelfth ribs. Later they descend; the female gonads (ovaries) stop in the pelvis while the male gonads (testicles) continue their descent before birth to reach the scrotum through the inguinal canal. Even in the adult after the descent of the reproductive organ, these organs receive their nerve supply and blood supply from the Abdominal Aorta, which is in the area between the backbone (spinal column) and the ribs. Even the lymphatic drainage and the venous return goes to the same area.

**Human Beings created from Nutfah** - The Glorious Qur'an mentions no less than eleven times that a human being is created from Nutfah, which means a minute quantity of liquid or a trickle of liquid which remains after emptying a cup. This is mentioned in several verses of the Qur'an. Science has confirmed in recent times that only one out of an average of three million sperms is required for fertilising the ovum. This means that only 1/three millionth part or 0.00003% of the quantity of sperms that are emitted is required for fertilisation.

**Human Beings created from Sulalah** – verse of the Qur'an states; "We made his progeny from a quintessence of the nature of a fluid despised." We have come to know now that only one single spermatozoon that penetrates the ovum is required for fertilization, out of the several millions produced by man. That one spermatozoon out of several millions, is referred to in the Qur'an as Sulalah. Sulalah also means gentle extraction from a fluid. The fluid refers to both male and female germinal fluids containing gametes. Both ovum and sperm are gently extracted from their environments in the process of fertilization.

**Man created from Nufatun Amshaaj** - Consider the following Qur'anic verse: "Verily we created Man from a drop of mingled sperm." The Arabic word Nufatun amshaajin means mingled liquids. According to some commentators of the Qur'an, mingled liquids refers to the male or female agents or liquids. After mixture of male and female gamete, the zygote still remains Nutfah. Mingled liquids can also refer to spermatic fluid that is formed of various secretions that come from various glands. Therefore Nufatun Amshaaj, i.e. a minute quantity of mingled fluids refers to the male and female gametes (germinal fluids or cells) and part of the surrounding fluids.

**Sex Determination** - The sex of a foetus is determined by the nature of the sperm and not the ovum. The sex of the child, whether female or male, depends on whether the

23rd pair of chromosomes is XX or XY respectively. Primarily sex determination occurs at fertilization and depends upon the type of sex chromosome in the sperm that fertilizes an ovum. If it is an 'X' bearing sperm that fertilizes the ovum, the foetus is a female and if it is a 'Y' bearing sperm then the foetus is a male. "That He did create in pairs, male and female, from a seed when lodged in its place." The Qur'an says: "Was he not a drop of sperm emitted? Then did he become A clinging clot; Then did Allah make and fashion him in due proportion. "And of him He made two sexes, male and female." Here again it is mentioned that a small drop of sperm which comes from the man is responsible for the sex of the foetus. The Qur'an and Science confirm that it is the male fluid that is responsible for the sex of the child.

**Foetus Protected by three Veil of Darkness** - "He makes you in the wombs of your mothers, in stages, one after another, in three veils of darkness." According to Prof. Keith Moore these three veils of darkness in the Qur'an refer to:

- 1) Anterior abdominal wall of the mother
- 2) The uterine wall
- 3) The amnio-chorionic membrane

**Embryonic Stages** - "We created Man from clay; Then We placed him as a drop of sperm in a place of rest, firmly fixed; Then We made the sperm Into a clot of congealed blood; Then, of that clot We made a lump, foetus; then We Made out of that lump Bones and clothed the bones With flesh; then We developed Out of it another creature. So blessed be Allah, The Best to create!" In this verse Allah states that man is created from a small quantity of liquid which is placed in a place of rest, firmly fixed. The uterus is well protected from the posterior by the spinal column supported firmly by the back muscles. The embryo is further protected by the amniotic sac containing the amniotic fluid. Thus the foetus has a well-protected living place. This small quantity of fluid is made into alaqah, means to cling to. It also means a leech-like substance. Both descriptions are scientifically acceptable as in the very early stages the foetus clings to the wall and also appears to resemble the leech in shape. It also behaves like a leech (blood sucker) and acquires its blood supply from the mother through the placenta. The third meaning of the word alaqah is a blood clot. During this alaqah stage, which spans the third and fourth week of pregnancy, the blood clots within closed vessels. Hence the embryo acquires the appearance of a blood clot in addition to acquiring the appearance of a leech. In 1677, Hamm and Leeuwenhoek were the

first scientists to observe human sperm cells (spermatozoa) using a microscope. They thought that a sperm cell contained a miniature human being which grew in the uterus to form a new-born. This was known as the perforation theory. When scientists discovered that the ovum was bigger than the sperm, it was thought by De Graf and others that the foetus existed in a miniature form in the ovum. Later, in the 18th century Maupertuis propagated the theory of parental inheritance. The alaqah is transformed into mudghah which means 'something that is chewed (having teeth marks)' and also something that is tacky and small which can be put in the mouth like gum. Both these explanations are scientifically correct. Prof. Keith Moore took a piece of plaster seal and made it into the size and shape of the early stage of foetus and chewed it between the teeth to make it into a 'Mudgha'. He compared this with the photographs of the early stage of foetus. The teeth marks resembled the 'somites' which is the early formation of the spinal column. This mudghah is transformed into bones (izâm). The bones are clothed with intact flesh or muscles (lahm). Then Allah makes it into another creature.

Prof. Marshall Johnson is one of the leading scientists in US, and is the head of the Department of Anatomy and Director of the Daniel Institute at the Thomas Jefferson University in Philadelphia in US. He was asked to comment on the verses of the Qur'an dealing with embryology. He said that the verses of the Qur'an describing the embryological stages cannot be a coincidence. He said it was probable that Muhammad had a powerful microscope. On being reminded that the Qur'an was revealed 1400 years ago, and microscopes were invented centuries after the time of Prophet Muhammad, Prof. Johnson said: "I see nothing here in conflict with the concept that Divine intervention was involved when Muhammad recited the Qur'an." According to Dr. Keith Moore, the modern classification of embryonic development stages which is adopted throughout the world, is not easily comprehensible, since it identifies stages on a numerical basis. The divisions revealed in the Qur'an are based on distinct and easily identifiable forms or shapes, which the embryo passes through. These are based on different phases of prenatal development and provide elegant scientific descriptions that are comprehensible and practical. Similar embryological stages of human development have been described in the following verses: "Was he not a drop of sperm emitted (In lowly form)? Then he became a clinging clot; Then did Allah make and fashion him in due proportion. And of him He made two sexes, male

and female." "Him who created thee, fashioned thee in due proportion, And gave thee a just bias; in whatever Form He wills, Does He put thee together."

**Embryo partly Formed and partly Unformed** - At the mudghah (3rd stage of prenatal development), if an incision is made in the embryo and the internal organ is dissected, it will be seen that most of them are formed while the others are not yet completely formed. According to Prof. Johnson, if we describe the embryo as a complete creation, then we are only describing that part which is already created. If we describe it as an incomplete creation, then we are only describing that part which is not yet created. So, is it a complete creation or an incomplete creation? There is no better description of this stage of embryogenesis than the Qur'anic description, "partly formed and partly unformed", as in the following verse: "We created you Out of dust, then out of Sperm, then out of a leech-like Clot, then out of a morsel Of flesh, partly formed And partly unformed." Scientifically we know that at this early stage of development there are some cells which are differentiated and there are some cells that are undifferentiated some organs are formed and yet others unformed.

**Sense of Hearing and Sight** - The first sense to develop in a developing human embryo is hearing. The foetus can hear sounds after the 24th week. Subsequently, the sense of sight is developed and by the 28th week, the retina becomes sensitive to light. Consider the following Qur'anic verses related to the development of the senses in the embryo: "And He gave you the faculties of hearing, sight, feeling and understanding. Verily we created Man from a drop of mingled sperm, In order to try him: So We gave him the gifts, Of Hearing and Sight. It is He Who has created for you the faculties of Hearing, sight, feeling And understanding: little thanks it is ye give!" In all these verses the sense of hearing is mentioned before that of sight. Thus the Qur'anic description matches with the discoveries in modern embryology.

## General Science

**Fingerprints** - "Does man think that We Cannot assemble his bones? Nay, we are able to put together in perfect order the very tips of his fingers." Unbelievers argue regarding resurrection taking place after bones of dead people have disintegrated in the earth and how each individual would be identified on the Day of Judgement. Almighty Allah answers: He cannot only assemble our bones but can also reconstruct perfectly our very fingertips. Why does the Qur'an, while speaking about determination

of the identity of the individual, speak specifically about fingertips? In 1880, fingerprinting became the scientific method of identification, after research done by Sir Francis Golt. No two persons in the world can ever have exactly the same fingerprint pattern. That is the reason why police forces worldwide use fingerprints to identify the criminal. 1400 years ago, who could have known the uniqueness of each human's fingerprint? Surely it could have been none other than the Creator Himself.

**Pain receptors present in the Skin** - It was thought that the sense of feeling and pain was only dependent on the brain. Recent discoveries prove that there are pain receptors present in the skin without which a person would not be able to feel pain. When a doctor examines a patient suffering from burn injuries, he verifies the degree of burns by a pinprick. If the patient feels pain, the doctor is happy, because it indicates that the burns are superficial and the pain receptors are intact. On the other hand if the patient does not feel any pain, it indicates that it is a deep burn and the pain receptors have been destroyed. The Qur'an gives an indication of the existence of pain receptors in the following verse: "Those who reject Our signs, We shall soon Cast into the Fire; As often as their skins Are roasted through, We shall change them For fresh skins, That they may taste The Penalty: for Allah Is Exalted in Power, Wise." Prof. Tagatat Tejasen, Chairman of the Department of Anatomy at Chiang Mai University in Thailand, has spent a great amount of time on research of pain receptors. Initially he could not believe that the Qur'an mentioned this scientific fact 1,400 years ago. He later verified the translation of this particular Qur'anic verse. Prof. Tejasen was so impressed by the scientific accuracy of the Qur'anic verse, that at the 8th Saudi Medical Conference held in Riyadh on the Scientific Signs of Qur'an and Sunnah he proclaimed in public: "There is no God but Allah and Muhammad is His Messenger."

**Conclusion** - To attribute the presence of scientific facts in the Qur'an to coincidence would be against common sense and a true scientific approach. The Qur'an invites all humans to reflect on the Creation of this universe in the verse: "Behold! In the creation of the heavens and the earth, And the alternation Of Night and Day – There are indeed Signs for men of understanding." The scientific evidences of the Qur'an clearly prove its Divine Origin. No human could have produced a book, fourteen hundred years ago, that would contain profound scientific facts, to be discovered by humankind centuries later. The Qur'an, however, is not a book of Science but a book of 'Signs'. These signs invite Man to realize the purpose of his existence on earth, and to live in harmony with

nature. The Qur'an is truly a message from Allah, the Creator and Sustainer of the universe. It contains the same message of the Oneness of God which was preached by all prophets, right from Adam, Moses, and Jesus to Muhammad. Several detailed tomes have been written on the subject of Qur'an and modern science and further research in this field is ongoing. Insha Allah, this research will help mankind to come closer to the Word of the Almighty. Prof. Tejasen accepted Islam on the strength of just one scientific 'sign' mentioned in the Qur'an. Some people may require ten signs while some may require hundreds of signs to be convinced about the Divine Origin of the Qur'an. Some would be unwilling to accept the Truth even after being shown a thousand signs. The Quran condemns such a closed mentality in the verse: "Deaf, dumb and blind, they will not return to the path." The Qur'an contains a complete code of life for the individual and society. Praise be to Allah, the Qur'anic way of life is far superior to the 'isms' that modern man has invented out of sheer ignorance. Who can give better guidance than the Creator Himself?

## Islamic Origins of Modern Science

Fourteen centuries ago, God sent down the Qur'an as a guide to all humanity. At the time the Arab society was in a state of complete degeneration, chaos and ignorance. They were barbarous people who worshipped idols of their own making, believed warfare and bloodshed to be virtuous and were even capable of killing their own children. They had little interest in intellectual matters, let alone a scientific outlook to the natural world. However, through Islam they learned humanity and civilization. Not only the Arabs but all the communities which accepted Islam escaped the darkness of the age of ignorance and were illuminated by the divine wisdom of the Qur'an. Amongst the faculties the Qur'an brought to humanity was scientific thinking.

**The Scientific Paradigm Given in the Qur'an** - The genesis of scientific thought is the sense of curiosity. Because people wonder how the universe and nature work, they investigate and become interested in science. But most people lack this curiosity. For them, the important things are not the secrets of the universe and nature but their own small worldly profits and pleasures. In communities where people who think in this way are in charge, science does not develop. Idleness and ignorance rule. The Qur'an states: Have they not looked at the camel-how it was created? And at the sky-how it was raised up? And at the mountains-how they were embedded? And at the earth-

how it is spread out? So remind them! You are only a reminder. In many other verses of the Qur'an, people are instructed to examine nature and learn from it because people can know God only by examining His creations. Because of this, in one verse of the Qur'an Muslims are defined as people who think about the creation of the heavens and the earth: Those who remember God, standing, sitting and lying on their sides, and reflect on the creation of the heavens and the earth saying: "Our Lord, You have not created this for nothing. Glory be to you! So safeguard us from the punishment of the Fire."

An early manuscript of the Qur'an - For a Muslim, taking an interest in science is a very important form of worship. In many verses of the Qur'an, God instructs Muslims to investigate the heavens, the earth, living things or their own existence and think about them. When we look at the verses, we find indications of all the main branches of science in the Qur'an. For example, in the Qur'an, God encourages the science of astronomy: He who created the seven heavens in layers. You will not find any flaw in the creation of the All-Merciful. Look again-do you see any gaps? In another verse of the Qur'an, God encourages the investigation of astronomy and the composition of the earth that is the science of geology: Do they not look at the sky above them? How we have made it and adorned it, and there are no flaws in it? And the earth- We have spread it out, and set thereon mountains standing firm, and produced therein every kind of beautiful growth (in pairs)-To be observed and commemorated by every devotee turning to God.

In the Qur'an, God also encourages the study of botany: It is He Who sends down water from the sky from which we bring forth growth of every kind, and from that we bring forth the green shoots and from them we bring forth close-packed seeds, and from the spathes of the date palm date clusters hanging down, and gardens of grapes and olives and pomegranates, both similar and dissimilar. Look at their fruits as they bear fruit and ripen. There are Signs in that for people who believe. In another verse of the Qur'an, God draws attention to zoology: You have a lesson in livestock.

Here is a Qur'anic verse about the sciences of archaeology and anthropology: Have they not travelled the earth and seen the final fate of those before them? In another verse of the Qur'an, God draws attention to the proof of God in a person's own body and spirit: There are certainly Signs in the earth for people with certainty; and in yourselves as well. Do you not then see? As we can see, God recommends all the

sciences to Muslims in the Qur'an. Because of this the growth of Islam in history meant at the same time the growth of scientific knowledge.

**Scientific Renaissance of the Middle East** - As we have mentioned, when Prophet Mohammed began to preach Islam, the Arabs were a community of ignorant, superstitious tribes. However, thanks to the light of the Qur'an they were rescued from superstition and began to follow the path of reason. As a result of this, one of the most astonishing developments in world history took place and in a few decades Islam, which emerged from the small town of Medina, spread from Africa to Central Asia. The Arabs, who previously could not even rule a single city in harmony, came to be rulers of a world empire. One of the most important facets of this empire was that it provided the stage for a scientific development previously unmatched in history. At a time when Europe was living through the Dark Ages, the Islamic world created the greatest legacy of scientific knowledge seen in history to that date. The sciences of medicine, geometry, algebra, astronomy and even sociology were developed systematically for the first time. Great centres of religious learning were also centres of knowledge and scientific development. Such formal centres began during the Abbasid period (750-1258 A.D.) when thousands of mosque schools were established. In the tenth century Baghdad had some 300 schools. Alexandria in the fourteenth century had 12,000 students. It was in the tenth century that the formal concept of school was developed in Baghdad. The school had a curriculum and full-time and part-time teachers, many of whom were women. Rich and poor alike received free education. Libraries were developed and foreign books acquired. The two most famous are Bait al-Hikmah in Baghdad (CA. 820) and Dar al-Ilm in Cairo (CA. 998). Universities such as Al-Azhar (969 A.D.) were also established long before those in Europe. The Islamic world created the first universities and even hospitals in the world. This fact may be very surprising to modern Westerners, who generally have a different kind of picture about Islam in their minds. But this picture emerges from ignorance about the origins and history of the Islamic civilization. Those who get rid of this ignorance - and several prejudices - acknowledge the true nature of Islam. One example of these is a recent documentary film by PBS, titled Islam: The Empire of Faith, in which the commentator rightly states that: In the unfolding of history, Islamic civilization has been one of humanity's grandest achievements for the West, much of the history of Islam has been obscured behind a veil of fear and misunderstanding. Yet Islam's hidden history in deeply and surprisingly interwoven with Western civilization. It was the Muslim

scholars who sowed the seeds of the Renaissance, 600 years before the birth of Leonardo da Vinci. From the way we heal the sick to the numerals we use for counting, cultures across the globe have been shaped by the Islamic civilization. A prominent voice of the liberal American media, author George Rafael writes in an article titled "A Is For Arabs"; From algebra and coffee to guitars, optics and universities, the West owes to the People of the Crescent Moon, A millennium ago, while the West was shrouded in darkness, Islam enjoyed a golden age. Lighting in the streets of Cordoba when London was a barbarous pit; religious tolerance in Toledo while pogroms raged from York to Vienna. As custodians of our classical legacy, Arabs were midwives to our Renaissance. Their influence, however alien it might seem, has always been with us.

**Open-Mindedness of Islam** - What allowed Muslims to create such an advanced scientific culture was derived from the faculties of the Islamic understanding. One of them was, the motive to learn about the universe and nature according to the Qur'anic principles. Another one was open-mindedness. Both the Qur'anic wisdom and the Prophetic teaching gave Muslims a global outlook to the world, overcoming all cultural barriers. In the Qur'an, God states: Mankind! We created you from a male and female, and made you into people and tribes so that you might come to know each other." This verse clearly encourages cultural relationships between different nations and communities. In another verse of the Qur'an it states "Both east and west belong to Allah" thus Muslims should see the world in a Universalist and cosmopolitan vision. The Prophet tells Muslims that "wisdom is the lost property of the Muslims; he takes it from wherever he finds". This means that Muslims should be very pragmatic and broadminded in adapting and using the cultural and scientific achievements of non-Muslims; those non-Muslims are also creatures and servants of God, even though they might not recognize it. The "People of The Book", i.e. Christians and Jews, are even much more compatible, since they believe in God and stick to moral code He revealed to man.

**Middle Eastern History** - According to one of the great Muslim scholars of our time, Sayed Hossain Nasr, Islamic science was "the first science of a truly international nature in human history". Yet Muslims did not only incorporate other cultures, but developed their own. Some commentators neglect this and try to link the Islamic scientific development solely to the influence of the Ancient Greece or Far East. But

the real source of Islamic science was the experimentation and observations of Muslim scientists. In his book *The Middle East*, Professor Bernard Lewis, an undoubted expert in Middle Eastern history, explains it as follows: The achievement of medieval Islamic science is not limited to the preservation of Greek learning, nor to the incorporation in the corpus of elements from the more ancient and more distant East. This heritage which medieval Islamic scientists handed on to the modern world was immensely enriched by their own efforts and contributions. Greek science, on the whole rather tended to be theoretical. Medieval Middle Eastern science was much more practical, and in such fields as medicine, chemistry, astronomy and agronomy, the classical heritage was clarified and supplemented by the experiments and observations of the medieval Middle East. As noted by Westerners, this advanced scientific culture of the Islamic world paved the way for the Western Renaissance. Muslim scientists acted in the knowledge that their investigation of God's creation was a path through which they could get to know Him. Esposito stresses that Muslim scientists, who were often philosophers of mystics as well, viewed physical universe from within their Islamic worldview and context as a manifestation of the presence of God, the Creator and the source and unity and harmony in nature. With the transfer of this paradigm and its accumulation of knowledge to the Western world, the advance of the West began.

**Origins of Western Science** - Medieval Europe was ruled by the dogmatic regime of the Catholic Church. The Church opposed freedom of thought and pressured scientists. People could be punished by the Inquisition simply for holding different beliefs or ideas. Their books were burned and they themselves were executed. The pressure on research in the Middle Ages is often referred to in history books, but some interpret the situation wrongly and claim that the scientists who clashed with the Church were against religion. The truth is the exact opposite, the scientists who opposed the bigotry of the church were religious believers. They were not against religion, but against the harsh clericalism of the time. For example, the famous astronomer Galileo, whom the Church wanted to punish because he stated that the world rotated, said, "I render infinite thanks to God for being so kind as to make me alone the first observer of marvels kept hidden in obscurity for all previous centuries." The other scientists who established modern science were all religious. Kepler, regarded as the founder of modern astronomy, told those who asked him why he busied himself with science, "I had the intention of becoming a theologian, but now I see how God is, by my endeavours, also glorified in astronomy, for 'heavens declare

the glory of God". As for Newton, one of the greatest scientists in history, he explained the reason underlying his zeal for scientific endeavour by saying: "God is eternal and infinite, omnipotent and omniscient; that is, his duration reaches from eternity to eternity; his presence from infinity to infinity; he governs all things and knows all things that are or can be done. We know him only by his most wise and excellent contrivances of things. We revere and adore him as his servants" The great genius Pascal, the father of modern mathematics, said that: "But by faith we know God's existence; in glory we shall know His nature."

Many other founders of modern Western science were also strong believers. For example: Von Helmont, one of the leading figures in modern chemistry and the inventor of the thermometer, declared that science was a part of faith. "George Cuvier, the founder of modern palaeontology, regarded fossils as surviving proofs of the Creation and taught that living species had been created by God. Carl Linnaeus, who first systematized scientific classification, believed in the Creation and stated that the natural order was significant proof of God's existence. Gregor Mendel, the founder of genetics, also a monk, believed in Creation and opposed the evolutionary theories of his time, such as Darwinism and Lamarckism. Louis Pasteur, the greatest name in the history of microbiology, proved that life could not be created in inert matter and taught that life was a miracle of God. The famous German physicist Max Planck said that the Creator of the universe was God and stressed that faith was a necessary quality of scientists. Albert Einstein, regarded as the most important scientist of the twentieth century, believed that science could not be godless and said, "Science without religion is lame." A large number of other scientists who guided modern scientific progress were religious people who believed in God. These scientists served science with the intention of discovering the universe that God had created, a paradigm that was first developed and implemented in the Islamic world and then incorporated into the West. All these theist scientists thought about the creation of the heavens and the earth and investigated in the awareness of God, as God decreed in the Qur'an and the Bible. The birth of science and its development were the result of this awareness. During the nineteenth century, however, this awareness was replaced by a misconception called materialism.

**Rise and fall of the Materialist Deviation** - The nineteenth century was a period that witnessed the greatest errors in human history. These errors began with the imposition

on European thought of materialist philosophy, an ancient Greek teaching. The greatest error of this period was Darwin's theory of evolution. Before the birth of Darwinism, biology was accepted as a branch of science that provided evidence of the existence of God. In his book *Natural Theology*, the famous author William Paley maintained that, to the extent that every clock proves the existence of a clockmaker, natural designs prove the existence of God. However, Darwin rejected this truth in his theory of evolution. By distorting the truth to fit materialist philosophy, he claimed that all living things were the result of blind natural causes. In this way he created an artificial antagonism between religion and science. In their book *The Messianic Legacy*, English authors Michael Beignet, Richard Leigh and Henry Lincoln have this to say on the subject: For Isaac Newton, a century and a half before Darwin, science was not separate from religion but, on the contrary, an aspect of religion, and ultimately subservient to it. But the science of Darwin's time became precisely that, divorcing itself from the context in which it had previously existed and establishing itself as a rival absolute, an alternative repository of meaning. As a result, religion and science were no longer working in concert, but rather stood opposed to each other and humanity was increasingly forced to choose between them. Not only biology, but also branches of science such as psychology and sociology were twisted according to materialist philosophy. Astronomy was distorted according to the materialist dogmas of ancient pagan Greeks; a metaphysical faith in an "eternal cosmos" came to be the norm. The new aim of science was to confirm materialist philosophy. These incorrect ideas have dragged the scientific world into a dead end for the past 150 years. Tens of thousands of scientists from different branches worked in the hope of being able to prove Darwinism or other materialist theories. But they were disappointed. The scientific evidence showed the exact opposite of the conclusion they wanted to reach. That is, it confirmed the truth of Creation. Today the world of science is astonished by this truth. When nature is examined it emerges that there is a complex plan and design in every detail and this has cut away the foundations of materialist philosophy. For example, the extraordinary structure of DNA shows scientists that it is not the result of blind chance or natural laws. The DNA in a single human cell contains enough information to fill a whole 900-volume encyclopaedia. Gene Myers, a scientist from the Celera Company which administers the Human Genome Project, says this: What really astounds me is the architecture of life. The system is extremely complex. Scientists are viewing with surprise the invalidity of the materialist philosophy and Darwinism which they were taught as truth, and some of them are declaring this

openly. In his book *Darwin's Black Box*, biochemist Michael Beha, one of the leading critics of Darwinism, describes the situation of the scientific world as follows: Over the past four decades modern biochemistry has uncovered the secrets of the cell. The progress has been hard won. It has required tens of thousands of people to dedicate the better parts of their lives to the tedious work of the laboratory. The result of these cumulative efforts to investigate the cell-to investigate life at the molecular level-is a loud, clear, piercing cry of "design!" The result is so unambiguous and so significant that it must be ranked as one of the greatest achievements in the history of science but, no hands clapped. Why does the scientific community not greedily embrace its startling discovery? The dilemma is that while one side of the issue is labelled intelligent design, the other side must be labelled God.

The same situation exists in astronomy. The astronomy of the twentieth century has demolished the materialist theories of the nineteenth. First with the Big Bang theory, it emerged that the universe had a beginning, the moment of Creation. Since then it has been realized that in the universe there is an extraordinarily delicate balance which protects human life, a concept known as the anthropic principle. For these reasons, in the world of physics and astronomy atheism is in rapid decline. As American physicist Robert Griffiths jokingly remarks: "If we need an atheist for a debate, I go to the philosophy department. The physics department isn't much use." In short, in our day and age materialist philosophy is collapsing. Science is rediscovering certain very important facts rejected by materialist philosophy and in this way a new concept of science is being born. The "Intelligent Design" theory, which has been on a successful rise in the United States during the past 10 years. Those who accept this theory stress that Darwinism was the greatest error in the history of science and that there is an intelligent design in nature that gives evidence of Creation.

## Conclusion

God created the entire universe, and the whole of creation shows humanity the signs of God. Science is the method of investigating what has been created, so conflict between religion and science, provided that religion is guided only by Divine revelation, is out of the question. On the contrary, history shows that belief in God has been the main motive and paradigm for scientific progress. The two greatest scientific achievements in world history, the Islamic scientific endeavour of the Medieval Age

and the Christian scientific leap of the modern era stemmed from faith in God. Moreover, the latter borrowed a great deal of knowledge, method and vision from the former. The wisdom of the Qur'an first enlightened the Islamic world and then shed light even on the non-Muslim Europe. If something went wrong in the Islamic world, this was because Muslims turned away from the sincerity, wisdom and open-mindedness God teaches in the Qur'an. The materialist paradigm is a deviation from this pattern. It arose in the 19th century, reached its peak in the mid-20th century and is on the brink of collapse today. No matter how arrogant and seemingly self-confident its supporters are, the materialist dogma and its main pillar, Darwinism, will inevitably perish in the upcoming decades. And science will return to its authentic and true paradigm: A search for the discovery and definition of the great design and harmony in the natural world, the artefact of God.

## Timing in the Holy Qur'an

Since ancient times, some nations, such as Egyptians, Romans, Persians and Europeans, adopted the solar year for timing, although they differed in fixing the date for the beginning of years and the number of days in each month, which constituted one part of 12 in each year. Before the advent of Islam, Egyptians made the numbers of days in each month 30, with the addition of 5 or 6 days to the year at the end of it. The lunar calendar known to us now, or the Hijrite Calendar, had not been adopted until after Islam. This is despite the fact that it was followed in pre-Islamic days by the Arabs and certain groups of Jews, as well as in India and China, but in another form. Attempts were made to unite both solar and lunar calendars at the time when months were nearer to nature represented in the sun and the moon, taking into consideration that the lunar year included 12 lunar months. To achieve this goal, Indians took the moment the crescent appeared in the sky as the beginning of the New Year. That was before the coming of the spring. By so doing, they had a year of 12 months, with 30 days in each. Later, the beginning of the year gradually lagged behind the spring, making a difference of one or more than one month. When such a thing occurred they used to adopt a leap year, including 13 months. By this action, one certain month had to be repeated twice. Jews in Yathrib fixed the days of the lunar months as 30 or 29. They used to determine the beginning of the year by the appearance of the crescent they used to see about the beginning of autumn. By this way, they were in need of some of the leap years which included 13 months each.

This is how nations of the earth differed at that time in adopting the days the years began with. This occurred despite the attempts they made to connect the beginnings of the years with the seasons of those years. But the grave and serious problems with the Arabs was that concerning the fixation of the pilgrimage day. They found that the tenth day of Dhul Haj often came in winter. Later, it was gradually delayed, until it came in autumn, then in summer, then in spring, and so on. This contradicted the arrangements they made for their travels, marketing, trades, and even wars, and other activities they used to make in pre-Islamic days. They adopted the idea of the additional days, which could be summarised as follows: Since the solar year represented the four seasons exceeded in number the lunar year by about 11 days, one month could be added to the lunar year every two or three years in a bid to make it corresponding with the solar year. On that basis, they preferred to perform pilgrimage in Dhul Haj in two successive years. The third year they made it 13 months; and by this, that year ended with Muharram during which they again proceeded for pilgrimage. Even after making all these attempts, the Arabs noticed that the fractions of the familiar solar year (resulting from the revolution of the earth) could be collected to form, in the course of time, a full complete month. For this reason, they supplemented the year with additional days.

The Arabs' customs and traditions, since the days of Ibrahim, prevented wars in four months every year, in Dhul `Qaad, Zul Haj, Muharram and Rajab. Referring to this, the Holy Qur'an says in Surat Al-Tauba (Repentance) "The number of months is twelve by Allah's ordinance, since the day when He created the heavens and the earth, of these four are sacred. That is the right religion; so do not wrong yourselves therein. And fight the polytheists all together as they fight you all together. And know that Allah is with those who keep their duty. Postponing the sacred months is only an addition in disbelief, whereby those who disbelieve are led astray. They allow one year and forbid another, in order to agree in the number of months which Allah has made sacred, and thus make lawful what Allah has forbidden. The evil of their doings is made fair to them. Allah does not guide disbelieving people." Interpreters had different ideas about the question of additional days. Some of them preferred to increase the months of the lunar year so it corresponded with the solar year. Some others interpreted the question as a delay in the observance of one of the four sacred months in order to fight in order to release themselves from the tradition of staying for three months without breaking out wars.

The important astronomical or universal phenomena on which time depends is the confirmation of the appearance of the crescent in order to determine the first days of the Hijrite months. After the crescent is witnessed, the moon goes eastwards away from the sun. This increases the length of time between the disappearance of the moon and sunset. Until it becomes a full-moon. Here, it disappears around dawn. At that time, the moon goes in one direction and the sun goes the opposite. In the second half of the Hijrite month, the moon disappears during daytime. This becomes delayed gradually until the moon completes a full round, putting itself between both the sun and the earth. At that time, one half of the moon facing the sun becomes luminous while the other, facing the earth, becomes dark. Later, the latter starts to get itself lit and appears in the form of a small crescent which grows gradually in the course of time. The important point is that the moment the new crescent is born, it is the same everywhere around the globe, regardless of day or night. Thus, the time at which the crescent appears, it should have astronomical value as it determines timings. In this meaning, the Holy Qur'an says: "They ask thee of the new moons. Say They are times appointed for men, and for the pilgrimage."

It is probable that strong sunlight during the day or the accumulation of clouds in the sky or bad witness for any reasons may prevent the witness of the newly born crescent. It is a fact that in certain countries sunset takes place before the appearance of the crescent, while in others chances allow the witness of the crescent immediately after sunset. And for the absence of quick communications facilities at that time, the Holy Qur'an asked people to keep fasting the moment they witnessed the crescent. In Al-Baqarah, God says:

"So whoever of you is present in the month, he shall fast therein." This had been done as if Prophet Muhammad knew that the Hijrite month had started at a fixed time and that the moon was difficult to be seen sometimes and completely impossible to be witnessed sometimes. Here, we may ask again: Was Muhammad so distinguished in astronomy or mathematics? On the other hand, we notice that stars and planets do not complete their orbit around the sun at equal intervals. The length of the year on earth differs completely from Mars, Mercury, Venus, Jupiter, etc. There may be other planets which follow other suns which complete their orbits around their suns in thousands of the years known in our planet. The idea of diversity among days and years in worlds existing beyond our own is mentioned in the Holy Qur'an: "And surely

a day with thy Lord is a thousand years of your reckoning." Also in the Qur'an: "To Him ascends the angels and the Spirit in a day the measure of which is fifty years."

## Islam and Science

Western thought today is in the midst of a raging battle between religion and science. It is almost impossible for a western thinker today to accept the fact that there may be a meeting ground between religion and science. The Bible, in which the Christians believe, states that the tree from which the Prophet Adam was forbidden to eat was the tree of knowledge. After eating from it, he gained knowledge. For this reason, Europe spent two centuries arguing whether or not to accept scientific knowledge coming from Muslims. The Church ruled that the pursuit of such scientific knowledge was the cause for the original sin. The bishops drew their evidence from the Old Testament, where it is mentioned that when Adam ate of the tree and gained some knowledge, Allah was displeased with him and denied him mercy. Scientific knowledge was therefore rejected entirely by the Church as a taboo. Finally, when the free thinkers and scientists of the West were able to overcome the power of the Church, they took revenge by going in the opposite direction and suppressing any power of the religion. They went to all possible extremes in order to overcome the power of the Church and reduce its influence into a narrow and a confined corner. Therefore, if you discuss the issue of religion and science with a westerner, he readily goes into sheer wonderment. They do not know Islam. They do not know that Islam accords a very high status to knowledge. But Allah, Himself has told us in the Quran: There is no Allah but He: That is the witness of Allah, His angels and those endued with knowledge. And Allah, may He be exalted and Glorified has also told us: Know, therefore, that there is no true deity but Allah.

It is known from the Qur'an that Adam was favoured over the angels by virtue of knowledge given to him by Allah. The Qur'anic story contradicts that of the Bible which Muslims hold to have been distorted. According to the Qur'an, the fact that Adam was given knowledge is a mark of Honour, and not the cause of his expulsion from Paradise. Hence, if one discusses Islam and science with Western thinkers, they tend to expect an argument similar to what they have in their own religious and cultural context. That is why they react with surprise when they are presented with crystal clear facts of the Qur'an and Sunnah. Among those who were taken by surprise is Dr. Joe

Leigh Simpson, Chairman of the Department of Obstetrics and Gynaecology, and Professor of Molecular and Human Genetics at the Baylor College of Medicine, Houston. Professor Simpson studied two hadith's extensively, noting that the first 40 days constitute a clearly distinguishable stage of embryo genesis. He was particularly impressed by the absolute precision and accuracy of those hadith's. Then during one of his conferences, he gave the following opinion: "So that the two hadith's that have been noted can provide us with a specific time table for the main embryological development before 40 days. Again, the point had been made repeatedly by other speakers this morning that these hadith's could not have been obtained on the basis of the scientific knowledge that was available at the time of their recording." Professor Simpson says that religion can successfully guide the pursuit of knowledge. The West has rejected this. Here is an American scientist who says that religion, namely Islam, can achieve this with success. By analogy, if you go to a factory and have with you the operation manual of the factory, then you will be able to easily understand the kind of operation that goes on in that factory, thanks to that manual by the factory designer and builder. If you do not have a manual, chances are much less that you will have good understanding of the various processes there. Professor Simpson said: "It follows, I think, that not only is there no conflict between genetics and religion, but in fact religion can guide science by adding revelation to some traditional scientific approaches. That there exist statements in the Qur'an shown by science to be valid, which supports knowledge in the Qur'an having been derived from Allah."

This is true. Certainly, the Muslims can lead the way in the pursuit of knowledge and they can present knowledge in its proper status. Moreover, Muslims know how to use knowledge as proof of the existence of Allah, May Allah be Exalted and Glorified, and affirm Prophet Muhammad. Allah said in the Qur'an: Soon will we show them our signs in the furthest regions of the earth, and in their own souls, until it becomes manifest to them that this is the truth. Is it not enough that thy Lord does witness all things? After having realized through examples of scientific miracles in the Qur'an as well as knowing the related comments of the objective scientists on them, let us ask ourselves these questions: Could it be a coincidence that all this recently discovered scientific information from different fields was mentioned in the Qur'an which was revealed 14 centuries ago? Could this Qur'an have been authored by Muhammad or by any other human being? The only possible answer to that is that the Qur'an must be the literal word of God (Allah). The Qur'an is the literal word of Allah which He revealed to His

Prophet Muhammad through the Angel Gabriel. It was memorized by Muhammad who then dictated it to his companions. They in turn memorized and wrote it down.

Moreover, Prophet Muhammad reviewed the Qur'an with the Angel Gabriel once every Ramadan and twice in the last year of his life. Since the Qur'an was revealed, there has always been a huge number of Muslims who memorize the Quran, letter by letter. Some of them have been able to memorize the Qur'an by the age of ten. The Qur'an which was revealed 14 centuries ago mentioned facts that are only recently discovered by proven scientists. This proves without a doubt that the Qur'an is the word of Allah, revealed by Him to Prophet Muhammad and it also proves that Muhammad is truly a Messenger and Prophet sent by Allah. It is beyond reason that anyone fourteen hundred years ago would have known these facts discovered or proven very recently with advanced equipment and sophisticated methods.

## Qur'an on Clouds

Scientists have studied cloud types and have realized that rain clouds are formed and shaped according to definite systems and certain steps connected with certain types of wind and clouds. One kind of rain cloud is the cumulonimbus cloud. Meteorologists have studied how cumulonimbus clouds are formed and how they produce rain, hail, and lightning. They have found that cumulonimbus clouds go through the following steps to produce rain: God has said in the Qur'an: "Have you not seen how God makes the clouds move gently, then joins them together, then, like mountains, He stacks them and then you see rain come out of it?" Meteorologists have only recently come to know these details of cloud formation, structure, and function by using advanced equipment like planes, satellites, computers, balloons and other equipment, to study wind and its direction, to measure humidity and its variations and to determine the levels and variations of atmospheric pressure. The preceding verse, after mentioning clouds and rain, speaks about hail and lightning: "And He sends down hail from clouds in the sky, and He strikes with it whomever He wills, and turns it from whomever He wills. The vivid flash of its lightning nearly blinds the sight." Meteorologists have found that these cumulonimbus clouds, that shower hail, reach a height of 25,000 to 30,000 ft. (4.7 to 5.7 miles), like mountains, as the Qur'an said, "And He sends down hail from mountains (clouds) in the sky" This verse may raise a question. Why does the verse say "it's lightning" in a reference to the hail? Does this mean that hail is the major factor

in producing lightning? Let us see what the book entitled Meteorology Today says about this. It says that a cloud becomes electrified as hail falls through a region in the cloud of super cooled droplets and ice crystals.

As liquid droplets collide with a hailstone, they freeze on contact and release latent heat. This keeps the surface of the hailstone warmer than that of the surrounding ice crystals. When the hailstone comes in contact with an ice crystal, an important phenomenon occurs: electrons flow from the colder object toward the warmer object. Hence, the hailstone becomes negatively charged. The same effect occurs when super cooled droplets come in contact with a hailstone and tiny splinters of positively charged ice break off. These lighter positively charged particles are then carried to the upper part of the cloud by updrafts. The hail, left with a negative charge, falls towards the bottom of the cloud, thus the lower part of the cloud becomes negatively charged. These negative charges are then discharged as lightning. We conclude from this that hail is the major factor in producing lightning. This information on lightning was discovered recently. Until 1600 AD, Aristotle's ideas on meteorology were dominant. For example, he said that the atmosphere contains two kinds of exhalation, moist and dry. He also said that thunder is the sound of the collision of the dry exhalation with the neighbouring clouds, and lightning is the inflaming and burning of the dry exhalation with a thin and faint fire. These are some of the ideas on meteorology that were dominant at the time of the Qur'an's revelation, fourteen centuries ago.

## Evolutionists can never explain

Atoms that come alive - Atoms are the building blocks of both animate organisms as well as inanimate objects. Since atoms are inanimate particles, it evokes extreme astonishment that they are the building blocks of living beings. This is an issue evolutionists can never explain. Just as it is impossible to imagine pieces of stone coming together to form living organisms, it is impossible to imagine inanimate atoms coming together by themselves to form living organisms. Think of a rock and a butterfly, one is inanimate, the other is animate. Yet, when we reach into their essences, we see that both are made up of the same sub-atomic particles. The following example may elucidate the impossibility of inanimate matter transforming itself into animate matter in a better way: Can aluminium fly? No. If we mix aluminium with plastic and gasoline, can it fly? Of course it still cannot. Only if we bring these

materials together in a way to form an airplane, they fly. So, what makes an airplane fly? Is it the wings, the engine or the pilot? None of these can fly by themselves. In fact, an airplane is manufactured by the assemblage in a special design consisting of different pieces each of which has no ability to fly. The ability to fly is derived neither from aluminium, nor plastic, nor gasoline. The specifications of these substances are important, but the ability to fly can only be gained by bringing these substances together in a very special design. Living systems are no different. A living cell is formed by the arrangement of inanimate atoms in a very special design. Faculties of living cells such as growth, reproduction and others are results of perfect design rather than the properties of molecules. The design we find at this point is only Allah's creates life from the dead. In the Qur'an Allah Says: "Indeed, Allah is the cleaver of grain and the date seed. He brings the living out of the dead and brings the dead out of the living. That is Allah; so how are you deluded?" When the Theory of Evolution was advanced in the middle of the 19th century, scientific research conducted with primitive microscopes had created the impression that the cell was just a simple lump of matter. However, in the 20th century, observation and research made using advanced instruments and electron microscopes revealed that the cell has an extremely complex structure that could only have been formed as a result of perfect design. Most importantly, research showed that it is absolutely impossible for life to arise spontaneously out of inanimate matter. The source of life is life alone, a fact has been proved experimentally too. This is a problem evolutionists can never resolve. It is for this reason that renowned evolutionary scientists find themselves in a great impasse and instead of presenting solid scientific evidence, resort to telling hypothetical 'tales' which amount to nothing but window-dressing. They put forward completely illogical and unscientific claims that matter has a consciousness, ability and will of its own. However, they themselves do not believe these absurd tales and are eventually forced to confess that the main questions that need to be answered cannot be answered scientifically: "The outstanding evolutionary mystery now is: how matter has originated and evolved, why it has taken its present form in the Universe and on the earth, and why it is capable of forming itself into complex living sets of molecules." The Theory of Evolution is to deny that Allah (God) created living beings. This is the scenario claimed by evolutionists, describing the transformation of inanimate and unconscious atoms into animate organisms, and most significantly, into people with high levels of consciousness and intelligence: "After the Big Bang, atoms, containing precisely balanced forces, somehow brought themselves into being. These atoms first

transformed themselves into cells with highly complex structures and then produced copies of the cells they formed by splitting into two, after which they started speaking and hearing. Subsequently, these atoms transformed into university professors viewing themselves under the electron microscope and claiming that they came into being coincidentally.”

Let us see whether unconscious atoms can spontaneously form the DNA molecule. DNA (Deoxyribonucleic Acid), which is located in the nucleus of a cell contains the codes carrying the information that controls the formation of all organs and characteristics of the body. This code is so complex that scientists were only able to translate it (limited extent) as late as the 1940s. Proteins are the building blocks of living beings and play a key role in many vital functions of the organism. DNA is a series of nucleotides arranged in a special sequence. A protein is a series of amino acids arranged again in a special sequence. First of all, it is mathematically impossible for either DNA molecules or protein molecules that come in thousands of different types to sort out the appropriate sequences necessary for life by chance. Probabilistic calculations reveal that the probability of even the simplest protein molecules achieving the right sequence by chance is zero. In addition to this mathematical impossibility, there is also an important chemical obstacle to the coincidental formation of these molecules. If the relationship between DNA and protein were a result of time, chance and natural processes, then there would be some sort of chemical affinity of DNA and protein to react, as acids and bases have a great tendency to react. In that case, if chance had really played a role, a whole host of other natural chemical reactions would occur among any random fragments of DNA and protein, hence the living beings we see today would not have formed. Just as the entire Universe was created from nothing, so were living beings. Just as only nothing can come into existence out of nothing by chance, inanimate matter cannot combine by chance to form living beings. Only Allah, possesses Infinite Power, Infinite Wisdom and Infinite Knowledge. Allah Says: "Indeed your Lord is Allah, who created the Heavens and Earth in six days and then established Himself above the Throne. He covers the night with the day chasing it rapidly; and He created the sun, the moon and the stars, all are subjected by His command. Unquestionably, His is the creation and the command; blessed is Allah, Lord of the worlds.”

## Muslims laid the foundation of Physical Science

It is an undeniable historical fact that before the arrival of Islam, the pursuit of Science was condemned as heresy. One does not have to go far to seek the reason for this. At that time, most people could not think in the abstract and they looked upon the elements of Nature as sacred objects, possessing supernatural powers. They made idols symbolizing different elements and worshipped them as gods and goddesses, either for protection from evil or for attainment of certain objects. It was in this way that a pantheon was created and the sun, moon, stars, air, water, animals, trees and stones were worshiped and adored. It was not unnatural that in such circumstances, any deviation from the prevailing belief in their sanctity should have been branded as sacrilege, and any attempt at a critical examination of their potentiality, for good or evil, stigmatized as profanity. Thus, all that was useful in the heavens and the earth remained altogether unexplored, and for thousands of years man did not realise the sublime utility of the forces of Nature. It was reserved for the untutored son of the desert to open man's eye to the wonderland of Nature by bringing down her elements from the high pedestal of divinity on which they had been placed, to the position of servants of mankind. The subservience of natural elements to man. The Qur'an says: "And He has made subservient to you the night and the day and the sun and moon and the stars are made subservient by His commandment; most surely there are signs in this for people to ponder. Thus were the gods of the pre-Islamic people reduced by one stroke to the status of man's servants. For the first time in the history of the world, the Holy Qur'an declared in unmistakable language that the main purpose for which all objects from the mightiest sun to the most insignificant atom were created, was to minister to man's needs. Everything in the Universe being intended for his use, man has been commanded to use his faculties to investigate their intrinsic properties in other words, to cultivate every branch of Science in order to discover the Divine that designed him and the world around him.

In the Qur'an, man was declared the representative on earth by the Lord of the Universe and everything in it was subservient to him. Thus, the Qur'an gave a tremendous inspiration to the development of scientific research. In fact, the foundation of modern Science was thus laid by acquainting man with the real nature of the forces and laws of Nature and by teaching him how to harness them for the services of human beings. The initiation of the conquest of Nature leading to the

utilisation of its forces for the benefit of humanity is, indeed, one of the greatest blessings Islam has conferred upon mankind. The Qur'an clearly indicated the way in which to reduce Nature to human service by contemplation and observation of four kinds, learning, pondering, contemplation and meditation). By means of learning a correct idea of things and their different features can be arrived at; by pondering the knowledge of how to utilize them properly can be acquired, contemplation teaches the ways by which things have come into existence while meditation gives the knowledge which enables man to make the right use of different things in everyday life. It was meditation which indicated the different kinds of scientific research among the early Muslims. This is how the Qur'an placed in the hands of man, the key to the treasures of Nature and Divine Revelation which came to show him the way to material progress. Everything in the Universe having been intended for the use of man, it was a virtuous act for him to conduct research into the realms of Nature in order to discover the utility of its various components. Thus the first principle of progress the exploration and subsequent utilization of the forces of Nature to serve the needs of mankind and help him realize the Greatness of his Creator became an article of faith with the Muslims and impelled them to engage in scientific research.

## Muslims: Pioneers of Pharmacology

Muslim pharmacy as a profession and a separate entity from medicine was recognized by the beginning of the ninth century. This century not only saw the founding and increase in the number of privately owned pharmacy shops in Baghdad and its vicinity, but in other Muslim cities as well. Many of the pharmacists who managed them were skilled in the apothecary's art and quite knowledgeable in the compounding, storing and preserving of drugs. State-sponsored hospitals also had their own dispensaries attached to manufacturing laboratories where syrups, electuaries, ointments and other pharmaceutical preparations were prepared on a relatively large scale. The pharmacists and their shops were periodically inspected by a government appointed official, 'Al-Muhtasib', and his aides. These officials were to check the accuracy in weights and measures as well as the purity of the drugs used. Such supervision was intended to prevent the use of deteriorating compounded drugs and syrups, and to safeguard the public. This early rise and development of professional pharmacy in Islam, over four centuries before such development took place in Europe, was the result of three major occurrences: the great increase in the demand for drugs,

professional maturity and the outgrowth of intellectual responsibility by qualified pharmacists. The ninth century in Muslim lands witnessed the richest period thus far in literary productivity insofar as pharmacy and the healing arts were concerned. This prolific intellectual activity paved the way for still a greater harvest in the succeeding four centuries of both high and mediocre calibre authorship. For pharmacy, manuals on Material medical and for instructing the pharmacist concerning the work and management of his shop were circulating in increasing numbers. A few authors and their important works will be briefly discussed and evaluated.

Abu Hasan at-Tabari: One of the contributors to Muslim Pharmacy was Abu Hasan 'Ali At-Tabari. He was born in 808. At about thirty years of age, he was summoned to Samarra by Caliph al-Mu'tasim (833-842), where he served as a statesman and a physician. At-Tabari wrote several medical books, the most famous of which is his Paradise of Wisdom, completed in 850. It contains discussions on the nature of man, cosmology, embryology, temperaments, psychotherapy, hygiene, diet, and diseases - acute and chronic - and their treatment, medical anecdotes, and abstracts and quotations from Indian source material. In addition, the book contains several chapters on Material medical, cereals, diets, utilities and therapeutic uses of animal and bird organs, and of drugs and methods of their preparation. At-Tabari urged that the value of each drug be utilised in accordance with a particular case, and the practitioner should always choose the best of samples. He explained that the finest types of samples come from various places: black myrobalan (herb tree) comes from Kabul; clover dodder from Crete; aloes from Socotra; and aromatic spices from India. He was also precise in describing his therapeutics. He said, 'I have tried a very useful remedy for the swelling of the stomach; the juices of the liverwort (water hemp) and the absinthian after being boiled on fire and strained to be taken for several days. Also, powdered seeds of celery (marsh parsley) mixed with giant fennel made into troches and taken with a suitable liquid, release the wind in the stomach, joints and back (arthritis).' To strengthen the stomach and to insure good health he prescribed 'black myrobalan powdered in butter, mixed with dissolved plant sugar extracted from liquorice and this remedy should be taken daily.' For storage purposes he recommended glass or ceramic vessels for liquid drugs; special small jars for eye liquid salves; lead containers for fatty substances. For the treatment of ulcerated wounds, he prescribed an ointment made of juniper-gum, fat, butter and pitch. In

addition, he warned that about 4 grams of opium or henbane causes sleep and also death.

The first medical formulary to be written in Arabic is *Al-Aqrabadhin* by Saboor bin Sahl, who died in 869 AH. In it, he gave medical recipes stating the methods and techniques of compounding these remedies, their pharmacological actions, the dosages given of each, and the means of administration. The formulas are organised in accordance with their types of preparations into which they fit, whether tablets, powders, ointments, electuaries or syrups. Each class of pharmaceutical preparation is represented along with a variety of recipes made in a specific form; they vary, however, in the ingredients used and their recommended uses and therapeutic effects. Many of these recipes and their pharmaceutical forms are remindful of similar formulas given in ancient documents from the Middle East and the Greco-Roman civilisations. What is unique is the organization of Saboor's formulary-type compendium purposely written as a guidebook for pharmacists, whether in their own private drugstores or in hospital pharmacies. Hunayn bin Is'haaq was an Arab scholar who died in 873 AH. His translations of Plato, Aristotle, Galen, Hippocrates and the Neoplatonist's made accessible to Arab philosophers and scientists the significant sources of Greek thought and culture. Hunayn was a Nestorian Christian who studied medicine in Baghdad and became well versed in ancient Greek. He was appointed by Caliph Al-Mutawakkil to the post of chief physician to the court, a position that he held for the rest of his life. He travelled to Syria, Palestine and Egypt to gather ancient Greek manuscripts. From his translators' school in Baghdad, he and his students transmitted Arabic and Syriac versions of the classical Greek texts throughout the Islamic world. Especially important are his translations of Galen, most of the original Greek manuscripts of which are lost. Hunayn's book of the Ten Treatises on the Eye was completed in 860 AH. After finishing the ninth treatise, the author felt the need for a closing treatise to be devoted to compounded drugs for eye medication. He extracted some recipes from earlier treatises and added more prescriptions recommended by Greek authors.

As one obvious example of the uses and therapeutic values of using compounded drugs, Hunayn gave that of the theriac, the universal antidote against poisoning. Hunayn, who knew Greek, defined the Greek word theriac as an animal that bites or snaps. Since these antidotes were used against animal bites, the word eventually was applied to all antidotes, especially when snake flesh was incorporated. Hunayn

corrected the translation in Arabic of the major part of Dioscorides', *Materia Medica*, undertaken by his associate Istifan bin Basil (about mid ninth century) in Baghdad. Due to the influence of this work, several books of *Materia medica* were written in Arabic. Dioscorides definitely influenced the writing and direction of Saboor's formulary, which has been mentioned earlier. Hunayn's *Herbal Treatise* established the basis for Arabic pharmacology, therapy, and medical botany. It also provided a description of the physical properties of drugs, types, and means of testing their purity, and usefulness. As a result, Muslim pharmacology advanced beyond the Greco-Roman contribution. In turn, this helped and influenced a similar development in Europe through the Renaissance.

## Comments on the Scientific Miracles in the Qur'an

1) Dr. Persaud is Professor of Anatomy, Professor of Paediatrics and Child Health. In 1991, he received the most distinguished award presented in the field of anatomy in Canada, the J.C.B. Grant Award from the Canadian Association of Anatomists. When he was asked about the scientific miracles in the Qur'an which he has researched, he stated the following: "The way it was explained to me is that Muhammad was a very ordinary man. He could not read, didn't know how to write. In fact, he was an illiterate. And we're talking about twelve, actually about fourteen hundred years ago. You have someone illiterate making profound pronouncements and statements and that are amazingly accurate about scientific nature. And I personally can't see how this could be a mere chance. There are too many accuracies and, like Dr. Moore, I have no difficulty in my mind that this is a divine inspiration or revelation which led him to these statements." Professor Persaud has included some Qur'anic verses and sayings of Prophet Muhammad, May the mercy and blessings of God be upon him, in some of his books. He has also presented these verses and sayings of Prophet Muhammad at several conferences.

2) Dr. Joe Leigh Simpson is the Chairman of the Department of Obstetrics and Gynaecology, Professor of Obstetrics and Gynaecology, and Professor of Molecular and Human Genetics at the Baylor College of Medicine, Houston, Texas, USA. Professor Simpson studied the following two sayings of Prophet Muhammad: "In every one of you, all components of your creation are collected together in your mother's womb by forty days. If forty-two nights have passed over the embryo, God sends an

angel to it, who shapes it and creates its hearing, vision, skin, flesh and bones.” He studied these two sayings of the Prophet Muhammad extensively, noting that the first forty days constitute a clearly distinguishable stage of embryo-genesis. He was particularly impressed by the absolute precision and accuracy of those sayings of Prophet Muhammad. Then, during one conference, he gave the following opinion: “So that the two hadith’s that have been noted provide us with a specific time table for the main embryological development before forty days. Again, the point has been made, I think, repeatedly by other speakers this morning: these hadith’s could not have been obtained on the basis of the scientific knowledge that was available at the time of their writing. It follows, I think, that not only there is no conflict between genetics and religion but, in fact, religion can guide science by adding revelation to some of the traditional scientific approaches, that there exist statements in The Qur’an shown centuries later to be valid, which support knowledge in the Qur’an having been derived from God.”

3) Dr. E. Marshall Johnson is Professor Emeritus of Anatomy and Developmental Biology at Thomas Jefferson University, Philadelphia, Pennsylvania, USA. In 1981, during the Seventh Medical Conference in Dammam, Saudi Arabia, Professor Johnson said in the presentation of his research paper: “Summary: The Qur’an describes not only the development of external form, but emphasizes also the internal stages, the stages inside the embryo, of its creation and development, emphasizing major events recognized by contemporary science.” Also he said: “As a scientist, I can only deal with things which I can specifically see. I can understand embryology and developmental biology. I can understand the words that are translated to me from the Qur’an. As I gave the example before, if I were to transpose myself into that era, knowing what I know today and describing things, I could not describe the things which were described. I see no evidence for the fact to refute the concept that this individual, Muhammad, had to be developing this information from some place. So I see nothing here in conflict with the concept that divine intervention was involved in what he was able to write.”

4) Dr. William W. Hay is a well-known marine scientist. He is Professor of Geological Sciences at the University of Colorado, Boulder, Colorado, USA. He was formerly the Dean of the Rosenstien School of Marine and Atmospheric Science at the University of Miami, Miami, Florida, USA. After a discussion with Professor Hay about the Qur’an’s mention of recently discovered facts on seas, he said: “I find it very interesting

that this sort of information is in the ancient scriptures of the Holy Qur'an and I have no way of knowing where they would come from, but I think it is extremely interesting that they are there and that this work is going on to discover it, the meaning of some of the passages." And when he was asked about the source of the Qur'an, he replied: "Well, I would think it must be the divine being."

5) Dr. Gerald C. Goeringer is Course Director and Associate Professor of Medical Embryology at the Department of Cell Biology, School of Medicine, Georgetown University, Washington, DC, and USA. During the Eighth Saudi Medical Conference in Riyadh, Saudi Arabia, Professor Goeringer stated the following in the presentation of his research paper: "In a relatively few ayahs (Qur'anic verses) is contained a rather comprehensive description of human development from the time of commingling of the gametes through organogenesis. No such distinct and complete record of human development, such as classification, terminology, and description, existed previously. In most, if not all, instances, this description antedates by many centuries the recording of the various stages of human embryonic and foetal development recorded in the traditional scientific literature."

6) Dr. Yoshi hide Kozai is Professor Emeritus at Tokyo University, Hongo, Tokyo, Japan, and was the Director of the National Astronomical Observatory, Mitaka and Tokyo, Japan. He said: "I am very much impressed by finding true astronomical facts in the Qur'an, and for us the modern astronomers have been studying very small pieces of the universe. By using telescopes, we can see only see portions of the sky. By reading the Qur'an and by answering to the questions, I think I can find my future way for investigation of the universe."

7) Professor Tejatat Tejasen is the Chairman of the Department of Anatomy at Chiang Mai University, Chiang Mai, Thailand. Previously, he was the Dean of the Faculty of Medicine at the same university. During the Eighth Saudi Medical Conference in Riyadh, Saudi Arabia, Professor Tejasen stood up and said: "During the last three years, I became interested in the Qur'an from my study and what I have learned from this conference, I believe that everything that has been recorded in the Qur'an fourteen hundred years ago must be the truth that can be proved by the scientific means. Since Prophet Muhammad could neither read nor write, Muhammad must be a messenger who relayed this truth, which was revealed to him as an enlightenment by the one who is eligible as the creator. This creator must be God. Therefore, I think this is the time

to say La ilaha illa Allah, there is no god to worship except Allah (God), Muhammadur rasoolu Allah, Muhammad is Messenger (Prophet) of Allah (God). Lastly, I must congratulate for the excellent and highly successful arrangement for this conference I have gained not only from the scientific point of view and religious point of view but also the great chance of meeting many well-known scientists and making many new friends among the participants. The most precious thing of all that I have gained by coming to this place is La ilaha illa Allah, Muhammadur rasoolu Allah, and to have become a Muslim.” After all these examples we have seen about the scientific miracles in the Holy Qur’an and all these scientists’ comments on this, let us ask ourselves these questions: Could it be a coincidence that all this recently discovered scientific information from different fields was mentioned in the Qur’an, which was revealed fourteen centuries ago? Could this Qur’an have been authored by Muhammad, may the mercy and blessings of God be upon him or by any other human being? The only possible answer is that this Qur’an must be the literal word of God, revealed by Him. Prophet Muhammad, may God praise him, was illiterate. He could not read nor write, but he dictated the Qur’an to his Companions and commanded some of them to write it down.

## Qur’an or the Bible, which is God’s Word

One of the major sources of corruption of the Bible is translation and translations of translations. With regards to the Gospel of the Christians, there is no record of any writings or any documents when Jesus received revelations. It is believed by the Christians that the first records of the teachings of Jesus and his life were made decades after his disappearance and it was in the Greek language. The earliest manuscript available is from the fourth century, after Jesus. In the case of the Old Testament, it was written in Hebrew and its dialects, but was destroyed at least twice by the enemies of Judaism in ancient times without leaving a single copy, it then was rewritten from memory, one of the sources of corruption. The Qur’an was recorded in writing as well as in the memory of many people in the lifetime of the Prophet Muhammad and was compiled in the form of a book according to his direction by his companions shortly after his death.

## Why so Many Religions

If there is only one God, then why are there so many religions? All religions originated with Allah, then people began to add or take away from the teachings in order to control mankind. The Noble Qur'an states: Today, those who disbelieve have given up all hope of your religion, so do not fear them, but fear me. Today, I have perfected for you, your religious Way of life, I have completed My Favour upon you, and have chosen, as your religious way of life, for you to surrender and submit to me in peace. Allah does not force anyone to submit to Him. He has laid out a clear path and then made it known to them the two ways (Heaven or Hell). The person is always free to make his or her own choice. There is no compulsion in religion. Verily, the Right Path has become distinct from the wrong path. Whoever disbelieves in taghut (false gods and false worship) and believes in Allah, then he has grasped the most trustworthy handhold that will never break. And Allah is All-Hearer, All-Knower. Allah is the Wali (Protector or Guardian) of those who believe. He brings them out from darkness into light. As for those who disbelieve, their Auliya (supporters and helpers) are Taghut [false gods and false worship.], they bring them out from light into darkness. Those are the dwellers of the Fire, and they will remain there forever.

There is no compulsion in the way of "Islam." Whoever chooses to worship Allah without partners and is devoted to Him and obeying His commands as much as possible has grasped the firm handhold that will never break. Whoever denies God and chooses some other way to worship or not to believe at all, for them there is an eternal punishment that is most horrible (Hell). People began to separate into different groups due to their rejection of truth and denial of clear proofs becoming evident to them from their Lord. And the people of the Scripture (Jews and Christians) differed not amongst themselves until after clear evidence came to them. They were not given a command other than this; Worship Allah, alone (without associating partners with Him in worship) and establish regular devotional prayers and pay the charity due to the poor; this is the correct Way (way of life and religion). Allah warns the Muslims not to fall into the same trap as the people before them, by disputing with each other and separating into different religious groups: And be not as those who divided and differed among themselves after clear proofs had come to them. It is they for whom there is an awful torment. On the Day of Resurrection when some faces will become white and some faces will become black; as for those whose faces will become black, to them it

will be said: "Did you reject Faith after accepting it? Now taste the torment in Hell for rejecting Faith." People lied about the revelations, changed their scriptures and abused and even murdered the prophets whom Allah sent to them. And verily, among them is a party who distort the Book with their tongues, so that you may think it is from the Book, but it is not from the Book, and they say: "This is from Allah," but it is not from Allah; and they speak a lie against Allah while they know it. It is not possible for any human being to whom Allah has given the Book and Al-Hukma (the knowledge and understanding of the laws of religion) and Prophet Hood to say to the people: "Be my worshippers rather than Allah's." On the contrary he would say: "Be you Rabbani Yun (learned men of religion who practice what they know and also preach others), because you are teaching the Book, and you are studying it."

Prophets of Allah only ask people to worship Allah, as One God without partners. They would never ask people to worship them or anyone or anything else. Allah tells us in the Quran: Nor would he (a messenger of Allah) order you to take angels and Prophets for lords (gods). Would he order you to disbelieve after you have submitted to Allah's Will? Manmade religions are a disgrace before the Lord and will never be accepted. Do they seek other than the religious way of life of Allah (Islamic Monotheism), while to Him submits all creatures in the heavens and the earth, willingly or unwillingly? And to Him shall they all be returned. Allah will only accept true submission, obedience and purity and peace to His commandments. And whoever seeks a Way of life other than submission and surrender to Allah's Will, it will never be accepted of him, and in the Hereafter he will be one of the losers. To believe in Allah and follow His Commandments has been the message of all prophets of monotheism.

## Difference between the Bible and the Qur'an

The Bible is a collection of writings by many different authors. The Qur'an is a dictation. The speaker of the Qur'an is God talking directly to man. In the Bible you have many men writing about God and you have in some places the word of God speaking to men and still in other places you have some men simply writing about history. The Bible consists of 66 small books. About 18 of them begin by saying: This is the revelation God gave to so and so, and the rest make no claim as to their origin. You have for example the beginning of the book of Jonah which begins by saying: The word of the Lord came to Jonah, the son of Elmitaeh saying... quote and then it continues for two

or three pages. If you compare that to one of the four accounts of the life of Jesus, Luke begins by saying: “many people have written about this man, it seems fitting for me to do so too”. That is all, no claim of saying “these words were given to me by God, they are for you it is a revelation”, there is no mention of this. The Bible does not contain self-reference, that is, the word 'Bible' is not in the Bible. Nowhere does the Bible talk about itself. Some scriptures are sometimes pointed to in the Bible, saying: Here, where it talks about itself, but we have to look closely. 2nd Timothy 3:16 is a favourite which reads: “All scripture is inspired of God” and there are those who say, here is where the Bible talks about itself, it says it is inspired by God, all of it. But if you read the whole sentence, you read that this was a letter wrote by Paul to Timothy and the entire sentence says to Timothy: “Since you were a young man you have studied the Holy Scriptures, all scriptures inspired by God” and so on... When Timothy was a young man the New Testament did not exist, the only thing that stems, he was talking about scriptures – which are only a portion of the Bible - from before that time. It could not have meant the whole Bible. There is at the end of the Bible a verse which says: “Let anyone who takes away from this book or adds to this book be cursed”. This too is sometimes pointed to me saying: Here is where it sums itself as a whole. But look again and you will see that when it says: Let no one change this book, it is talking about that last book, number 66, the Book of Revelation. It has too, because any reference will tell you that the Book of Revelation was written before certain other parts of the Bible were written. It happens today to be stacked at the end, but there are other parts that came after, so it cannot be referring to the entire book.

It is an extreme position held only by some Christian groups that the Bible, in its entirety cover to cover is the revealed word of God in every word, but they do a clever thing when they mention this, or make this claim. They will say that the Bible in its entirety is the word of God; inerrant (no mistakes) in the original writings. So if you go to the Bible and point out some mistakes that are in it you are going to be told: Those mistakes were not there in the original manuscript. There is a verse in the Bible Isaiah 40:8 which in fact is so well known that some Bibles printed it on the inside front cover as an introduction and it says: “The grass weathers, the flower fades, but the word of our God stands forever”. Here is a claim in the Bible that the word of God will stand forever, it will not be corrupted, and it won't be lost. So if today you find a mistake in the Bible you have two choices. Either that promise was false that when God said my word won't fade away, he was mistaken or the portion which has the mistake in it was

not part of the word of God in the first place, because the promise was that it would be safeguarded, it would not be corrupted. Matthew 27:5 says that Judas Iscariot when he died he hung himself. Acts 1 says that no he jumped off a cliff head first. If you study Logic very soon you will come in your course to what they call an “undecidable propositions” or “meaningless sentences” or statements that cannot be decided because there is no contextual false. One of the classic examples cited is something called the Effeminate paradox. This man was Cretan and he said “Cretans always lie”, now was that statement true or false? If he was a Cretan and he says that they always lie is he lying? If he is not lying then he is telling the truth then the Cretans don't always lie! You see it cannot be true and it cannot be false, the statement turns back on itself. It is like saying “What I am telling you right now is a lie” would you believe that or not? You see the statement has no true content. It cannot be true and it cannot be false. If it is true it is always false. If it is false it is also true.

The speaker in the Qur'an is God. The book itself claims that it is the word of God. It names itself 70 times in the Qur'an. It talks about its own contents. It has self-reference. The Qur'an states in the first Surah after Fatiha that “This is the book, there is no doubt in it, and it is a guide for those who are conscious of God”. It begins that way and continues that way. And there is one very amazing statement in the Qur'an when you come to the fourth Surah, it says to those who say the Qur'an is something other than the word of God. It challenges them saying: “Have they not considered the Qur'an, if it came from someone other than God they will find in it many mistakes”. Another interesting thing the Qur'an does is that it quotes all its critics. There has never in hundreds of years ever been some suggestion as to where that book came from but that the Qur'an does not already mention that objection and reply to it. So the difference in Christianity and Islam comes down to a difference of authority and appeal to authority. The Christian wants to appeal to the Bible, and the Muslim wants to appeal to the Qur'an. A Muslim does not simply open his book and say: No, the Qur'an says this, the Qur'an does not deny something the Bible says, and then say something different. The Christian may say: My Bible says such and such, the Qur'an will not say: No that is not true, it will say: Do they say such and such then ask them such and such. You have for example the Ayah that compares Jesus and Adam. There are those who may say that Jesus must have been God because he had no father. He had a woman who was his mother, but there was no human father. It was God that gave him life, so he must have been God's son. The Qur'an reminds the Christians in

one short sentence to remember Adam, who was his father? And in fact, who was his mother? He did not have a father or mother. The likeness of Adam and Jesus is the same, yet they both worshiped the same one God. The Qur'an does not demand belief - the Qur'an invites belief, here is the fundamental difference. It is not simply delivered as: Here is what you are to believe, but throughout the Quran the statements are always: Have you O man thought of such and such, have you considered so and so. It is always an invitation for you to look at the evidence.

**Special Pleading:** Special Pleading is when implications are not consistent. When you take something and you say: Well that must mean this, but you don't use the same argument to apply it to something else. To give an example, I have seen it in publications many times, stating that Jesus must have been God because he worked miracles. On the other hand we know very well that there is no miracle ever worked by Jesus that is not also recorded in the Old Testament as worked by one of the prophets. You had amongst others, Elijah, who is reported to have cured the leper, raise the dead boy to life and to have multiplied bread for the people to eat - three of the most favourite miracles cited by Jesus. If the miracles worked by Jesus proved he was God, why don't they prove Elijah was God? This is Special Pleading. The words "Son of God" are not found on the lips of Jesus anywhere in the first three Gospel accounts, he always called himself the Son of Man. It is in the Bible that he claimed to be God because of how the Jews reacted. The Jews say he is blaspheming, he claimed to be God so they tried to stone him. Then the Jews tried to kill him. Jesus said that he would keep the Law of Moses and we have this statement in the Bible, why did the Jews kill him? Because he broke the Law of Moses. They must have misunderstood him or lied about him.

In the Qur'an you will find in two different Ayahs a statement that all creation began from a single point, and from this point it is expanding. It is the big bang origin of the universe. It was determined by the large radio receivers that were sensitive enough to pick up background noise, which turned out to be the left over energy from the original creation explosion. It fits exactly as predicted by the mathematical calculation of what would be this thing if the universe began from a single point and exploded outwards. Centuries before, the Qur'an states; in the beginning, the heavens and earth were one piece and split, and in another Ayah: "we are expanding the heavens."

## Is Jesus Really God

Without a doubt, you have often heard the claim that Jesus is God, the second person in the "Trinity". However, the very Bible which is used as a basis for knowledge about Jesus and as the basis for doctrine within Christianity clearly belies this claim. We urge you to consult your own Bible and verify that the following conclusions are not drawn out of context:

1. **God is all Knowing, Jesus was not** - When speaking of the Day of Judgment, Jesus clearly gave evidence of a limitation on his knowledge when he said, "but of that day, the hour that no man knows, neither the angels who are in Heaven, neither a son nor a Father." But God knows all. His knowledge is without any limitations. Jesus, of his own admission, did not know when the Day of Judgment would be, is clear proof that Jesus is not all-knowing, therefore cannot be God.

2. **God is All-Powerful, but Jesus was not** - While Jesus performed many miracles, he himself admitted that the power he had was not his own, but derived from God. He said, "Verily I say to you, the Son can do nothing by himself, but what he sees the Father do", Again he said, "I can of mine own self do nothing: As I hear I judge, and my judgment is just because I seek not mine own will but the will of the Father which has sent me." But God is not only all-powerful, He is also the source of all power and authority. Jesus, of his own admission, could do nothing on his own is clear proof that Jesus is not all-powerful, therefore Jesus is not God.

3. **God does not have a God, Jesus did have a God** - God is the ultimate judge and refuge for all, He does not call upon nor pray to any. Jesus acknowledged that there was one whom he worshipped and to whom he prayed when he said, "I ascend to my Father and your Father, and to my God and your God." He is also reported to have cried out while on the cross, "My God, my God, why have you forsaken me?" If Jesus were God, then couldn't this be read "Myself, myself?" Would that not be pure nonsense? When Jesus prayed the Lord's Prayer, was he praying to himself? When in the garden of Gethsemane he prayed, "O my Father, if it be possible, let this cup pass from me: Nevertheless, not as I will but as you will." Was Jesus praying to himself? Jesus, of his own admission, and by his own actions, acknowledged, worshipped and prayed to God, is clear proof that Jesus is not God.

4. According to the Bible, God is invisible to humans, Jesus was flesh and blood - While thousands saw Jesus and heard his voice, Jesus himself said that this could not be done with God when he said, "No man has seen God at any time. You have neither heard His voice at any time nor seen His shape." He also said in John, "God is a spirit and they that worship him must worship him in spirit and in truth." Jesus said no one had seen or heard God at any time, while his followers both saw and heard him, is clear proof that Jesus was not God.

5. No one is greater than God and no one can direct Him, Jesus acknowledged someone greater than himself whose will was distinct from his own - The clearest indication we have that Jesus and God are not equal, came from the mouth of Jesus himself, when he said in John, "My Father is greater than I." When someone referred to him as a "good master" in Luke, Jesus responded, "Why call me good? There is none good but one that is God" Furthermore, Jesus drew clear distinctions between himself and God when he said, "I proceeded forth and came from God, I did not come by myself, He sent me." Jesus acknowledges another being greater than himself, and that he would negate his own will in deference to affirming the will of another, give clear proof that Jesus is not the Supreme One and therefore Jesus is not God.

6. The Qur'an states: Jesus, son of Mary, in word of truth, concerning which they are doubting. It is not for God to take a son unto Him. Glory be to Him! When He decrees a thing, He but says to it "Be", and it is. And they say, 'The All-Merciful has taken unto Himself a son.' You have indeed stated something hideous. The heavens are well-nigh rent of it and the earth split asunder, and the mountains well-nigh fall down crashing for that they have attributed to the All-Merciful to take a son. All in the heavens and the earth come to the All-Merciful, as a servant. Truly the likeness of Jesus, in God's sight, is as Adam's likeness; He created him from dust, then said to him, "Be", and he was. People of the Book, do not go beyond the bounds in your religion, and do not speak the truth about God. The Messiah, Jesus, son of Mary, was only a Messenger of God, and His word that He committed to Mary, and a spirit from Him. So believe in God and His Messengers, and do not say 'Three', refrain, it is better for you. God is only One God. Glory be to Him – that He should have a son! To Him belongs all that is in the heavens and in the earth, God suffices for a guardian.

7. Regarding Jesus being God: And when God said, 'O Jesus, son of Mary, did you say to men, "Take me and my mother as gods, apart from God?" He said, 'glory be to

you! It is not for me to say what I have no right to. If I indeed said it, you knew it, knowing what is within my soul, and I do not know what is within your soul; you know the things unseen. I only said to them what you commanded me: "Serve God, my Lord and your Lord." I was a witness over them, while I remained among them; but when you took me to yourself, you were the Watcher over them; you are the witness over everything.

8. **Regarding the Crucifixion of Jesus:** And for their unbelief, and their uttering against Mary a mighty calumny, and for their saying 'We slew the Messiah, Jesus son of Mary, yet they did not slay him, neither crucified him, only a likeness of that was shown to them. Those who are at variance concerning him surely are in doubt regarding him, they have no knowledge of him, except the following of surmise; certainly they did not kill him, no. Indeed God raised him up to Himself; God is Almighty, All-Wise. There is not one of the people of the Book but will assuredly believe in him before his death, and on the Resurrection Day he will be a witness against them.

9. **Christians and Islam:** "You will find the closest among them (men) in love with the believers, will be those who say: 'we are Christians': because amongst these are men devoted to learning and men who have renounced the world, and they are not arrogant. And when they listen to the revelation received by the messenger, you will see their eyes overflowing with tears for they recognize the truth: They pray: 'Our lord! We believe; write us down among the witnesses'." Prophet Muhammad has prophesied that Jesus will return and judge mankind with justice. He will descend by the white minaret in the east of Damascus, placing his hands upon the wings of two angels, and will fight against the Antichrist (Dajjal) until he reaches the gate of Ladd (present-day Israel), where he will kill him.

## Who invented the Trinity?

The three monotheistic religions – Judaism, Christianity and Islam all purport to share one fundamental concept: belief in God as the Supreme Being, the Creator and Sustainer of the Universe. This concept of the Oneness of God was stressed by Moses in a Biblical passage known as the "Shema", or the Jewish creed of faith: "Hear, O Israel: The Lord, our God is one Lord." It was repeated word-for-word approximately 1500 years later by Jesus when he said "The first of all the commandments is, Hear,

O Israel; the Lord our God is one Lord." Muhammad came along approximately 600 years later, bringing the same message again: "And your God is One God: there is no God but He". Christianity has digressed from the concept of the Oneness of God, however, into a vague and mysterious doctrine that was formulated during the fourth century. This doctrine, which continues to be a source of controversy both within and outside the Christian religion, is known as the Doctrine of the Trinity. The Christian doctrine of the Trinity states that God is the union of three divine persons – the Father, the Son and the Holy Spirit – in one divine being. If that concept, put in basic terms, sounds confusing, the flowery language in the actual text of the doctrine lends even more mystery to the matter: "we worship one God in Trinity, and Trinity in Unity... for there is one Person of the Father, another of the Son, another of the Holy Ghost is all one... they are not three gods, but one God... the whole three persons are co-eternal and co-equal... he therefore that will be saved must thus think of the Trinity..." (Excerpts from the Athanasies Creed). Let's put this together in a different form: one person, God the Father, plus one person, God the Son, plus one person, God the Holy Ghost, equals one person, God the What? Is this English or is this gibberish? It is said that Athanasius, the bishop who formulated this doctrine, confessed that the more he wrote on the matter, the less capable he was of clearly expressing his thoughts regarding it. How did such a confusing doctrine get started?

### Trinity in the Bible

References in the Bible to a Trinity of divine beings are vague. We find Jesus telling his disciples to go out and preach to all nations. While this "Great Commission" does make mention of the three persons who later become components of the Trinity, the phrase "baptizing them in the name of the Father, and of the Son, and of the Holy Ghost" is quite clearly an addition to Biblical text – that is, not the actual words of Jesus – as can be seen by two factors:

- 1) Baptism in the early Church, as discussed by Paul in his letters, was done only in the name of Jesus.
- 2) The "Great Commission" was found in the first gospel written, that of Mark, bears no mention of Father, Son and/or Holy Ghost.

The only other reference in the Bible to a Trinity can be found in the Epistle of John. Biblical scholars of today, however, have admitted that the phrase "... there are three that bear record in heaven, the Father, the Word, and the Holy Ghost: and these three are one" is definitely a "later addition" to Biblical text, and it is not found in any of today's versions of the Bible. It can, therefore, be seen that the concept of a Trinity of divine beings was not an idea put forth by Jesus or any other prophet of God. This doctrine, now subscribed to by Christians all over the world, is entirely man-made in origin.

### The Doctrine Takes shape

While Paul of Tarsus, the man who could rightfully be considered the true founder of Christianity, did formulate many of its doctrines, that of the Trinity was not among them. He did, however, lay the groundwork for such when he put forth the idea of Jesus being a "divine Son". After all, a Son does need a Father, and what about a vehicle for God's revelations to man? In essence, Paul named the principal players, but it was the later Church people who put the matter together. Tertullian, a lawyer and presbyter of the third-century Church in Carthage, was the first to use the word "Trinity" when he put forth the theory that the Son and the Spirit participate in the being of God, but all are of one being of substance with the father.

### A Formal Doctrine Is Drawn up

When controversy over the matter of the Trinity blew up in 318 between two church men from Alexandria – Arius, the deacon, and Alexander, his bishop – Emperor Constantine stepped into the fray. Although Christian dogma was a complete mystery to him, he did realize that a unified church was necessary for a strong kingdom. When negotiation failed to settle the dispute, Constantine called for the first ecumenical council in Church history in order to settle the matter once and for all. Six weeks after the 300 bishops first gathered at Nicea in 325, the doctrine of the Trinity was hammered out. The God of the Christians was now seen as having three essences, or natures, in the form of the Father, the Son, and the Holy Spirit.

## The Church Puts It foot down

The matter was far from settled, however, despite high hopes for such on the part of Constantine. Arius and the new bishop of Alexandria, a man named Athanasius, began arguing over the matter even as the Nicene Creed was being signed; "Arianism" became a catch-word from that time onward for anyone who didn't hold the doctrine of the Trinity. It wasn't until 451, at the Council of Chalcedon that, with the approval of the Pope, the Nicene/Constantinople Creed was set as authoritative. Debate on the matter was no longer tolerated; to speak out against the Trinity was now considered blasphemy, and such earned stiff sentences that ranged from mutilation to death. Christians now turned on Christians, maiming and slaughtering thousands because of a difference of opinion. Brutal punishments and even death did not stop the controversy over the doctrine of the Trinity, however, and the said controversy continues even today. The majority of Christians, when asked to explain this fundamental doctrine of their faith, can offer nothing more than "I believe it because I was told to do so." It is explained away as "mystery", yet the Bible says: "God is not the author of confusion" The Unitarian denomination of Christianity has kept alive the teachings of Arius in saying that God is one; they do not believe in the Trinity. As a result, mainstream Christians abhor them, and the National Council of Churches has refused their admittance. In Unitarianism, the hope is kept alive that Christians will someday return to the preaching's of Jesus: "Thou shalt worship the Lord thy God, and Him only shalt thou serve."

## Islam and the Matter of the Trinity

While Christianity may have a problem defining the essence of God, such is not the case in Islam: "They do blaspheme who say: Allah is one of three in a Trinity, for there is no god except One God". Suzanne Haneef, in her book *What Everyone Should Know about Islam and Muslims*, puts the matter quite succinctly when she says, "But God is not like a pie or an apple which can be divided into three thirds which form one whole; if God is three persons or possesses three parts, He is assuredly not the Single, Unique, Indivisible Being which God is and which Christianity professes to believe in." Looking at it from another angle, the Trinity designates God as being three separate entities – the Father, the Son and the Holy Spirit. If God is the Father and also the Son, He would then be the Father of Himself because He is His own Son. This is not

exactly logical. Christianity claims to be a monotheistic religion. Monotheism, however, has its fundamental belief that God is one; the Christian doctrine of the Trinity – God being Three-in-One – is seen by Islam as a form of polytheism. This is a charge not taken lightly by Christians, however. They, in turn, accuse the Muslims of not even knowing what the Trinity is, pointing out that the Qur'an sets it up as Allah the Father, Jesus the Son, and Mary his mother. While veneration of Mary has been a figment of the Catholic Church since 431 when she was given the title "Mother of God" by the Council of Ephesus, a closer examination of the verses in the Qur'an most often cited by Christians in support of their accusation, shows that the designation of Mary by the Qur'an as a "member" of the Trinity, is simply not true.

While the Qur'an condemns both Trinitarians and the worship of Jesus and his mother Mary, nowhere does it identify the actual three components of the Trinity. The position of the Qur'an is that WHO or WHAT comprises this doctrine is not important; what is important is that the very notion of a Trinity is an affront against the concept of One God. In conclusion, we see that the doctrine of the Trinity is a concept conceived entirely by man; there is no sanction whatsoever from God to be found regarding the matter simply because the whole idea of a Trinity of divine beings has no place in monotheism. In the Qur'an, God's Final Revelation to mankind, we find His stand quite clearly stated in a number of eloquent passages: "Your God is One God: whoever expects to meet his Lord, let him work righteousness and in the worship of his Lord, admit no one as partner. Take not, with God, another object of worship, lest you should be thrown into Hell, blameworthy and rejected." Because, as God tells us over and over again in a Message that is echoed throughout all His revealed Scriptures, "I am your Lord and Cherisher: therefore, serve me and no other."

## Atonement

Salvation can be defined as the deliverance from sin and its penalties; the path to salvation, however, varies from one religion to another. In Christianity, salvation is found through the Doctrine of Vicarious Atonement. Since human nature is considered in Christianity to be wayward and sinful, this doctrine states that Jesus "rendered full satisfaction" to God for the sins of man through his death and resurrection. In a nutshell, Jesus took our place, and his death absolves us of our sins. This is contrary to what is found in the Torah where God says: "every man shall be put to death for his

own sin". The matter of Jesus, as saviour of mankind, is refuted in the Qur'an, wherein God says that He "has stamped them with their disbelief... for their saying 'We killed God's Messenger, Christ Jesus, the son of Mary' they neither killed nor crucified him, even though it seemed so to them". Nowhere in the four gospels did Jesus state that he would die to save mankind from sin. When approached by a man who asked what he could do to gain eternal life, Jesus told him to keep the Commandments; In other words, to obey God's Law. To a similar question put to him by a lawyer, as recorded in the gospel of Luke, Jesus told him to love God and his fellow man. The role of Jesus is made clear in the Qur'an where God says: "Christ, the son of Mary, was no more than a Messenger; many were the Messengers that passed away before him, see how God makes His Signs clear to them, yet see in what ways they are deluded away from the truth."

**Paul of Tarsus** - For the origin of the doctrine of atonement, one does not go to the teachings of Jesus, but instead to the words of Paul, the true founder of Christianity; in teachings of present Christian terms and practices. Like many Jews, Paul had no use for the teachings of Jesus, and he himself persecuted the followers of Jesus for their unorthodox beliefs. This zealous persecutor was turned into an ardent preacher, however, through a sudden conversion around 35 CE. Paul claimed that a resurrected Jesus appeared to him in a vision, thereby, choosing Paul as his instrument for carrying his teachings to the Gentiles. Experience and observation had taught Paul that preaching among the Jews was not feasible; he, therefore, chose to go to the non-Jews. By doing so, however, Paul disregarded a direct command from Jesus against preaching to other than a Jew. In short, Paul set aside the actual teachings of Jesus in his desire to be a success.

**The Pagan Influence** - Among the pagans of Paul's time, a wide variety of gods existed. Although these gods had different names and were embraced by people from different areas of the world – Adonis from Syria, Dionysus from Thrace, Attis from Phrygia, for instance – the basic concept in each cult was the same: these sons of gods died violent deaths and then rose again to save their people. Since the pagans had tangible saviour-gods in their old religions, they wanted nothing less from the new; they were not able to accept any sort of an invisible Deity. Paul was quite accommodating, preaching therefore of a saviour named Jesus Christ, the son of God, who died and then rose again to save mankind from sin. The Bible itself points out the

error of Paul's thinking. While each of the four gospels contain an account of the crucifixion of Jesus, these accounts are strictly hearsay; none of the disciples of Jesus were witness to such, having fled his side in the Garden. In the Torah, God says that one who is "hanged upon a tree "crucified is "accursed". Paul side-stepped this by saying that Jesus became accursed in order to take on the sins of man; in so doing, however, Paul set aside the very Law of God. The resurrection, wherein Paul says that Jesus "conquered" death and sin for mankind, plays such an important part that one who does not believe in it is not considered a good Christian. Here, too, the Bible lends little support to Paul's notions; first of all, not only was there no eyewitness to the actual resurrection, but all post-resurrection accounts are in contradiction with each other as to who went to the gravesite, what happened there, and even where and to whom Jesus appeared. Secondly, although Christianity states that the body following resurrection will be in a spiritual form, Jesus had obviously not changed, for he both ate with his disciples and allowed them to touch his wounds. Finally, as the divine son of God in Christianity, Jesus is said to share in God's attributes; one cannot fail to wonder, however, just how it can be possible for God to die. In his desire to win souls among the pagans, Paul simply reworked a number of major pagan beliefs to come up with the Christian scheme of salvation. No prophet – including Jesus himself taught such concepts; they were authored entirely by Paul.

**Ultimate Sacrifice** - Long accustomed to making sacrifices to their gods, the pagans easily grasped Paul's notion that Jesus was the "ultimate sacrifice" whose blood washed away sin. Pagan influence in Christianity even extends to its sacred symbol. Although Paul calls the cross of Jesus "the power of God."

**Original Sin** - Central to the Doctrine of Atonement is Paul's notion that mankind is a race of wrong-doers, having inherited from Adam his sin in eating the forbidden fruit. As a result of this Original Sin, man cannot serve as his own redeemer; good works are to no avail, says Paul, for even these cannot satisfy the justice of God. As a result of Adam's sin, man is doomed to die. By his death, however, Jesus took on the punishment due man; through his resurrection, Jesus conquered death, and righteousness was restored. To earn salvation, a Christian need only have faith in the death and resurrection of Jesus. Despite its prominent place in Christianity, the notion of an "original sin" is not found among the teachings of any prophet, Jesus included. In the Old Testament, God says: "... the son shall not bear the iniquity of the father,

neither shall the father bear the iniquity of the son". Personal responsibility is also stressed in the Qur'an where God says: "... no bearer of burdens can bear the burden of another... man can have nothing but what he strives for". The doctrine of original sin gave Paul the means to justify pagan influence in his scheme of salvation. Irresponsibility became the hallmark of Christianity through this doctrine, however, for by "transferring" sins onto Jesus, Christians assume no responsibility for their actions.

**Salvation in Islam** - By the seventh century, the doctrines conceived by Paul had been embellished to the point where Christianity became almost entirely a man-made religion. At this time, God chose to send Muhammad as His Final Messenger in order to set things straight once and for all, for mankind. Since God is Almighty, He doesn't need the charade concocted by Christians in order to forgive man. In the Qur'an, God says; we are all created in a state of goodness; He has not burdened man with any "original sin", having forgiven Adam and Eve as He forgives us. As we are all personally responsible for our actions there is no need for a humanly concocted saviour in Islam; salvation comes from God alone. Thus Islam did seek to restore the true meaning to monotheism, for in the Qur'an God asks: "Who can be better in religion, than the one who submits his whole self to God, and does well, and follows the way of Abraham, the true in faith."

**Religion of Man** - The evidence is overwhelming that the concept of salvation in Christianity, its Doctrine of Vicarious Atonement did not come from God but from man via pagan rituals and beliefs. Paul effectively shifted the centre of worship away from God by saying that Jesus was the divine agent of their salvation. In doing this, Paul set aside all teachings of God's prophets, and even the concept of monotheism itself, since God in Christianity needs Jesus for His divine "helper". Christians should take a closer look at what they believe in and why. God says in the Qur'an: "O People of the Book! Do not commit excesses in your religion and do not say about God, anything but the truth. Christ Jesus, the son of Mary, was no more than a Messenger of God, for God is One God; glory be to Him: far exalted is He above having a son. To him belongs all things in the heavens and on earth. And God is enough of a Disposer of Affairs."

**Original Sin or Original Forgiveness** – Man, by nature is bound to commit sins, small or major. God knows this nature of man because He is the Creator. God on the other hand is Most Merciful and is there to forgive man when he sincerely repents. The

lesson derived from the Qur'an is much more complete and gives us a better picture of the nature of God. For forgiveness, all man needs to do is turn towards God, repent for the wrong deed and promise not to repeat it. God who is Most Merciful then forgives the creation and on the Day of Judgment, this act will not be held against him. Islam teaches us this lesson and informs us that all new-borns are without the burden of any sin on their shoulders. They are innocent. From the story the theme is easy to understand. God created man. Man committed sin, Man turned towards God for forgiveness. God forgave man for indeed God is Most Merciful.

## Islam and the Class System

The class system is based on the wrong assumption that property means power. Such a class will exercise an influence over the legislative power. Consequently such a class will, by direct or indirect means, make legislations which protect itself and subject the common people to its own authority, thus depriving them of their legal rights. In the light of the above-mentioned definition of classes, it may be truly said that there has never been a class system in Islam. There are no laws in Islam which aim at keeping property in the hands of particular persons. Islam made laws that ensured continual fragmentation and redistribution of wealth. According to the Islamic law of inheritance, inherited property should be distributed among a large number of people. Inheritance is never passed on to a single person except in very rare cases, such as a person has no brothers, sisters or any other kindred. Even in such rare cases, Islam took the necessary precautions by prescribing that a portion of the inheritance should go to the deprived people who are not related to the dead. This provision may be regarded as a predecessor of modern inheritance tax. The Holy Qur'an states: "if at the time of division other relatives or orphans or poor are present, feed them out of the property and speak to them words of kindness and justice". This way Islam solved the problem resulting from the accumulation of property. History bears witness that property in the Islamic society was constantly changing hands without being confined to a particular faction of the nation. In an Islamic state no one is allowed to make the legislations he desires because all people are treated according to the same Islamic laws which were revealed by God and which hold no distinctions among people. Islamic society is a classless society. Such a privilege is non-existent, and no one can make legislations which safeguard his own interests at the expense of others.

Now let us explain how two relevant verses which, if read carelessly might lead to some doubts. "And Allah has favoured some of you over others in provision", "We raised some of them above others in ranks". Do such verses mean that Islam recognizes the class system? These two verses merely describe what is actually taking place on earth, be it under Islamic rule or otherwise. They state that people differ in rank and livelihood. The existence of differences among the people is an inevitable fact. The two verses do not give a Particular reason for such differences. They do not even state that such preference is based on capitalist, communist or even Islamic considerations. They do not say that such preference may be just or unjust by our standards. The two verses merely say that such preference exists everywhere on earth. But, of course, all that takes place on earth falls within the sphere of God's will. The ownership of land under Islam did not confer upon landowners any special privileges or rights by which they might enslave or exploit others. The same thing would have happened if capitalism had existed in Islamic society. The ruler does not derive his power from class, he is elected by the nation and is carrying out the law of God. In addition to the above-mentioned, there can be no community wherein wealth can be equally distributed among all individuals; surely not in the communist society which, truly or not, claims to have abolished the class system though in fact it has left one ruling class which suppresses all other classes.

## Islamic Sharia Law

Islamic Law is a comprehensive system covering the human being's relationship with his Creator, his fellow human beings and with his society and nation. It also deals with the relationship between nations in both war and peace. Most jurists divide the study of Islamic Law into two broad categories: Devotional Law and Transaction Law. This division is built upon the fact that the injunctions dealt with by each of these two categories have quite different and distinct primary objectives. Devotional Law deals with the injunctions that have as their primary objective attaining nearness to Allah, showing Him gratitude, and seeking eternal reward in the Hereafter. This includes prayer, fasting, Hajj, jihad, zakat and the fulfilment of covenants.

## Distinctive Characteristics of Islamic Law

Anyone who follows Islamic Law or studies it carefully will find that it is distinguished by certain characteristics and unique qualities that are not shared by any other legal system. These characteristics have allowed it to enjoy stability, growth, and relevance for over fourteen centuries. It shall remain so until Allah repossesses the Earth and everyone upon it. The reason for this is that the Sharia has a permanent and global character, because it is the final, divinely revealed Sharia for the whole world, and because the religion of Islam is the last in the line of divinely revealed religions. It is, thus, necessary for the Sharia to have certain unique qualities that afford it the continuity and stability it needs to deal with the ever-changing requirements of human life over vast stretches of time and space. Islamic Law covers all aspects of Law covered by man-made “positive” law as well as other issues that such man-made laws do not touch upon. For this reason, one orientalist was of the opinion that there is no exact equivalent to the term “fiqh” in any Western language. There is nothing strange about this, because Islamic Law derives its principles and tenets from the Book of Allah that was sent down by the Most Wise, the Most Praiseworthy Creator, and a Book that cannot be approached by falsehood from any angle.

### Unique characteristics of Islamic Law are the following:

#### Nobility of purpose

Islamic Law is not limited to regulating the interrelationships between individuals in society. It, first and foremost, regulates the relationship between the individual and the Creator by legislating different forms of worship like prayer, fasting, zakat and Hajj. Moreover, it defines the rights and obligations each individual has with respect to others, so that the potential harm any individual might cause for others is effectively negated. In this regard, Allah’s Messenger said: “There should be no harm and no harming of others.”

#### Islamic Law is Divine Revelation

All the injunctions of Islamic Law are revelations from Allah, so the one who is legislating for mankind is our Creator who knows best what will be of benefit to his creation in both this world and the next. He knows the psychological makeup of human

beings, what will be in harmony with it, and what will clash with it. Allah says: Does the One who created not know, and he is the Gentle, the All-Aware. Man-made law, on the other hand, is the product of the human intellect that has limited powers and is subject to deficiency and errors. This is the reason that the intellect can never truly comprehend the human soul and what is in harmony with the nature that Allah has placed within it. Therefore, the legislations that comes from human effort may not always be suitable for human nature.

### Applying the injunctions of Islamic Law constitutes obedience to Allah

Following the injunctions of Islamic Law is a way of worshipping Allah and earning His reward. Likewise, disobeying the Law amounts to disobedience of Allah and is a way of deserving His wrath. Some forms of transgression have prescribed punishments that are supposed to be carried out in this world. Others hold the threat of punishment in the Hereafter. It is, thus, possible for us to say that the individual Muslim is always acting as an overseer policing himself out of fear of Allah. It is on this basis the character of the individual and society is built. As for man-made laws, the impetus to obey them is the fear of reprisal from the political authority, not the hope of attaining blessings and rewards from Allah. Likewise, disobedience to such laws does not instil a feeling of wrongdoing as long as it goes unnoticed by the authorities.

### Islamic Law holds the distinction of being comprehensive and general in its scope

It comes to regulate three different factors: the relationship between the individual and his Lord, the relationship between the individual and himself, and the relationship between the individual and others. Devotional Law deals with the first of these through its legislation of different forms of worship, like prayer and fasting. The notion of “separation of church and state” is rejected by the Sharia that has Islamic Law as one of its fundamental components. Ethics is likewise a fundamental principle. The comprehensiveness of Islamic Law also manifests itself in its direct concern for every stage in an individual’s life. Islamic Law is also concerned with the future of the human being, not only in this worldly life, but also in the eternal life to come, by enjoining acts of worship that must be carried out by every believer in this faith. Man-made laws are not even concerned with this worldly life except in a limited framework, so there is no

reason to discuss them with reference to what is before or after this life. Allah has commanded that every legally accountable person must perform prayer five times a day, no individual prayer requiring more than a few minutes. The one who is unable to stand is permitted to sit. There is an equal degree of leniency in fasting. Fasting is obligatory for one month out of the year. The difficulty in carrying it out does not reach the level of any real hardship. In spite of this, breaking the fast is permitted for the one who is traveling or is ill. Consumption of meat that has not been properly slaughtered is forbidden, but may be eaten in cases of dire necessity. Expiations have been provided to compensate for certain sins. There are many other things that point to the fact that Islamic Law aims at achieving ease and removing difficulties in its legislation, so that people will not find themselves incapable of fulfilling their obligations and so that their resolve will not become weak in fulfilling that which has been enjoined upon them for their own benefit. The obligations imposed by Islamic Law are few. They can all be learned in a short period of time. They do not have many particulars and secondary factors to consider, making it easy to know them. This is attested to by Allah's words: O you who believe, do not ask about things that if they were made clear to you, it would because you harm. If you ask about them when the Qur'an is being revealed, they will be made clear to you. Allah has forgiven them, for Allah is Forgiving, Forbearing. Those before you asked about them then became disbelievers. Allah Almighty has forbidden the people from delving into issues and becoming severe with them so that this would not cause certain injunctions to become obligatory that otherwise would not have been made compulsory. This would have led to a greater number of obligations that the people would be incapable of carrying out. This would have caused them to fall into ruin. This verse alludes to the fact that Allah intended to make the number of obligations small in order to make carrying them out easy for us and so that we would not fall into undue hardship.

### The richness and fullness of Islamic Law

You will find in Islamic Law that, for example, there are four major orthodox schools of thought, and you will find that in each school of thought there are a number of opinions attributed to the school's founder and his students. Moreover, there are numerous other schools of thought from the earliest generations of Islamic scholars. All of this should make the reader realize that Islamic Law is not limited to the opinions of one

scholar or those of a specific group of people. Quite the contrary, it is a collection of opinions that ultimately all stem from the Qur'an and Sunnah.

## Stages in the Development of Islamic

The Prophet did not leave this world until after the edifice of the Sharia was completed and its basis and general principles fully outlined. This has been established by a clear text from the Qur'an: Today, I have perfected for you your religion and completed my favour upon you and have chosen for you Islam as your religion. At the same time, the Prophet did not leave for his Companions a fully codified Law. He left them with only a collection of principles and general rules and a number of specific injunctions and judicial verdicts that are found in the Qur'an and Sunnah. This would almost have been sufficient for them if the authority of Islam had not spread beyond the confines of the Arabian Peninsula and met with circumstances and customs that the Muslims had never before encountered. When this happened, they disagreed on how these new factors fit in with the general principles of Islamic Law, its injunctions, and its objectives. That which is contained in the Quran was a set of principles, the understanding of which was capable of being broadened and advanced with the broadening of the scope of human thought and the appearance of the new circumstances that Islam had to deal with when it came in contact with other cultures and customs. At this point in time, the Muslim scholars began to investigate issues and, in a religious light, derive laws for the circumstances of a more informed life. This advancement in the organization of Islamic Law was the result of the work of the Caliphs and those that followed them in accordance with what was suitable for the circumstances. In the newly opened territories where foreign peoples began entering the fold of Islam in droves, there was a pressing need to instruct them in the things that they were ignorant of and to clearly define the injunctions of the Sharia. It was also necessary to apply these injunctions in a way that would properly regulate human interaction and clearly define the peoples' rights. In this way, Islamic Law advanced over the ages, each successive generation contributing to its growth, until it became a great and awesome edifice, regulating in detail every type of human interaction and relationship. One who follows the historical development of Islamic Law will observe that it passed through different stages with respect to its formation, growth, and development over the past fourteen centuries. The writings in Law for every school of thought have seen development since the era of their founders, passing through

different styles, from commentaries on original texts, to summaries and abridged works, and then to the great legal encyclopaedias. Thereafter, writings began in the field of defining general axioms of Islamic Law that included comparing and grouping injunctions according to patterns evident in the legislations. The field of Comparative Law also developed, as well as Legal Theory, the codification of definitions, and the formulation of formal legal codes.

It is possible to outline the stages of development that Islamic law passed through by dividing it into the following seven stages:

1. The prophetic era, comprising the life of the Prophet. This era saw the completion of the edifice of the Sharia and the completion of the religion.
2. The era of the rightly guided Caliphs and the period that followed it up to the middle of the first century A.H. This period and the one that preceded it are considered the preliminary stage for the codification of Islamic Law.
3. from the middle of the first century A.H. to the beginning of the second. At this stage, Islamic Law became a distinct science of its own that scholars would specialize in. Schools of thought were formed in this period, which is the stage that Islamic Law as a science was established.
4. from the beginning of the second century to the middle of the fourth. During this stage, the codification of Islamic Law was completed.
5. from the middle of the fifth century to the fall of Baghdad at the hands of the Tatars in the middle of the seventh century. At this stage, the writings in the field of Islamic Law started to become rigid and beset by blind following.
6. from the middle of the seventh century to the beginning of the modern era. This stage is one of weakness with regard to the methodologies employed in the codification of Islamic Law.
7. from the middle of the thirteenth century A.H. to the present day. During this period, studies in Islamic Law broadened considerably, especially in the field of Comparative Law and in the critical study of the major classical works in the field.

## The Qur'an

This is the origin of all Islamic legislation. It sets forth the fundamentals of the Sharia, clarifying its principle teachings. It clarifies beliefs in great detail and discusses forms of worship and legal matters in broad terms. It fulfils the role in Islamic Law that a constitution fulfils for the man-made laws of nations. It is the model for the Prophet and those who come after him. This is why the Qur'an is considered the source of all legislation, even though its role as a "constitution" for Islamic Law limits it to clarifying injunctions in only general terms, rarely dealing with particular details. The reason for this is that these particulars are innumerable; their exposition would draw the Quran away from its primary objectives and its eloquence. The general orders for such things as prayer and the Zakat tax are given in the Qur'an, without the manner of performance being dealt with. This is then expounded by the words and practices of the Prophet (peace be upon him) as recorded in the Sunnah. Likewise, the Quran, in general terms, orders that contractual obligations be carried out, asserts the permissibility of trade, and prohibits interest. It does not stipulate which types of contracts are valid and must be fulfilled and which types are invalid. This has been taken up by the Sunnah.

## Juristic Consensus

Consensus is a very strong source of evidence for establishing the injunctions of Islamic Law. It comes after the Sunnah in rank. The proof for its validity is drawn from a number of verses and hadith that show the unanimous statement of the people of knowledge is in itself a valid proof. The verdicts arrived at by consensus are, in themselves, always drawn from the Qur'an and Sunnah, even though it is possible that the hadith that formed the basis of the jurists' consensus did not reach us. This is because it is inconceivable that the reliable scholars of Islam would ever come to agreement on an issue on the basis of personal inclination without there being proof from the sacred texts. For this reasons, scholars of later generations, when investigating the possibility of consensus, look for the presence of the consensus and the reliability of how it has been reported without concerning themselves with the textual evidence behind it. Majority of scholars use a statement related from Abd Allah b. Masud, one of the greatest jurists from among the Companions of the Messenger as a proof for the status of customary practice in Islamic Law: "Whatever the Muslims see as good is seen by Allah as good."

## Economic Principles of Islam

God has created for mankind the earth and all that it contains. It is, therefore, the birth right of every human being to try and secure his share out of the world. All men enjoy this right equally and none can be deprived of it. Nor should one man get precedence over another. From the standpoint of Islam, there can be no bar on any individual, race, or class for taking certain means of livelihood or adopting certain professions. All are entitled to equal opportunities in the economic realm. Similarly, no distinction is valid in Islam which would result in creating a monopoly of a particular means of livelihood for a particular person, class, race or group of people. It is the right of all men to strive and get their share of the means of sustenance provided by God on the earth. Islam ensures that this effort should be made in the context of equal opportunities and fair chances for all.

### Right of property

Resources which are provided by nature free of cost and which can be use directly by man may be utilized freely and everyone is entitled to benefit from them. Water flowing in the rivers and springs, woods in the forest trees, fruits of wild plants, wild grass and fodder, air, animals of the jungle, minerals under the surface of the earth and similar other resources cannot be monopolized by anyone. Nor can a restriction of any sort be imposed on their free use by God's creatures to fulfil their needs. Of course, people who want to use these things for commercial purposes are required to pay taxes to the state. Or if there is a misuse of the resources, the Government may step and rectify what is right. But there is no bar on the individuals to avail of God's earth as long as they do not interfere with the rights of others or the state. Anyone who takes possession of the natural resources directly and renders it of value acquires a rightful title over it. For instance, if somebody takes possession of an uncultivated piece of land, on which nobody has a prior right of ownership, and makes productive use of it, he cannot be arbitrarily dispossessed of that land. This is how rights of ownership originated in the world. When man appeared for the first time in the world and population grew, everything was available to everyone. And whoever took possession of anything and made it useful in any manner became its owner; that is to say, he acquired the right of using it especially for his own purpose and obtaining compensation from others if they wanted to use it. This is the natural basis of all the

economic activities of mankind and must not be tampered with. This right of ownership which one may acquire by permissible legal means is to be honoured under all circumstances. The legality of ownership can be inquired thoroughly by the competent authority through legal means to determine its validity in accordance with the Sharia's law. If, it be found to be illegally acquired, such ownership be annulled and be terminated accordingly. However, in no case, shall there be allowed any state or legislation to arbitrarily divest the people of their legitimate rights of ownership without justifiable cause. Islam cannot approve of an economic policy which destroys the rights conferred by the Sharia's however attractive its name may be and whatever welfare pretensions it may make. Social justice and collective good are very dear to Islam, but not at the cost of rights given by the Sharia's. It is as unjust to reduce or remove the restrictions placed by the Sharia's on the rights of individual ownership for the sake of collective good of the community as it is to add such restrictions and limitations which do not fit into the scheme of the Islamic law. It is one of the duties of an Islamic state to protect the legal (Sharia's) rights of the individuals and to ensure that they fulfil their obligations to the community as enjoined by law. That is how Islam strikes a balance between individualism and collectivism.

### Problem of Equality

If we observe the phenomena of nature and God's blessings unto mankind we find that He has not observed equality in the distribution of His bounties and favours, but in His infinite wisdom has accorded precedence to some individuals over others. Beauty of form, pleasantness of voice, excellence of physique and mental talents, etc., have not been granted to men in equal degree. The same is the case with the material means of life. Human nature has been so ordained that divergence, variety and inequality among men in their modes and standards of living seem to be most natural thing. Variety is the spice of life and the driving spirit behind human effort and excellence. Consequently, all those schemes and ideologies which are forced to mankind are unrealistic and impossible to achieve. The equality in which Islam believes is equality in respect of the opportunities of struggle for securing a livelihood and for climbing the uppermost rung of the ladder of well-being and prosperity. Islam desires that no legal, functional or traditional handicaps should exist in society, to prevent an individual from struggling for a living according to his capacity and talent nor should any social distinctions subsist with the object of safeguarding the privileges

of a particular class, race and dynasty or group of people. And those schemes and ideologies which serve the vested interests or which want to perpetrate the hold of a certain group are repugnant to Islam and can have no place in its scheme of things. Such movements seek to establish, through force and resort to artificial means, an unnatural inequality in place of the natural limited inequality which feeds the springs of incentive to effort in a society. Hence, Islam aims at wiping them out and putting the economic system on the natural footing so that the opportunities of struggle may remain open to all. At the same time Islam does not agree with those who desire to enforce complete equality in respect of the means of production and the fruits of economic endeavour, as they aim at replacing, limited natural inequalities by an artificial equality. Only that system can be the nearest to human nature in which everyone joins the economic struggle at the start and in the circumstances in which God has created him. He, who has inherited an airplane should struggle to be equipped with it; while he who has only a pair of legs should stand on his feet and try to move ahead. The laws of society should neither establish a permanent monopoly of the airplane owner over his airplane nor make it impossible for the bare-footed to acquire an airplane nor such that the race for every one of them should compulsory begin from one point. And under the same conditions and they should all per force be tied to each other right till the end of the race. Contrary to this the economic laws should be such as to make it possible for the bare-footed who started his race under adverse conditions, to secure and possess an airplane if he can do so by dint of his struggle and ability. And for him who inherited the airplane, to be left behind in the race and be without it if that is due to his own inability or incapacity or inefficiency. Effort should be paid and inactivity penalized.

## Social Justice

Islam does not wish that this economic race takes place in an atmosphere of cold impartiality, moral neutrality and social apathy. It deems it desirable that the participants in the economic race should be considerate and sympathetic to one another. On the one hand, Islam through its moral injunctions, aims at creating a feeling of mutual love and affection among the people. Under which they may help their weak and weary brethren and at the same time create a permanent institution in the society to guarantee help and assistance to those who are lacking in the necessary means of subsistence. People who are unable to take part in the economic race should

secure their share from this social institution. And those who need some assistance commence their struggle in the economic field may also receive it in full measure from this institution. To this end, Islam has commanded that Zakat should be levied at the rate of 2.5% per annum on the total accumulated wealth of the country as well as on the invested capital. On agricultural produce 10% are levied on lands which are irrigated by natural means (through rains) and 5% on irrigation's which require man's efforts. And 2.5% is required on mineral products. The annual Zakat should also be levied at a specified rate, on the herds of cattle owned by anyone beyond a certain minimum number. The amount of Zakat thus collected is to be spent on giving assistance to the poor, the orphans and the indigent, etc. This provides a man's social insurance in the presence of which no one in an Islamic society can ever remain without being well provided with the necessities of life. No worker can ever be forced through fear of star to accept any conditions of employment which may be dictated to him by the industrialist or the landlord to his disadvantage. And nobody's physical health can ever be allowed to fail below the minimum standard of fitness for lack of proper medical care and hospitalization. Islam aims at striking such a balance between them as it would promote the individual liberty of a person and at the same time ensure that such freedom is not detrimental to the interests of the community as a whole. But is positively conducive to its growth and tranquillity. Islam does not approve of a political or economic organization which aims at merging the identity of the individual into that of the community and depriving him of the freedom essential for a proper development of his personality and talent. The inevitable consequence of nationalizing all the means of production in a country is the annihilation of the individual by the community, and in these circumstances the existence and development of his individuality becomes extremely difficult, if not impossible. Just as political and social freedom is essential for the individual, economic freedom is likewise indispensable for civilized moral existence. Unless we desire to completely eliminate the individuality of man, our social life should have enough margin for an individual to be free to earn his living, to maintain the freedom of his conscience, and to be able to develop his moral and intellectual faculties according to his own inclinations and aptitudes. Living on a dole or virtual dole at the hands of others cannot be very satisfying. Even though it is plentiful because the retardation of mental, moral and spiritual development to which it ultimately leads can never be compensated or counter-balanced by mere physical welfare and prosperity which too are doubtful. Just as Islam does not like such a system, it also does not favour a social system which gives unbridled economic

and social freedom to individuals and gives them a blank check to secure their individual interest and achieve their objective even at the whole or by exploiting and misappropriating the wealth of others. Between these two extremes Islam has adopted the middle course according to which the individual is first called upon, in the interest of the community, to accept certain restricts, and is then left free to regulate his own affairs. He has freedom of enterprise and competition within a framework which guarantees the good of both the individual and the society. It is not possible to explain all these obligations and restrictions in detail and I shall, therefore, content myself with presenting a bare outline of them.

### Obligations and Restrictions

Take the case of earning a livelihood first. The meticulous care with which Islam has distinguished between right and wrong in respect of the means of earning wealth is not to be found in any other legal and social system existing in the world. It condemns as illegal all those means of livelihood which injure, morally or materially, the interests of another individual or of the society as a whole. Islamic law categorically rejects as illegal the manufacture and sale of liquor and other intoxication, adultery, professional dancing and obscenity, gambling, speculation, race and lotteries, transactions of speculative, imaginary, fraudulent or controversial nature; business transactions in which the gain of one party is absolutely guaranteed and assured while that of the other party is left uncertain and doubtful; price manipulation by withholding the sale of necessities of life; and many other similar transactions which are detrimental to the interests of community. If we examine this aspect of the economic laws of Islam, we will find a long list of practices declared illegal most of which can and are making people millionaires in the capitalistic system. Islam forbids all these unfair means and allows freedom of earning wealth only by those means through which a person renders some real and useful service to the community and thereby entitles himself to a fair and just compensation for it. Islam accepts the rights of ownership of an individual the rights of ownership of an individual over the wealth earned by him by legitimate means but even these rights are not unqualified. A man can spend his legitimate wealth, only in legitimate avenues and by legitimate means. Islam has imposed restrictions on expenditure so that while one can lead a decent life, one cannot waste one's riches on luxurious pursuits. A person cannot transgress the prescribed limits of exhibiting his status and affluence and behave as superior being. Certain forms of illegal and

wasteful expenditure have been clearly and unequivocally prohibited while some others, though not expressly banned, may be prohibited at the discretion of the Islamic state. One is permitted to accumulate wealth that is left over after meeting his legitimate and reasonable requirements, and these savings can also be used in producing more wealth but there are some restrictions on both of these activities. In the event of accumulation of wealth he will, of course, have to pay Zakat at the rate of 2.5% per annum on the accumulation exceeding the specified minimum. If he desires to invest it in business he can only do so in what is declared as legitimate business. It is permissible for a man to undertake the legitimate business himself or to make his capital available to others on a profit-loss sharing basis. It is not at all objectionable in Islam if, working with in these li, a man becomes even a millionaire; rather, this will constitute a Divine favour. But in the interests of the community as a whole Islam imposes two conditions on the individual; first, that he should pay Zakat on his commercial goods and Ushr (1/10) (which has not required any man effort for irrigation) and 5% on irrigated produce which has required man'. , efforts of the value of agricultural produce, secondly, that he should deal fairly and honestly with those whom he brings into his partnership in trade industry or agriculture, with those whom he takes in his employment and with the state and the community at large. If one doe: not do justice to others, particularly his employees, of his own accord, the Islamic state will compel him to do so. Then again, even wealth that is accumulated within these legal limits is not allowed by Islam to be concentrated at a point or place for a long time. By virtue of it's of inheritance Islam spreads it over a large number of persons from generation to generation. In this respect, the spirit of Islamic law is different from that of other laws prevailing in the contemporary world. Most of the inheritance laws attempt to keep the wealth once accumulated by a person concentrated in the hands of the beneficiary from generation to generation. As against this, Islam has made a law under which the wealth accumulated by a person in his lifetime is distributed among all of his near relatives soon after his death. If, there are no near relatives, then distant relatives are to benefit from it in the proportions laid down by the law for each one of them. And, if no distant relative is forthcoming, then the entire Muslim society is entitled to its inheritance. Under this law, the creation or continuance of any big family of capitalists or landlords becomes impossible.

## Moral System of Islam

Moral sense is inborn in man and through the ages it has served as the common man's standard of moral behaviour, approving certain qualities and disapproving others. While this instinctive faculty may vary from person to person, human conscience has given a more or less uniform verdict in favour of certain moral qualities as being good and declared certain others as bad. On the side of moral virtues, justice, courage, bravery and truthfulness have always elicited praise. History does not record any period worth the name in which falsehood, injustice, dishonesty, and breach of trust may have been upheld. Fellow-feeling, compassion, fidelity, and magnanimity have always been valued while selfishness, cruelty, miserliness and bigotry have never received the approval of the human society; men have always appreciated perseverance, determination and courage and have never approved of impatience, fickle-mindedness, cowardice and imbecility. Dignity, restraint, politeness, and amiability have throughout the ages been counted among virtues, whereas snobbery, misbehaviour and rudeness have never found recognition as good moral qualities. Persons having a sense of responsibility and devotion to duty have always won the highest regard of men; never have people who are incompetent, slothful and lacking in sense of duty been looked upon with approval. Similarly, in respect of the standard of good and bad in the collective behaviour of society as a whole, the verdict has always been almost unanimous. Only that society has been looked upon as worthy or Honour and respect which possesses the virtues of organization, discipline, mutual affection and fellow feeling and has established a social order based on justice, freedom and equality of men. As opposed to this, disorganization, no-discipline, anarchy, disunity, injustice and social imbalance have always been considered as manifestations of decay and disintegration in a society. Robbery, murder, larceny, adultery, fraud and graft have always been condemned. Slandering, scandal mongering and blackmailing has never been considered as wholesome social activities. Contrary to this service and care of the aged, help of one's kith and kin, regard for neighbours, loyalty to friends, assistance of the weak, the destitute and the orphans, and nursing the sick are qualities which have always been highly valued ever since the dawn of civilization. Virtuous, polite, mild and sincere persons have always been welcomed. Individual who are upright, honest, sincere, outspoken and dependable, whose needs conform to their words, who are content with their own rightful possession, who are prompt in the discharge of their obligations to others, who

live in peace and let others live in peace and from whom nothing but good can be expected, have always formed the core of any healthy human society. This shows that human moral standards are in fact universal and have been well-known to mankind throughout the ages. Good and evil are not myths to be hunted out. They are well-known realities and are equally well-understood by all. The sense of good and evil is inherent in the very nature of man. Hence, in the terminology of the Qur'an virtue is called "Maroof" (something to be announced) and evil is designated as "Munkar" (something to be denounced); that is to say virtue is known to be desirable for every one and evil is not known to commend itself in any way. This fact is mentioned by the Qur'an when it says: "Allah gave to the Soul its enlightenment as to its wrong and its right."

### Why Differences?

The questions that arises are: if the basic values of good and evil have been so well-known and there has virtually been a universal agreement thereon, then why do varying patterns of moral behaviour exist in this world? Why are there so many and do conflicting moral philosophies? Why do certain moral standards contradict each other? What lies at the root of their difference? What is the unique position of Islam in the context of the prevailing ethical systems? On what grounds can we claim that Islam has a perfect moral system? And what exactly is the distinctive contribution of Islam in the realm of ethics? These questions are important and must be squarely faced; but justice cannot be done to them on the brief span of this talk. To cut a long story short, I shall briefly sum up some of those important points which strike us at the very outset when we undertake a critical examination of the contemporary ethical systems and the conflicting patterns of moral behaviour.

(a) The present moral system fail to integrate various moral virtues and norms by prescribing their specific limits and utility and assigning to them their proper place. That is why they fail to provide a balanced and coherent plan of social conduct.

(b) The real cause of their differences seems to lie in the moral systems offering different standards for good and bad actions and enunciating different means of distinguishing good from evil. Differences also exist in respect of the sanction behind the moral law and in regard to the motives which impel a person to follow it.

(c) On deeper reflection, we find that the grounds for these differences emerge from different peoples conflicting views and concepts about the universe, the place of man in the universe, 'and the purpose of man on the earth. Various theories of ethics, philosophy and religion are but a record of the vast divergence of views of mankind on these most vital questions, viz. Is there a God and a Sovereign of the universe and if there is, is He One or are there many gods? What are Divine Attributes? What is the nature of the relationship between God and the human beings? Has God made any arrangements for guiding humanity through the rough and tumble of life or not? Is man answerable to God or not? If he is, then what are the matters for which he is to be answerable? What is the ultimate aim of man's creation which he should keep in view throughout his life? Answers to these questions will determine the way of life, the ethical philosophy and the pattern of moral behaviour of the individual and the society. It is difficult for me in this brief talk to take stock of the various ethical system prevalent in the world, indicate what solutions each one of them has proposed to these questions and what has been the impact of these answers on the moral evolution of the society believing in these concepts. Here I can confine myself to the Islamic concept only and this I shall try to propound.

### Islamic Concept of Life and Morality

The viewpoint of Islam, however, is that this universe is the creation of God Who is one. He created it and He alone is its unrivalled Master, Sovereign and Sustainer. The whole universe is functioning under His Divine Command. He is All-Wise, All-Powerful and Omniscient. He is Subbooh and Quddoos that is, free from all defects, mistakes, weaknesses and faults and pure in every respect). His God-hood is free from partiality and injustice. Man is His creature, subject and servant and is born to serve and obey Him. The correct way of life for man is to live in complete obedience to Him. It is not for man to determine the mode of worship and obedience; it is for God to decide this. God, being the master, has raised from time to time prophets for the guidance of humanity and has revealed His books through them. It is the duty of man to take the code of his life from these sources of divine guidance. Man is answerable to God for all his actions in life. The time for rendering an account will be in the life-hereafter and not in this world. The short span of worldly life is really an opportunity to prepare for that great test. In this life all efforts of man should be centred on the object of soliciting the Pleasure and Blessings of God in the Hereafter. During this test every person is

responsible for all his beliefs and actions. He, with all his faculties and potentialities, is on trial. There will be an impartial assessment of his conduct in life. By a Being Who keeps a complete and correct record not merely of his movements and actions and their influence on all that is in the world from the tiniest speck of dust to the loftiest mountains but also a full record of his innermost ideas and feelings and intentions.

## Goal of Moral Striving

This is Islam's fundamental attitude towards life. This concept of the universe and of man's place therein determines the real and ultimate goal which should be the object of all the endeavours of mankind and which may be termed briefly as "seeking the pleasure of God". This is the standard by which a particular mode of conduct is judged and classified as good or bad. This standard of judgment provides the nucleus around which the whole moral conduct should revolve. Man is not left like a ship without moorings, being tossed about by the blows of wind and tides. This dispensation places a central object before mankind and lays down values and norms for all moral actions. It provides us with a stable and flawless set of values which remains unaltered under all circumstances. Moreover, with making the "pleasure of God" as the object of man's life, a highest and noblest objective is set before humanity, and thus, unlimited possibilities are opened for man's moral evolution, unstained at any stage by any shadow of narrow selfishness or bigoted race or nation worship. While providing a normal standard Islam also furnishes us with means of determining good and evil conduct. It does not base our knowledge of vice and virtue on mere intellect, desire, intuition, or experience derived through the sense-organs, which constantly undergo shifts, modifications and alterations and do not provide definite, categorical and unchanging standards of morality. It provides us with a definite source, the Divine Revelation, as embodied in the Book of God and the Sunnah way of life of the Holy Prophet (peace be upon him). This source prescribes a standard or moral conduct that is permanent and universal and holds good in every age and under all circumstances. The moral code of Islam covers the smallest details of domestic life as well as the broad aspects of national and international behaviour. It guides us in every stage of life. These regulations imply the widest application of moral principles in the affairs of our life and make us free from exclusive dependence on any other source of knowledge, except as an aid to this primary source.

## Sanction Behind Morality

This concept of the universe and of man's place therein also furnishes the sanction that must lie at the back of every moral law. Viz., the love and fear of God, the sense of accountability on the Day of Judgment and the promise of eternal bliss and reward in the life hereafter. Although Islam wants to cultivate a powerful and strong mass opinion, which may induce individuals and groups to abide by the principles of morality laid by it and also aims at the evolution of a political system which would enforce the moral law, as far as possible, through its legislative and executive power. Islam's moral law does not really depend on these external pressures alone. It relies upon the inherent urge for good in every man which is derived from belief in God and a Day of Judgment. Before laying down any moral injunction, Islam seeks to firmly implant in man's heart the conviction that his dealings are with God Who sees him at all times and in all places. That he may hide himself from the whole world but not from Him. That he may deceive everyone but cannot deceive God. That he can flee from the clutches of anyone else but not from God's. That while the world can see man's onward life, only God probes into his innermost intentions and desires, that while he may, in his short sojourn on this earth, do whatever he likes but in any event he has to die one day and present himself before the Divine court of justice where no advocacy, favour, recommendation, misrepresentation, deception or fraud will be of any avail and where his future will be decided with complete impartiality and justice. There may or may not be any police, law court or jail in the world to enforce the observance of these moral injunctions and regulations but this belief firmly rooted in the heart, is the real force at the back of the moral law of Islam which helps in getting it enforced. If popular opinion and the coercive powers of the state exist to give it support so much the better; otherwise, this faith alone can keep a Muslim individual and a Muslim community on the straight path of virtue, provided, the spark of genuine faith dwells in their hearts.

## Motives and Incentives

This concept of Islam about man and his place in the universe also provides those motivating forces which can inspire a person to act in conformity with the moral law. The fact, that a man voluntarily and willingly accepts God as his own Creator, and the obedience to God as the mode of his life and strives to seek His Pleasure in his every

action, provides a sufficient incentive to enable him to obey the commandments which he believes to be from God. Along with this, the belief in the Day of Judgment and the belief that whosoever obeys Divine Commands is sure to have a good life 'in the Hereafter, the Eternal Life, whatever difficulties and handicaps he may have to face in this transitory phase of life, provides a strong incentive for virtuous life. On the other hand, the belief that whoever violates the Commandments of God in this world and dies in a state of Kufr (unbelief) shall have to bear eternal punishment however superficially nice a life he may have led in this temporary abode, is an effective deterrent against violation of moral law. If this hope and fear are firmly ingrained, and deeply rooted in one's heart, they will provide a strong motive-force to inspire one to virtuous deeds even on occasions when worldly consequences may appear to be very damaging and harmful, and it will keep one away from evil even on occasions when it looks extremely attractive and profitable. This clearly indicates that Islam possesses a distinctive criterion of good and evil, its own source of moral law, and its own sanction and motive force, and by them its virtues in all spheres of life after knitting them into a balanced and comprehensive plan. Thus, it can be justifiably claimed that Islam possesses a perfect moral system of its own. This system has many distinguishing features and I shall refer to the three most significant ones which, in my opinion, can be termed its special contributions to ethics.

### Distinctive Features of Islamic Moral Order

By setting Divine pleasure as the objective of man's life, it has furnished the highest possible standard of morality. This is bound to provide limitless avenues for the moral revolution of humanity. By making Divine Revelation the primary source of knowledge, it gives permanence and stability to the moral standards which afford reasonable scope for genuine adjustment, adaptations and innovations though not for perversions, wild variations, atomistic relativism or moral fluidity. It provides a sanction to morality in the love and the fear of God which will impel man to obey the moral law even without any external pressure. Through belief in God and the Day of Judgment, it furnishes a motive force which enables a person to adopt the moral conduct with earnestness and sincerity, with all the devotion of heart and soul. It does not, through a false sense of originality and innovation, provide any novel moral virtues nor does it seek to minimize the importance of the well-known moral norms nor give exaggerated importance to some and neglect others without cause. It takes up all the commonly

known moral virtues and with a sense of balance and proportion it assigns a suitable place and function to each one of them in the total plan of life. It widens the scope of their application to cover every aspect of man's individual and collective life his domestic associations, his civic conduct, and his activities in the political, economic, legal educational and social realms. It covers his life from home to society, from the dining table to the battlefield and peace conferences, literally from the cradle to the grave. In short, no sphere of life is exempt from the universal and comprehensive application of the moral principles of Islam. It makes morality reign supreme and ensures that the affairs of life, instead of being dominated by selfish desires and petty interests, should be regulated by the norms of morality. It stipulates for man a system of life which is based on all good and is free from all evil. It invokes the people, not only to practice virtue, but also to establish virtue and eradicate vice, to bid good and to forbid wrong. It wants that the verdict of conscience should prevail and virtue must not be subdued to play second fiddle to evil. Those who have responded to this call and gathered together into a community (Ummah) are given the name "Muslim" and the singular object underlying the formation of this community (Ummah) is that it should make an organized effort to establish and enforce goodness and suppress and eradicate evil. The Qur'an is quite explicit on this fact as it can be seen from the following verse: "You are the best of People, evolved for mankind, enjoining what is right, forbidding what is wrong and believing in God. If only the People of the Book Had faith, it were best for them: among them Are some who have faith, But most of them Are perverted transgressors." And also in the following verse: "They are those who, If we establish them In the land, establish Regular prayer and give Regular charity, enjoin right and forbid wrong: With God rests the end and decisions of all affairs." It will be a day of mourning for the community and a bad day for the entire world if the efforts of this very community were at any time directed towards establishing evil and suppressing good.

## Preservation of Faith

Islam has stressed the importance of faith for human life by citing the natural human inclination to worship Allah, man's religious sentiments and inner feelings, the strength of the elements of goodness and virtue within him, and the prosperity and tranquillity that faith provides for him. Due to these factors, faith is a vital necessity of human life. Allah says: So set your face towards the pure faith, Allah's natural way upon which He

created mankind. There can be no change in Allah's Creation. This is the straight faith, but most men do not know. For the same reason, Bridgestone says: "There have been, and continue to be, human societies that do not possess science, art or philosophy, but there has never been a society without religion." In consideration of these factors, Islamic Law protects faith. In some cases, this is achieved by planting faith firmly and deeply in the heart and mind. In other cases, this is through nurturing the seed of faith that is already present in an individual and supporting it with what will develop it and make it endure. As a means to achieving these goals, Islam has established the following:

### The means taken to establish faith in the heart

1. Faith must be firmly established on clearly defined articles. The articles of faith are: belief in Allah, His Messengers, His Books, His angels, the Day of Judgment and Divine Decree, both the good and the bad of it. Allah says: The Messenger believes in what was sent down to him from his Lord, and so do the believers. All of them believe in Allah, His angels, His books, and His Messengers. (They say :) We make no distinction between any of the Messengers. Allah also says: O you who believe, believe in Allah, His Messenger, the Book that was sent down upon the Messenger, and what was sent down before. Whoever disbelieves in Allah, His angels, His books, His Messengers and the Day of Judgment has gone far astray.

2. Faith is established on the basis of knowledge and rational proofs. On these grounds, Islam calls towards examination, contemplation and reflection. Allah says: Do they not look into the dominion of the heavens and the Earth and all the things that Allah has created? Allah reproaches those who do not reflect upon the many signs that are present in Creation, saying: How many a sign in the heavens and Earth they pass by while they are aversely turned away. He also reproaches those who follow their desires and blindly follow their forefathers in belief without having any proof at hand and without engaging in any contemplation. Allah says: When it is said to them, 'Follow what Allah has sent down' they say, 'nay! We shall follow what we found our fathers following.' Would they do this even though their fathers did not understand anything nor were they guided?

3. The pillars of Islam must be established. These pillars are the principle acts of worship that Islam enjoins upon the believers. The first of these is to make an open

testimony of one's Islam. This is then followed by prayer, Zakat, fasting, and performing the Hajj pilgrimage. Among the most important effects of these acts of worship – and the profound wisdom behind them – is that they create a direct bond between the worshipper and his Lord, strengthening and rejuvenating the faith that exists in the heart of the believer.

Allah's Messenger relates to us that Allah says: The servant does not seek nearness to me with anything more beloved to me than what I have commanded him to do. Then the servant continues to seek nearness to me with voluntary acts until I love him. Allah's Messenger also says: Islam is built on five pillars: testifying that there is no god save Allah and that Muhammad is his Messenger, establishing prayer, paying the Zakat tax, fasting the month of Ramadan, performing the Hajj pilgrimage if one finds the means to do so.

4. It is a duty to call others to Islam. This duty extends to maintaining and sponsoring such efforts, and to giving due support and protection to those who are carrying it out. Allah says: Let their arise from amongst you a group of people who invite to all that is good, command what is right and prohibit what is wrong. These are the successful ones. He also says: Invite to the way of your Lord with wisdom and good exhortation and argue with them in the best manner. Allah mentions the advice that Luqman gave to his son: my son, perform the prayer, command what is right, and prohibit what is wrong, and bear patiently whatever befalls on you,

### Islam guarantees and protects Freedom of Religion

Islam does not compel anyone to embrace it and permits a plurality of religious beliefs to coexist under its authority within the boundaries of the Islamic state. It affords the people of other faiths the freedom to maintain their beliefs, religious practices, and civil codes. Allah's Messenger (peace be upon him) said: They have the rights that we have and the duties that we have. Furthermore, one of the goals of jihad (struggle in the cause of Allah) is to protect religious freedom. Allah says: Had it not been for Allah checking one people by means of another, monasteries, churches, synagogues, and mosques, wherein Allah's name is often mentioned, would have been torn down. Islam prescribes Jihad to defend faith, repel its enemies, and to protect it. Allah says: Fight in the path of Allah against those who fight you and do not transgress bounds; verily Allah does not love the transgressors. Allah also says: What is wrong with you that

you do not fight in the path of Allah and for the weak and oppressed men, women, and children whose cry is, 'Our Lord, rescue us from this town whose people are oppressors, and raise for us from Your grace one who will protect us, and raise for us from Your grace one who will help us. After accepting Islam, it is obligatory to adhere to the teachings of the faith and to put them into practice. This gives faith vitality in the hearts of its practitioners and lets it have its effect on their sentiments. Apostasy is a crime punishable by law. This ensures that a person is serious when embracing Islam, so that no one enters into Islam without first having firm and complete conviction. Moreover, Allah does not accept anyone's faith unless it springs from conviction. If a person enters Islam, it must be a permanent decision taken on the basis of firm conviction. If he rejects faith thereafter, he is actually introducing to the public a measure of intellectual and political uncertainty that can disrupt society and destroy its desired level of intellectual and psychological stability.

Allah mentions the words of the idolaters who called to these activities: A group of the People of the Scripture said: "Believe in what came down upon those who believe at the beginning of the day, then disbelieve at the end of the day, so perhaps they might return from faith." Thus, the punishment for apostasy was legislated to safeguard the seriousness and the sacredness of faith. A number of necessary and complementary acts of worship have been established to act as a protective shield for one's faith. Among these are performing prayers in congregation and numerous forms of voluntary worship. These acts establish and ingrain faith within the hearts of the people who perform them and strengthen faith in the society where these acts are put into practice. This brings to both the individual and society a sense of security, tranquillity and righteousness.

## Preservation of Life

The sanctity of human life is one of the necessities of human existence. Islam has set down a number of means to secure the sanctity of life. Among them are the following:

### The means taken to promote the existence of human:

Islamic Law prescribes marriage. Islam has legislated it for the purpose of producing progeny, increasing the human population, and providing people who will develop the Earth and sow the seeds of human life for the generations to come. Islam extols the

sacred relationship between a husband and wife and considers it to be one of Allah's signs. Allah says: Among His signs is that he created for you wives from among yourselves that you may find comfort in them, and He has put between you affection and mercy.

### The means taken to safeguard the continuity of life:

1. Islam obligates man to secure the means to sustain his life. This includes obtaining food, drink, clothing, and shelter. It is forbidden for a Muslim to eschew these necessities to the point where it endangers his life. It also obligates the state to provide the minimum amount of these necessities to those who are incapable of providing for themselves. Furthermore, it obligates one who is in danger of losing his life to prevent death by consuming the property of others to the extent of his need.

2. The state is obligated to furnish the necessary infrastructure to ensure public safety. This includes such things as providing a justice system and a police force.

3. It is obligatory to defend the Honour of the human being. This manifests itself in such laws as the prohibition of false accusation and defamation. It is also why restricting human activities without justification is prohibited. In this way, liberties such as freedom of thought, freedom of opinion, economic freedom, the freedom to reside where one wants to, and the freedom to relocate are safeguarded and ensured. Allah says: Whoever abuses believing men and women undeservedly, they bear upon themselves the crime of slander and manifest sin.

4. Islamic Law provides concessions under certain conditions to ward off undue difficulty that might cause personal harm or injury. One of these concessions is the right of the one who is sick or traveling to break his fast in Ramadan. Another is the right of the traveller to shorten his prayers.

5. Islam prohibits the taking of human life, whether that life be one's own or that of someone else. Allah says: Do not kill yourselves. Verily Allah is to you Most Merciful. The crime of murder is deplorable, so much so that taking one life is considered equivalent to killing all of mankind. Allah says: Whoever kills a person, not in retaliation for murder or iniquity in the Earth, then it would be as if he killed all of mankind. Allah also says: Do not kill a person whose life Allah has made sacred except in the

dispensation of justice. He says: Whoever kills a believer intentionally, his recompense is Hell, abiding therein. Allah's wrath is upon him, and His curse; and He has prepared for him a great punishment. In an authentic hadith, it is related that Allah's Messenger (peace be upon him) said: Whoever kills someone who has a covenant with us will never smell the fragrance of Paradise.

6. Retribution is prescribed in the case of murder while payment of blood money and freeing a slave are obligatory in the case of unintentional manslaughter. Allah says: O you who believe, the law of retribution is prescribed for you in murder. Allah also says: It is not for a believer to kill another believer except by mistake; and whosoever kills a believer by mistake must set free a believing slave and pay blood money to the his family unless they remit it. If the deceased belonged to a people at war with you and he was a believer, then a believing slave must be set free; and if he belonged to a people with whom you have a treaty, then blood money must be paid to his family and a slave must be freed. And whoever finds this (the freeing of a slave) beyond his means must fast for two consecutive months seeking repentance from Allah. And Allah is All-Knowing, All-wise.

7. Jihad may be proclaimed in order to preserve lives and safeguard those who are weak and oppressed in the Earth. Allah says: What is wrong with you that you do not fight in the path of Allah and for the weak and oppressed men, women and children.

8. It is obligatory for a Muslim to save a person who is in danger of being murdered or killed for another reason, if that Muslim is capable of doing so.

9. Islamic Law prescribes self-defence when one is attacked. One should defend oneself if attacked and the defender is not in any way responsible if the attacker dies, as long as it is clear that the other truly intended to attack him.

## Preservation of Reason

Islam affords a great deal of importance to reason since it is the basis on which human beings are held responsible. Reason is the attribute that honours the human being and exalts him above the rest of Creation. It is what qualifies him to be Allah's vicegerent on Earth and to carry out the sacred trust from Allah. Allah says: Verily, We had offered the trust to the heavens and the Earth and the mountains, but they

declined to bear it and were afraid of it. But man bore it. Due to its extreme importance, Islamic Law seeks to preserve reason and establishes a number of injunctions to ensure the health and freedom of the rational faculties. Among these are the following:

1. Islam has prohibited every substance that affects the mind, harms it, or decreases its abilities. This includes substances like wine and hashish. Allah says: O you who believe, intoxicants, gambling, sacrificing to idols, and divination are an abomination of Satan's handiwork. So avoid all of this that perhaps you might be successful.

2. Islam sets down a stiff legal punishment to discourage the use of intoxicants. This is on account of the serious danger that they pose to both the individual and society.

3. Islam develops the intellect and nurtures it on a spirit of independent thinking. It guides the intellect to understand, to contemplate, to follow rational arguments and proofs, and to discard the blind following of others. Allah says: Or have they taken for worship gods beside Him? Say (O Muhammad): "Bring your proof." Allah also says: Whoever invokes besides Allah another god, of whom he has no proof, then his reckoning is only with his Lord. Verily, the disbelievers will not be successful. The Qur'an declares to the unbelievers: Bring your proof, if you are truthful.

4. Islam calls toward developing and cultivating the mind. On the material level, this includes getting proper nourishment that strengthens the body and enlivens the mind. For this reason, it is disliked for a judge to pass judgment when he is hungry. This is also the reason why, if food happens to be served at the time of prayer, it is preferable to eat before going to perform the prayer. On the intellectual level, Islam emphatically encourages the pursuit of knowledge, considering it to be the basis of faith. Allah says: It is only the knowledgeable among His servants who fear Allah. Allah commands us to offer the following supplication: Say, 'O my Lord, increase me in knowledge! Likewise, Islam affords everyone an opportunity to learn, making it a general right of all people in society. Moreover, it has made a certain level of knowledge obligatory upon every Muslim man and women.

5. Islam elevates the status of reason and honours those who possess it. This is emphasized in more than one verse of the Qur'an. Allah says the following: Give glad tidings to my servants who listen to the word and follow the best thereof. These are the ones whom Allah has guided, and these are the ones who possess understanding.

Verily, in the creation of the heavens and the Earth and the alternation of the night and day are signs for people who possess understanding.” Say, ‘Are those who know the same as those who know not?’ The only ones who consider are the people who possess understanding.

6. The rational faculties must be kept free from the influence of superstition and the shackles of delusion. For this reason, Islam forbids practices based on deceit and superstition, such as witchcraft, fortune telling, and sleight of hand magic. Likewise, it prohibits the rational faculties from delving into questions of the unseen without having the ability to do so and without possessing knowledge coming from the revelation that was sent down to the Prophets. This is merely an unjustifiable way of wasting one’s intellectual abilities. Allah says: Verily those who dispute about Allah’s signs without any authority having come to them, they have nothing in their hearts except pride. They shall never attain it. So seek refuge in Allah, Verily, He is the All-Hearing, All-Seeing.

7. Use of reason should be based upon a fruitful manner of gathering information and drawing conclusions, and upon a firm grasp of the facts. There are two approaches to this:

a) Rational investigation. Islam has set down the proper method for rational investigation, one that provides certainty. This means that Islam calls to confirming things before believing them before belief. Allah says: And follow not that which you have no knowledge. Allah also says, quoting the youths who sought refuge from their people by going to the cave: These people of ours have taken for worship gods beside Allah. Why, then, do they not bring a clear proof for them? So who does more wrong than he who invents a lie against Allah?

b) Reflection and contemplation. Islam calls to reflection and contemplation about the laws of nature, encouraging humanity to bring them to light and appreciate their intricacy and how deeply they are interrelated. It also calls to induction based on careful observation and detailed examination in order to attain certainty.

8. Islam directs the mind to seek out the wisdom and subtleties behind its legislations. Allah says: Do they not, then, carefully consider the Quran? Had it been from other than Allah, they would surely have found within it many contradictions.

9. Likewise, Islam directs the intellect towards attaining knowledge of the physical world and how to benefit from it in order to build civilization. Allah says: 'He is the one who has made the Earth subservient to you; so walk in its land and eat of His provision.'

## Preservation of Lineage

Lineage, here, is understood to mean the continuation of the human species through the agency of hereditary descent. Islam strives to perpetuate the human line on Earth until the Last Day. In order to bring about this objective, Islam has set down the following principles and legislations:

1. Islam enjoins marriage. Islam permits and encourages marriage, considering it to be the pure and natural way for a man and woman to come together. It is not only for the purpose of fulfilling natural impulses, but also to fulfil the noble purpose of preserving the human species and producing righteous offspring and assume the role of Allah's vicegerent on Earth, also allowing human civilization to prosper in the shade of the most noble principles and moral virtues.

2. Islam pays close attention to the upbringing of the youth and fostering bonds of love. Parents are obligated to take care of their children and provide for them until they grow to support themselves and their parents.

3. Islam pays attention to establishing the family on a firm foundation, considering it to be the stronghold that protects and fosters the next generation. Islam establishes the marital bond on the basis of free choice and mutual consent of two parties, then afterwards on the basis of harmonious dealings between the two spouses and mutual consultation on all matters. This brings feelings of affection and mutual understanding between them, causing each of the two spouses to seek the happiness of the other. Allah says: Among His signs is that he created for you wives from among yourselves that you may find comfort in them, and He has put between you affection and mercy.

4. Islam encompasses all possible relationships between men and women with a collection of principles and codes of moral conduct. These ensure that the noble aims of these relationships are fulfilled and that destructive practices in relationships between the sexes are avoided. Among these obligations is the duty of every man to

avert his gaze from every woman and for every woman to avert her gaze from every man. This helps to prevent sexual desire from being ignited. Likewise, Islamic Law combats the causes of temptation by making concealing clothing of a specific quality obligatory on the Muslims. Outside of dire necessity, Islam prohibits a man to be alone with a woman to whom he is not related by blood, fosterage, or marriage, even if proper dress is observed, unless she is chaperoned by one of her near relatives. The home, necessarily, enjoys a great deal of sanctity in Islam, whereby it is forbidden to enter another's home without seeking the permission of its occupants and greeting them with peace. Allah says: O you who believe, do not enter houses other than your own before seeking their permission and greeting their occupants with peace. Added to these and other etiquettes, Islam provides codes of conduct when interaction between unrelated men and women becomes necessary.

5. Islam forbids every assault on chastity and Honour. For this reason, Allah has forbidden fornication and adultery, as well as falsely accusing someone of sexual iniquity, setting fixed, prescribed punishments for both of these crimes in order to discourage them. With regard to fornication, Allah says: The woman and man guilty of illegal sexual intercourse, flog each of them with a hundred stripes. Do not let pity dissuade you from carrying out a punishment prescribed by Allah. Allah says, with respect to falsely accusing someone of sexual iniquity: And those who accuse chaste women and fail to produce four witnesses, flog them with eighty stripes, and reject their testimony forever.

## Preservation of Wealth

It is always the case with Islam, when dealing with man's natural inclinations, that it permits their fulfilment within reasonable limits in a refined, enlightened and sound manner, Islam permits individual ownership, while at the same time providing the necessary legislation to prevent the harmful effects that this inclination would have if left unchecked, like the loss of social equilibrium and the concentration of wealth within a small sector of society. Some of the systems that Islam has put into place is Zakat, inheritance and social security. From this perspective, Islam considers wealth to be one of the indispensable necessities of human life. Islam has set for man laws and guidelines to encourage him to seek a livelihood and acquire wealth for safety and security, along with preservation, and growth. This is achieved in the following manner:

1. Islam encourages actively seeking one's sustenance and earning a livelihood. It does so in consideration of the fact that wealth is what provides support for human life. Islam considers the earning of wealth, if pursued with righteous intent and with permissible means. In a form of worship and a means of achieving nearness to Allah. Allah says: He is the one who has made the Earth subservient to you; so walk in its land and eat of His provision. Allah also says: Then when the prayer is completed, set forth on the Earth and seek the bounty of Allah.

2. Islam raises the status of work and elevates the standing of the workers. In an authentic hadith, Allah's Messenger said: No one has ever eaten food better than that which he has earned with the work of his own hands. The Prophet of Allah, David, used to eat from the work of his own hands. Islam establishes the right to work for every individual and holds the state responsible to provide work for those who are unable to find it. Islam, likewise, asserts the Honour and nobility of the worker and makes fulfilling his material and intangible rights an obligation. Allah's Messenger said: Give the worker his wage before his sweat has time to dry. He also said: There are three who I will speak against on the Day of Judgment: a man who was entrusted with something then betrayed the trust, a man who sold a free person into slavery and took the price, and a man who hired a worker and benefited from him then did not pay his due. Islam also asserts that a worker's pay should be enough to fulfil his needs. Allah's Messenger said: Whoever is appointed to work for us and does not have a home should be given a home. If he does not have a wife, he should be given the means to marry, and if he does not have a mount, he should be provided with one. Today this is called the principle of minimum wage.

3. Islam permits just forms of commercial transactions. It allows transactions that are neither oppressive to any of the parties concerned nor infringe upon the rights of others. For this reason, we find that that Islam reaffirmed many types of transactions that were already in existence before Islam, after ridding them of any element of oppression. These include numerous transactions such as selling, loaning on collateral and partnerships. Islam also opens the door for new forms of transactions that the accumulated experiences of society might uncover; provided that they contain no element of oppression or injury to any of the parties involved and that they do not entail wrongfully consuming the wealth of others.

## Continuation of Wealth:

1. The use of wealth is limited by the constraints of considering the general welfare. Therefore, any means of acquiring wealth that is unlawful and harmful to others is expressly forbidden. One such means is the collection of interest, because of the detrimental effect that it has on social equilibrium. Allah says: Allah has permitted commerce and forbidden interest. Allah also says: Do not consume each other's wealth unjustly.

2. Islam prohibits transgressing against the wealth of others through theft, burglary, or fraud. Islam sets a fixed punishment for theft. Allah says: The thieves, male and female, cut off their hands. It is obligatory for anyone who damages the property of others to pay compensation. Allah's Messenger said: The blood, wealth and Honour of every Muslim are sacred.

3. Islam forbids wealth to be spent in unlawful ways and encourages spending in the way of charity. This is based upon one of the most important principles of the Islamic economic system: All wealth belongs to Allah alone, and man is merely entrusted with its use. Allah says: And spend from that which He has made you trustees. And give them from Allah's wealth that He has bestowed upon you. Therefore, it is incumbent upon anyone who possesses wealth to use his wealth within the confines set by Islamic Law. It is not permissible for him to let his wealth tempt him into transgression, because this is a cause of degradation and destruction. Allah says: When we decide to destroy a town, we send a command to those among them who live a life of luxury. They commit sin, and thus the word is justified against them and we completely annihilate it. It is likewise impermissible for him to squander his wealth on useless things. Allah says: Do not squander, verily those who squander are the brethren of the devils.

4. Islamic Law provides legislation to protect the wealth of the mentally deficient and others who are incapable of managing their own wealth. This includes the wealth of orphans and minors until they reach the age of discretion. For this reason, a guardian is appointed to manage their wealth. Allah says: Test the orphans until they reach the age of marriage, and if you find them of sound judgment, then release their property over to them. -They ask you concerning the orphans. Say O Muhammad: "The best thing is to improve their property." This principle also encompasses placing an

interdiction over the property of a mature person who, nevertheless, is incapable of exercising proper judgment with regard to the disposal of his property. Allah says: Do not give to the foolish your property that Allah has given you to maintain, but feed and clothe them from it and speak to them words of kindness.

5. Financial interactions are structured around the principles of consent and justice. Islam, thus, maintains that contracts are not binding unless the contracting parties exercised their mutual consent and the contract's provisions are just. For this reason, gambling is prohibited. Allah says: O you who believe, do not consume each other's property unjustly, but let there be commerce between you by mutual consent.

6. Islam encourages wealth to be invested and developed so that it can fulfil its proper function in society. Therefore, Islam prohibits and combats the hoarding of wealth and keeping it out of circulation. Allah says: And those who hoard up gold and silver and do not spend them in the way of Allah, announce to them a painful punishment.

With all these injunctions, Islam protects wealth and safeguards it from corruption so it can fulfil its necessary and indispensable role in the order of human life and facilitate the growth of civilization. Its place is just like that of the other necessities of life, for together they form the basis of human life and civilization. If they are not properly managed and preserved, the world would fall into ruin and the positive contributions of human civilization would come to a halt.

## Status of Women in Islam

Islam honours women greatly. It honours women as mothers who must be respected, obeyed and treated with kindness. Pleasing one's mother is regarded as part of pleasing Allah. Islam tells us that Paradise lies under the mother's feet. Islam forbids disobeying one's mother or making her angry, even by saying a mild word of disrespect. The mother's rights are greater than those of the father, and the duty to take care of her grows greater as the mother grows older and weaker. All of that is mentioned in many texts of the Qur'an and Sunnah. Allah says: "And we have enjoined on man to be dutiful and kind to his parents, And your Lord has decreed that you worship none but Him. And that you be dutiful to your parents. If one of them or both of them attain old age in your life, say not to them a word of disrespect nor shout at them but address them in terms of honour. And lower unto them the wing of

submission and humility through mercy, and say: 'My Lord! Bestow on them Your Mercy as they did bring me up when I was young.'

One of the rights which Islam gives to the mother is that her son should spend on her if she needs support, so long as he is able. Hence for many centuries it was unheard of among the people of Islam for a mother to be left in an old-people's home or for a son to kick her out of the house, or for her sons to refuse to spend on her, or for her to need to work in order to eat and drink if her sons were present. Islam also honours women as wives. Islam urges the husband to treat his wife in a good and kind manner, and says that the wife has rights over the husband like his rights over her, except that he has a degree over her, because of his responsibility of spending and taking care of the family's affairs. Islam states that the best of the Muslim men is the one who treats his wife in the best manner, man is forbidden to take his wife's money without her consent. Allah says: "And live with them honourably. Women have rights similar to their husbands, but men have a degree over them. Allah is All-Mighty, All-Wise."

Islam honours women as daughters and encourages us to raise them well and educate them. Islam states that raising daughters will bring a great reward. For example, the Prophet said: "Whoever takes care of two girls until they reach adulthood, he and I will come like this on the Day of Resurrection," and he held his fingers together. He also said: "Whoever has three daughters and is patient with them, and feeds them, and gives them drink and clothes them from his riches, they will be a shield for him from the Fire on the Day of Resurrection."

Islam honours woman as sisters and as aunts. Islam enjoins upholding ties of kinship and forbids severing ties in many texts. The Prophet said: "O people! Spread the greeting of salaam, offer food to the needy, uphold ties of kinship, and pray at night when people are sleeping, you will enter Paradise in peace." All of these qualities may co-exist in a single woman: she may be a wife, a daughter, a mother, a sister, an aunt, so she may be honoured in all these ways. Islam raised the status of women, and made them equal with men in most rulings. So women, like men, are commanded to believe in Allah and to worship Him. And women are made equal to men in terms of reward in the Hereafter. Women have the right to express themselves, to give sincere advice, to enjoin what is good and forbid what is evil, and to call people to Allah. Women have the right to own property, to buy and sell, to inherit and to give charity. It is not permissible for anyone to take a woman's wealth without her consent. Women

have the right to a decent life, without facing aggression or being wronged. Women have the right to be educated; in fact it is obligatory to teach them what they need to know about their religion.

The French held a conference in 586 CE to discuss whether women had souls, also were these souls animal or human? And that they were created to serve men only. During the time of Henry VIII, the English Parliament issued a decree forbidding women to read the New Testament because they were regarded as impure. Until 1805, English law allowed a man to sell his wife, and set a wife's price at six pennies. In the modern age, women are kicked out of the house at the age of eighteen. If a woman wants to stay in the house, she has to pay her parents rent. How can this compare to Islam which enjoins honouring women? Secondly: During the golden age of Islam, Muslims applied the sharia of their Lord more, and the rulings of this sharia include honouring one's mother and treating one's wife, daughter, sister and women in a kind manner. The weaker religious commitment grew, the more these rights were neglected, but until the Day of Resurrection there will continue to be a group who adheres to their religion and applies the sharia of their Lord. These are people who honour women the most and grant them their rights. Despite the weakness of religious commitment among many Muslims nowadays, women still enjoy a high status, we acknowledge there are shortcomings and neglect of women's rights among some people, but each one will be answerable for himself.

## Islamic Political System

The political system of Islam is based on three principles:

Tawheed (Oneness) means that one God alone is the Creator, Sustainer and Master of this universe and of all that exists in it organic or inorganic. The sovereignty of this kingdom rests only with Him. He alone has the right to command or forbid. Worship and obedience are due to Him alone. It is He who bestows on us bounties in abundance. Hence, it is neither for us to decide the aim and purpose of our existence or to prescribe the limits in our worldly authority nor is anyone else entitled to make these decisions for us. This right vests only in God, who created us and endowed us with mental and physical faculties, and provided all material provisions for our use.

Nothing can claim sovereignty, God alone is the Sovereign and His Commandments are the Law of Islam.

The medium through which we receive the Law of God is known as "Risalat" (Prophet Hood). We have received two things from this source: The Book in which God expounded His Law; and the book by the prophet, through his words and deeds. The broad principles on which the system of human life should be based have been stated in the Book of God. Further, the Prophet of God has, in accordance with the intention of the Divine Book, set up for us a model of the system of life in Islam by practically implementing the law and providing necessary details where required. The combination of these two elements, according to Islamic terminology, is called the "Sharia's". There is a specific purpose for man's existence. This purpose is achieved when man fulfils his function and is missed when man fails to live up to his designated role. In that case, his life will be barren and devoid of any original meaning. Total loss and perdition await everyone who fails to respond to Allah's call. This role relates man to be subservience to Allah. All aspects of man's life are based on this consideration. Thus, the meaning of worship must be extended to go beyond mere rituals into all activities since Allah does not only call upon us to perform rituals but His injunctions regulate all aspects of life.

The Qur'an develops this theme: "Behold, thy Lord said to the angels: 'I will create a representative on earth'. It is this Khilafat (Caliphate) on earth which encompasses the activities of a human being. It consists of settlement on earth, exploration of its resources and energies, fulfilment of Allah's purpose, making full use of its resources and developing life. In brief this task requires the implementation of Allah's way which is in harmony with the Divine Law governing the whole universe. Thus, it becomes clear that the meaning of worship, which is the very purpose of man's existence, is much more comprehensive than mere rituals. It is imperative to turn to Allah dedicating to Him every stir of one's conscience. This dedication should be channelled solely to Him. Strive in the way of Allah. Having patience in bearing calamities contentedly in the knowledge that they are part of Allah's plan; all these are instances of worship of Allah. With this healthy frame of mind, based on the right understanding on man's role in this universe, man becomes ready to implement Allah's teaching, as communicated through the message of Prophet Muhammad. This is exactly what Islam means when it states that man is Khalifah (servant) of God on earth.

## Polygamy in Islam

Islam is criticized for allowing polygamy, the West views polygamy as relatively backward and impoverished. For many Christians, it is a license to promiscuity, and feminists consider it a violation of women's rights and demeaning to women. A crucial point that needs to be understood is that for Muslims, standards of morality are not set by prevalent Western thought, but by divine revelation. A few simple facts should be borne in mind before any talk of polygamy in Islam. Islam did not introduce polygamy. Among all Eastern nations of antiquity, polygamy was a recognized institution. Among the Hindus, polygamy prevailed from the earliest times. There was, as among the ancient Babylonians, Assyrians, and Persians, no restriction as to the number of wives a man might have. Although Greece and Rome were not polygamous societies, concubine was a norm. Islam regulated polygamy by limiting the number of wives and bringing responsibility to its practice. In fact, according to David Murray, an anthropologist, historically polygamy is more common than monogamy. Polygamy Practiced by God's Prophets the great Hebrew patriarchs equally revered by Judaism, Christianity, and Islam - Abraham, Moses, Jacob, David, and Solomon, to name a few were polygamous. According to the Bible:

- ✚ Abraham had three wives
- ✚ Moses had two wives
- ✚ Jacob had four wives
- ✚ David had at least 18 wives
- ✚ Solomon had 700 wives

Marriage is a legal arrangement in Islam, not a sacrament in the Christian sense, and is secured with a contract. Islamic marriage lays rights and corresponding responsibilities on each spouse. Children born in wedlock are given legitimacy and share in inheritance from their parents. The primary purpose of marriage in Islam is regulating sexuality within marriage as well as creating an atmosphere for the continuity and extension of the family. This is in sharp contrast to growing trends on marriage in the West. In recent decades, there are more alternatives to marriage than ever before. Cohabitation - living together outside of marriage - has greatly increased among un-married adults, as well as the divorced. More American women are having children outside of marriage, ignoring the traditionally sanctioned sequence of

marriage followed by childbearing. The Muslim scripture, the Qur'an, is the only known world scripture to explicitly limit polygamy and place strict restrictions upon its practice: "marry women of your choice, two or three or four; but if you fear that you shall not be able to deal justly with them, then only one." The Qur'an limited the maximum number of wives to four. In the early days of Islam, those who had more than four wives at the time of embracing Islam were required to divorce the extra wives. Islam further reformed the institution of polygamy by requiring equal treatment to all wives. A Muslim is not permitted to differentiate between his wives in regards to sustenance and expenditures, time, and other obligations of husbands. Islam does not allow a man to marry another woman if he will not be fair in his treatment. Prophet Muhammad forbade discrimination between the wives or between their children. Also, marriage and polygamy in Islam is a matter of mutual consent. No one can force a woman to marry a married man. Islam simply permits polygamy; it neither forces nor requires it. Besides, a woman may stipulate that her husband must not marry any other woman as a second wife in her prenuptial contract. The point that is often misunderstood in the West is that women in other cultures - especially African and Islamic - do not necessarily look at polygamy as a sign of women's degradation. Consequently, to equate polygamy with degrading women is an ethnocentric judgment of other societies.

Even though we see the clear permissibility of polygamy in Islam, its practice is quite rare in many Muslim societies. Some researchers estimate no more than 2% of the married males practice polygamy. Most Muslim men feel they cannot afford the expense of maintaining more than one family. Even those who are financially capable of looking after additional families are often reluctant due to the psychological burdens of handling more than one wife. One can safely say that the number of polygamous marriages in the Muslim world is much less than the number of extramarital affairs in the West. In other words, contrary to prevalent notion, men in the Muslim world today are more strictly monogamous than men in the Western world.

## Final Book

Some people reject God because they cannot find evidence of Him to satisfy both their hearts and minds. Then there are others who accept God on the basis of emotional or irrational reasons which satisfy their hearts, but leave their minds unsure. These two

groups of people have never found a satisfying answer to the question of their relationship with God. Then there are others who have found the correct path which God intended for us: to accept Him and His message to us using our minds first and foremost, and the heart follows easily and naturally as a consequence. God has given us several Books of guidance, but each one was ultimately corrupted and changed by dishonest people. Each Book essentially contained the same fundamental message as the previous Books. Mankind was expected to guard these Books from harm, but unfortunately failed to live up to this expectation. Slowly but surely, each Book was edited and tampered with, destroying its authenticity. This is partly why God kept sending us more revelations. However, almost 1400 years ago, God sent us another Book with the same message as the earlier ones, but with a small but very important difference. This time, God decreed that this Book would be the last Book sent down because God would protect it Himself. Regarding this Final Book, God said: "Behold, it is We Ourselves who have bestowed from above this reminder: behold, it is we who shall truly guard it" Today, if we compare the 114 chapters in every copy of this Final Book with each other, we will find they match perfectly word for word - from the oldest copies made 1300-plus years ago to the ones printed just a few hours ago. No human hand has changed it. The rational person has every right to be doubtful, of course, if he or she has never read this book. For such people, here is a small sample of what the Final Book contains. Suppose we wanted to ask God several questions about Him and about ourselves. Short of Him speaking to us directly, the Book has the best answers one can find. It is on the strength of these answers that an honest person may be struck with the conviction that the Final Book is from none other than God Almighty.

### Do you know this Book?

Dr. Maurice Bucaille said in his book "The Bible, the Quran and Science", which was published by the American Trust Publications 1979: "Thanks to its undisputed authenticity, the text of the Qur'an holds a unique place among the books of Revelation, shared neither by the Old nor the New Testament. In the first two sections of this work, a review was made of the alterations undergone by the Old Testament and the Gospels before they were handed down to us in the form we know today. The same is not true for the Qur'an for the simple reason that it was written down at the time of the prophet". The Qur'an has a challenge in it. The challenge is for anybody to

produce something like or similar to the Qur'an. This challenge is presented in the Qur'an in Surah No.17, Verse No.88 which is translated as follows: "Say: If the whole of mankind and Jinns were together to produce the like of this Qur'an, they could not produce the like thereof, even if they back up each other with help and support." Years passed and nobody was able to meet the challenge. Later (after several years) the challenge in the Quran was eased asking for anyone to produce even ten Surah's like those in it. This was in the Quran in Sum No. 11, Verse no. 13 which is translated as follows: "Or they may say, "He forged it" Say, "Bring then ten Surah's forged, like unto it, and call to your aid whomsoever you can, other than Allah! If you speak the truth" Again years passed and nobody was able to successfully meet the challenge. Later the challenge was eased for the second time to produce one Surah like or similar to the Surah's in the Qur'an.

The challenge to produce one Surah was presented in the Quran in more than a Surah, one of them was in Surah No. 2, Verse No. 23 which is translated as follows: " And If ye are in doubt as to what We have revealed from time to time to Our servant, then produce a Surah like thereunto; and call your witnesses or helpers besides Allah, if what you say is true." Since then more than fourteen hundred years have passed, and nobody has been able to meet the challenge, and nobody will, because the Qur'an is the only existing book containing the word of Allah which no man can match or imitate. The most eloquent people in the Arabic language spent years going over and searching the Qur'an, trying to find any weak or inadequate word or sentence, but they could not. They even went further, trying to find a way to substitute a word or a sentence in the Qur'an, hoping to convey a similar meaning as the original one, but they failed. As a result, many people, especially linguists, throughout the last fourteen hundred years believed in the Qur'an as a revelation beyond any human capacity. If the Qur'an describes scientific facts with great accuracy, how, could it be human work? Let us see what Dr. Maurice Bucaille said after he had read the Qur'an: "My first goal was to read the Qur'an and make a sentence by sentence analysis of it, my approach was to pay special attention to the description of numerous natural phenomena given in the Qur'an; the highly accurate nature of certain details referring to them in the Book, which was only apparent in the original, struck me' by the fact that they were in line with present-day ideas, although man living at the time of Muhammad couldn't have suspected this at all. What initially strikes the reader confronted for the first time with a text of this kind is the sheer abundance of subjects discussed, whereas monumental

errors are to be found in the Bible, I could not find a single error in the Qur'an. I had to stop and ask myself: If a man was the author of the Qur'an how could he have written facts in the seventh century A.D. that today are shown to be in keeping with modern scientific knowledge. What human explanation can there be for this observation? In my opinion there is no explanation; there is no special reason why an inhabitant of the Arabian Peninsula should have had scientific knowledge on certain subjects that was ten centuries ahead...It is an established fact that at the time of the Qur'anic Revelation (622 A.D.), scientific knowledge had not progressed for centuries and the period of activity in Islamic civilization, with its accompanying scientific upsurge, came after the close of the Qur'anic revelation.

The Qur'an states several facts about astronomy which were discovered in the late twentieth century. One of these facts is about the expansion of the universe. The expansion of the universe is the most imposing discovery of modern science today. Thus the size of the Universe is probably constantly increasing and this increase will become bigger the further away the galaxies are from us. The speeds at which these celestial bodies are moving may, in the course of this perpetual expansion, go from fractions of the speed of light to speeds faster than this. The following verse where God is speaking, may perhaps be compared with modern ideas; "The heaven, we built it with power. Verily we are expanding it." Another example from a different scientific field is about the living things in general which we can find in more than one verse in the Qur'an. The Verse says: "Do not the Unbelievers see that the heavens and the earth were joined together, then we clove them asunder and we got every living thing out of the water. Will they then not believe? Without water, life is not possible. When the possibility of life on another planet is discussed, the first question is always: does it contain a sufficient quantity of water to support life? From the Animal Kingdom there are so many facts stated in the Qur'an. One of these facts is about the source of the constituents of animal milk which has been described in the Qur'an fourteen hundred years before. It has been understood only in recent times. "Verily, in cattle there is a lesson for you. We give you to drink of what is inside their bodies, coming from a conjunction between the contents of the intestine and the blood, a milk pure and pleasant for those who drink it." These substances come from the contents of the intestine. On arrival in the intestine at the appropriate stage of chemical transformation, they pass through its wall and towards the systematic circulation.

This passage is effected in two ways: either directly, by what are called the 'lymphatic vessels', or indirectly, by the portal circulation. This conducts them first to the liver, where they undergo alterations, and from here they then emerge to join the systematic circulation. In this way everything passes through the bloodstream. The constituents of milk are secreted by the mammary glands. These are nourished, as it were, by the product of food digestion brought to them via the bloodstream. Blood therefore plays the role of collector and conductor of what has been extracted from food, and it brings nutrition to the mammary glands, the producers of milk, as it does to any other organ. Here the initial process which sets everything else in motion is the bringing together of the contents of the intestine and blood, at the level of the intestinal wall itself. This very precise concept is the result of the discoveries made in the chemistry and physiology of the digestive system. It was totally unknown at the time of the Prophet Muhammad and has been understood only in recent times. The discovery of the circulation of the blood, was made by Harvey roughly ten centuries after.

This example illustrates where the Qur'an showed people facts that have not even been discovered. It is about the story of Pharaoh and Moses. The Verses which inspire Dr. Bucaille to do research around this incident are in Surah 10, Verses 90 to 92, which means as follows: "We (Allah) took the children of Israel across the sea. Pharaoh with his hosts pursued them in rebellion and hostility till, his drowning overtook him and then he said: I believe there is no True God except the God in whom the Children of Israel believe. I am of those who submit themselves to Him. (It was said to him)' Now! Before you rebelled and caused depravity: Today we will save you in your body so that you may be a sign for those who come after you but verily, many among mankind are heedless of our signs". This is what the Holy Quran said about the story of Moses and the Pharaoh and the sign Allah left for people to come after Pharaoh to see who has a revelation from Allah and who does not have. Let us hear from Dr. Bucaille how he conducted research to verify this Qur'anic story: "In June 1975, the Egyptian high authorities very kindly allowed me to examine Pharaoh's body. What derived from this examination is the discovery of multiple lesions of the bones with broad lacunae, some of which may have been mortal although it is not yet possible to ascertain whether some of them occurred before or after Pharaoh's death. He most probably died either from drowning, according to the scriptural narrations, or from violent shocks preceding the moment when he was drowned or both at once. The connection of these lesions with the deterioration whose sources have been mentioned above renders the correct

preservation of the mummy of the Pharaoh somewhat problematical, unless precautionary and restorative measures are not taken very soon. These measures should ensure that the only concrete evidence which we still possess today concerning the death of Pharaoh of the Exodus and the rescue of his body, willed by God; does not disappear with the passage of time. It is always desirable for man to apply himself to the preservation of relics of his history, but here we have something which goes beyond that: it is the material presence of the mummified body of the man. Who knew Moses, resisted his pleas, pursued him as he took flight and lost his life in the process. His earthly remains were saved by the Will of God from destruction to become a sign to man, as it is written in the Qur'an.

Those who seek among modern data for proof of the veracity of the Holy Scriptures will find a magnificent illustration of the verses of the Qur'an dealing with the Pharaoh's body by visiting the Royal Mummies Room in the Egyptian Museum, Cairo!" There are over a hundred of these examples in several scientific fields in the Qur'an which all have been proven to be scientifically true; in this Book which was revealed fourteen hundred years ago. Dr. Arthur Elson from the City University in London, U.K., stated that he was amazed by the scientific accuracy of the statements which had been made in the Qur'an. He had no doubt in his mind that these were not human words because these facts had just been discovered recently. I would like to quote a Verse from the Quran which may sum up the purpose of having these scientific facts in the Qur'an as signs for the people: "We (Allah) will show the unbelievers our signs in the farthest regions, and within their own selves until it becomes manifest to them that this is the Truth." The Quran contains scientific facts and explanations that fascinate scientists of all fields. But it is not an encyclopaedia of science. The Qur'an mentions stories of people and places in the past with vivid detail. But it is not merely a book of history. So what is Quran? The Qur'an is a revelation from the Creator of this universe to all human beings. Its most important message is the Unity of God - that there is only One Supreme Being who has no partners and is not dependent on anyone or anything. He is the Creator of everything and the whole universe is in His control. He is the only one worthy of being worshipped.

It is impossible for the created to fully comprehend the Creator - so the Qur'an makes us aware of Him by mentioning His Attributes. He is the most Merciful, the Loving, the Majestic and the Oft-Forgiving. The name that He has chosen for Himself is Allah. In

His infinite mercy, Allah has not left mankind to wander searching for the correct path. He has revealed the Qur'an which includes a code for all people to follow. Islam is not just a set of beliefs. It is a complete way of life which covers all spheres of human activity, the social, economic, political, educational as well as the spiritual. Islam enjoins good manners for every occasion and stresses treating people, particularly relatives and neighbours with kindness. The family enjoys a high status in Islam, it is viewed as the nucleus of society. Allah has also sent messengers to guide mankind to the truth and to be an example for others to emulate. Stories of these messengers starting from Adam and including those of Noah, Abraham, Moses and Jesus, ending with Muhammad are found in the Qur'an. This final revelation from Allah to mankind has been safeguarded from any alteration. Since the Qur'an has been preserved in its original Arabic it has not lost any meaning in translation to another language. Millions of people from all parts of the world have memorized the complete Qur'an. So even if all printed copies of the Qur'an were destroyed it would continue to live in the hearts of these people. There is only one God, Allah, who alone is worthy of being worshipped. Mankind has been guided at various times by the messengers of Allah of whom the most prominent were Noah, Abraham, Moses, Jesus and Muhammad. The final message was sent to the last prophet, Muhammad, which replaces all previous messages. None of the prophets claimed to be god or part-god, they were all human and were obedient to Allah. Islam is the universal message of Allah to all mankind and Prophet Muhammad is the last and final messenger of Allah. Therefore, Allah will not accept any way of life except Islam. He said in the Gracious Qur'an: "And anyone who chooses a way of life other than Islam, it will not be accepted from him and in the hereafter he will be one of the losers."

One thing which surprises non-Muslims who are examining the book very closely is that the Quran does not appear to them to be what they expected. What they assume is that they have an old book which came fourteen centuries ago from the Arabian Desert; and they expect that the book should look something like that - an old book from the desert. And then they find out that it does not resemble what they expected at all. Additionally, one of the first things that some people assume is that because it is an old book which comes from the desert, it should talk about the desert. Well the Qur'an does talk about the desert - some of its imagery describes the desert; but it also talks about the sea - what it's like to be in a storm on the sea.

## Merchant Marine

Some years ago, a man who was a merchant marine and made his living on the sea. A Muslim gave him a translation of the Qur'an to read. The merchant marine knew nothing about the history of Islam but was interested in reading the Quran. When he finished reading it, he brought it back to the Muslim and asked, "This Muhammad, was he a sailor?" He was impressed at how accurately the Qur'an describes a storm on a sea. When he was told, "No as a matter of fact, Muhammad lived in the desert," that was enough for him. He embraced Islam on the spot. He was so impressed with the Qur'an's description because he had been in a storm on the sea, and he knew that whoever had written that description had also been in a storm on the sea. The description of "a wave, over a wave, over it clouds" (Surah Nur, 24:40) was not what someone imagining a storm on a sea to be like would have written; rather, it was written by someone who knew what a storm on the sea was like. This is one example of how the Qur'an is not tied to a certain place and time. Certainly, the scientific ideas expressed in it also do not seem to originate from the desert fourteen centuries ago.

## Smallest Thing

Many centuries before the onset of Muhammad's prophet hood, there was a well-known theory of atomism advanced by the Greek philosopher, Democritus? He and the people who came after him assumed that matter consists of tiny, indestructible, indivisible particles called atoms. The Arabs too, used to deal with the same concept; in fact, the Arabic word dharrah commonly referred to the smallest particle known to man. Now, modern science has discovered that this smallest unit of matter can be split into its component parts. This is a new idea, a development of the last century; yet; interestingly enough, this information had already been documented in the Qur'an (Surah Saba', 34:3) which states: "Allah is aware of an atom's weight in the heavens and on the earth and even anything smaller than that". Undoubtedly, fourteen centuries ago that statement would have looked unusual, even to an Arab. For him, the dharrah was the smallest thing there was. Indeed, this is proof, that the Qur'an is not outdated.

## Honey

Various historical sources state that the Prophet gave some advice about health and hygiene, yet most of these pieces of advice are not contained in the Qur'an. At first glance, to the non-Muslims this appears to be a negligent omission. They cannot understand why Allah would not "include" such helpful information in the Qur'an. Although the Prophet's advice was sound and applicable to the time in which he lived, Allah, in His infinite wisdom, knew that there would come later medical and scientific advances which would make the Prophet's advice appear outdated. When later discoveries occurred, people might say that such information contradicted that which the Prophet had given. Thus, since Allah would never allow any opportunity for the non-Muslims to claim that the Qur'an contradicts itself or the teachings of the Prophet, He only included in the Qur'an information and examples which could stand the test of time. However, when one examines the true realities of the Qur'an in terms of its existence as a divine revelation, the entire matter is quickly brought into its proper perspective and the error in such argumentation becomes clear and understandable. It must be understood that the Qur'an is a divine revelation, and as such, all information in it is of divine origin. Allah revealed the Qur'an from Himself. It is the words of Allah, which existed before creation, thus nothing can be added, subtracted or altered. In essence, the Qur'an existed and was complete before the creation of Prophet Muhammad, so it could not possibly contain any of the Prophet's own words or advice. Consequently, there was no "home remedies" in the Qur'an which one could claim to be outdated; nor does it contain any man's view about what is beneficial to health, what food is best to eat, or what will cure this or that disease. In fact, the Qur'an only mentions one item dealing with medical treatment, and it is not in dispute by anyone. It states that in honey there is healing. Nobody today can argue with that.

## Scientific Approach to the Qur'an

A truly scientific approach to the Quran is possible because the Quran offers something that is not offered by other religious scriptures, in particular, and other religions, in general. It is what scientists demand. Today there are many people who have ideas and theories about how the universe works. These people are all over the place, but the scientific community does not even bother to listen to them. This is because within the last century the scientific community has demanded a test of

falsification. They say, "If you have a theory, do not bother us with it unless you bring with that theory a way for us to prove whether you are wrong or not." Such a test was exactly why the scientific community listened to Einstein towards the beginning of the century. He came with a new theory and said, "I believe the universe works like this; and here are three ways to prove whether I am wrong!" So the scientific community subjected his theory to the tests, and within six years it passed all three. Of course, this does not prove that he was great, but it proves that he deserved to be listened to because he said, "This is my idea; and if you want to try to prove me wrong, do this or try that." This is exactly what the Qur'an has - falsification tests. Some are old and some still exist today. Basically it states, "If this book is not what it claims to be, then all you have to do is this or this or this to prove that it is false." Of course, in 1400 years no one has been able to do this and thus it is still considered true and authentic.

### Ask Those Who Have Knowledge

The Qur'an informs the reader about man's origin and then tells the reader, "Research it!" It gives the reader a hint where to look and then states that one should find out more about it. This is the kind of thing that Muslims today largely seem to overlook. Undoubtedly, there is an attitude in the Qur'an which is not found anywhere else. It is interesting how when the Qur'an provides information, it often tells the reader, "You did not know this before." Indeed, there is no scripture that exists which makes that claim. All of the other ancient writings and scriptures that people have do give a lot of information, but they always state where the information came from. For example, when the Bible discusses ancient history, it states that this king lived here, this one fought in a certain battle, another one had so many sons, etc. Yet it always stipulates that if you want more information, then you should read the book of so and so because that is where the information came from. In contrast to this concept, the Qur'an provides the reader with information and states that this information is something new. It is interesting that such a concept was never challenged by non-Muslims fourteen centuries ago. In concurrence with the advice given in the Qur'an to research information, when 'Umar was caliph, he chose a group of men and sent them to find the wall of Dhul-Qarnayn. Before the Qur'an revelation, the Arabs had never heard of such a wall, but because the Qur'an described it, they were able to find it. As a matter of fact, it is now located in what is called Durban in the Soviet Union.

## Origin of the Universe and Life

An interesting characteristic of the Qur'an is how it deals with surprising phenomena which relates not only to the past but to modern times as well. In essence, the Qur'an is a problem. A problem for the non-Muslims. For every day, every week, every year brings more and more evidence that the Qur'an is a force to be contended with, its authenticity is no longer to be challenged! For example, one verse in the Qur'an (Surah al-Anbiyaa 21:30) reads: "Do not the unbelievers see that the heavens and the earth were joined together, then we split them apart, and made from water every living thing? Will they not then believe?" Ironically, this very information is exactly what they awarded the 1973 Noble Prize for - to a couple of unbelievers. The Qur'an reveals the origin of the universe, how it began from one piece, mankind continues to verify this revelation, even up to now. Additionally, the fact that all life originated from water would not have been an easy thing to convince people of fourteen centuries ago. Indeed, if 1400 years ago you had stood in the desert and told someone, "All of this, you see, is made up of mostly water," no one would have believed you. Proof of that was not available until the invention of the microscope. They had to wait to find out that cytoplasm, the basic substance of the cell, is made-up of 80% water. Nonetheless, the evidence did come, and once again the Qur'an stood the test of time.

## The Sun

The Qur'an explains the manner in which the sun travels through space. The Qur'an states that it moves as a result of its own motion. It simply means that the sun is turning and rotating as it travels. Can any common man tell that the sun is turning? Only in modern times was the equipment made available to project the image of the sun onto a table top so that one could look at it without being blinded. And through this process it was discovered that not only are there spots on the sun but that these spots move once every 25 days. This movement is referred to as the rotation of the sun around its axis and conclusively proves that, as the Qur'an stated 1400 years ago, the sun does, indeed, turn as it travels through space.

## Time Zones

Fourteen centuries ago people did not understand much about time zones, the Qur'an's statements about this subject are considerably surprising. The concept that

one family is having breakfast as the sun comes up while another family is enjoying the brisk night air is truly something to be marvelled at, even in modern time. Indeed, fourteen centuries ago, man could not travel more than thirty miles in one day. You have to realize that, in the process of traveling, you move across a time zone. Yet, because it is the words of Allah, the All-Knowing, the Qur'an recognizes and acknowledges such a phenomenon. In an interesting verse it states that when history comes to an end and the Day of Judgement arrives, it will all occur in an instant; and this very instant will catch some people in the daytime and some people at night. This clearly illustrates Allah's divine wisdom and His previous knowledge of the existence of time zones, even though such a discovery was non-existent. Certainly, this phenomenon is not something which is obvious to one's eyes or a result of one's experience, this fact, in itself, suffices as proof of the Qur'an's authenticity.

## Conclusion

No one can deny the following: the odds that Muhammad, an illiterate, guessed correctly about thousands and thousands of subjects, never once making a mistake, are so high that any theory of his authorship of the Qur'an must be completely dismissed even by the most hostile enemies of Islam! Indeed, the Qur'an expects this kind of challenge. It states that it originates from the One who created everything. So everyone has the right to say, convince me! We all know something for sure: we do not all have to be experts to verify what the Qur'an affirms. One's faith grows as one continues to check and confirm the truths contained in the Qur'an. And one is supposed to do this all his life. May God (Allah) guide everyone close to the truth? An engineer at the University of Toronto who was interested in psychology, conducted research and wrote a thesis on Efficiency of Group Discussions. The purpose of his research was to find out how much people accomplish when they got together to talk in groups of two, three, ten, etc. The graph of his findings go up and down at places, but it reaches the highest point at the variable of two. The findings: people accomplish most when they talk in groups of two. Of course, this discovery was entirely beyond his expectation, but it is very old advice given in the Qur'an (Surah Saba 34:46): "Say, I exhort you to one thing, that you stand for Allah, assessing the truth by two's and singly, and then reflect."

## Reason and Questions of Faith

Allah singles out people who possess reason and proper knowledge as being those who carry out the objectives of worship. He discusses the rulings of how to perform the pilgrimage and then concludes by saying: “And fear me, O people of understanding.” Allah declares that the ability to receive benefit from remembering Him and from hearing exhortations to truth and righteousness is the exclusive quality of those possessing reason. He says: “In their stories there is a lesson for those possessing reason.” He also says: “And we have certainly left a sign as clear evidence for people who use reason.” Allah honours the faculty of reason and makes it the crux of our legal accountability. The Prophet of Allah said: “The pen is lifted from three people: the sleeper until he awakens, the child until he reaches the age of discernment, and the insane until he is able to reason.” Allah reprimands those who unthinkingly follow in the footsteps of their forefathers who in doing so shun the dictates of reason. He says: “And when it is said to them to follow what Allah has revealed, they say: ‘nay, we follow what we found our fathers upon.’ Even though their fathers could discern nothing of reason and were not rightly guided.” Islam has made it unlawful to compromise the faculty of reason in any way. It forbids intoxicants and narcotics. Allah says: “O you who believe! Intoxicants, games of chance, sacrificing on stone alters, and divining arrows are the filth of Satan's handiwork, so keep away from it that perchance you might be successful.” Islam strictly prohibits every practice that offends reason or runs contrary to it, like seeing evil omens, resorting to soothsayers and fortune-tellers and superstitious practices.

In Islam, there are two sources of knowledge: Divine revelation: This is the truth that is conveyed to us from Allah by way of His Prophets. Human experience: Reason is a precondition for knowledge and for the proper performance of our actions. Essential knowledge: This includes a person's knowledge of his own existence, that two is greater than one, or that the sky is above us and the ground below us. Theoretical knowledge: This is knowledge that is acquired through and gleaned from evidence. Such thinking must draw from essential knowledge in order for its correctness to be discerned. Many disciplines fall into this category, like natural sciences, medicine and various manufacturing arts. It is in these fields where reason plays its greatest, most critical, and most constructive role. Knowledge of the Unseen: This includes knowledge of what is to be found in some distant land or knowledge of the events of

the Hereafter, like the resurrection and the judgment. Such knowledge is only ascertainable by way of a report. When the questions at hand are those of religious faith, especially with respect to the particulars, then the only source that can be relied upon is divine revelation. It is in light of this understanding that Allah says: “And those of firm knowledge say: ‘We believe in it. All of it is from our Lord.’ And none take heed except people of discernment.” This was the approach of the Salaf, our pious predecessors. They knew the limits of reason and stopped at those limits, never attempting to use their rational faculties to plumb the depths of the Unseen. They did not ponder on the true nature of Allah, His essence and His attributes. They voiced their objections to this pursuit and forbade others from engaging in it. In this way, they safeguarded themselves from doubt and error and kept their hearts secure in the certainty of faith.

It is one of the blessings of Allah upon the Muslims that he has sufficed those regarding matters of the Unseen. He revealed to them the Qur’an and took its preservation upon Himself and He sent them the Messenger and preserved for them the Sunnah of that Messenger. In this way, he sufficed them in their knowledge of the Unseen, so they would not have to squander their intellectual powers trying to investigate matters that their minds are unable to cope with. In this way, He freed their minds to pursue the problems of their worldly existence and derive benefit from the world in which they live. There is no other religion that honours the human intellect, awakens it, sets it on the right course and mobilizes it for constructive effort, liberating it from the shackles of fables and superstition and the oppression of soothsayers and possessors of “forbidden knowledge”. At the same time, it safeguards the mind from straying outside of its proper domain and into an intellectual wasteland without a guide. There is no other faith that has done this quite as Islam has. Allah has sufficed the Muslims in matters of their faith and commanded them to follow, while opening up to them the matters of the world and commanding them to be innovative. However, some Muslims instead opted to be innovative and inventive in matters of faith, while in the affairs of the world, they sufficed themselves with following the nations of the East and West without contributing any development or any new ideas.

## Life after Death

The Qur'an states that this worldly life is preparation for the eternal life after death. But those who deny it become slaves of their passions and desires, and make fun of virtuous and God-conscious people. Such people realize their folly only at the time of their death and wish in vain to be given a second chance in the world. Their miserable state at the time of death, the horror of the Day of Judgment, and the eternal bliss guaranteed to the sincere believers are very beautifully mentioned in the following verses of the Qur'an. "Until, when death comes unto one of them, he says, 'My Lord, send me back, so I may do right in that which I have left behind!' But nay! It is but a word that he speaks; and behind them is a barrier until the day when they are raised. And when the Trumpet is blown there will be no kinship among them that day nor will they ask of one another. Then those whose scales are heavy, they are successful. And those whose scales are light are those who lose their souls, in hell abiding, the fire burns their faces and they are glum therein." The belief in life after death not only guarantees success in the Hereafter, but also makes this world full of peace and happiness. This is through making individuals exceedingly responsible and dutiful in their activities due to their awe of God: the fear of His punishment and hope for His reward. Think of the people of Arabia. Gambling, drinking, tribal feuds, plundering and murdering were the main traits of their society when they had no belief in a life hereafter. But as soon as they accepted the belief in One God and life after death, they became the most disciplined nation of the world. They gave up their vices, helped each other in hours of need, they settled all their disputes on the basis of justice and equality. Similarly, the denial of life after death has its consequences not only in the Hereafter, but also in this world. When a nation as a whole denies it, all kinds of evil and corruption become rampant in that society and ultimately it is destroyed. The Qur'an mentions the terrible end of the 'Aad, Thamud and the Pharaoh people in some detail: "The tribes of Thamud and 'Aad disbelieved in the judgment to come. As for Thamud, they were destroyed by the lightning, and as for 'Aad, they were destroyed by a fierce roaring wind, which he imposed on them for seven long nights and eight long days, so that you might see the people laid prostrate in it as if they were the stumps of fallen down palm trees". "Now do you see remnant of them? Pharaoh likewise and those before him and the subverted cities. They committed errors and those before him, and they rebelled against the Messenger of their Lord, and He

seized them with a surpassing grip. Lo, when the waters rose, we bore you in the running ship that we might make it a reminder for you and for heeding ears to hold.

“So when the Trumpet is blown with a single blast and the earth and the mountains are lifted up and crushed with a single blow, then on that day, the Terror shall come to pass, and the heaven shall be split, for upon that day it shall be very frail.”

“Then as for him who is given his book in his right hand, he shall say ‘Here, take and read my book! Certainly I thought that I should encounter my reckoning.’ So he shall be in a pleasing life in a lofty garden, its clusters nigh to gather. Eat and drink with wholesome appetite for what you did long ago, in the days gone by.”

“But as for him who is given his book in his left hand, he shall say: ‘Would that I had not been given my book and known my reckoning! Would it had been the end! My wealth has not availed me, my authority is gone from me.’”

Thus, there are very convincing reasons to believe in life after death. First, all the prophets of God have called their people to believe in it. Secondly, whenever a human society is built on the basis of belief, it has been the most ideal and peaceful society, free of social and moral evils. Thirdly, history bears witness that whenever this belief is rejected collectively by a group of people in spite of the repeated warning of their Prophet, the group as a whole has been punished by God, even in this world. Fourthly, moral, aesthetic and rational facilities of man endorse the possibility of life after death. Finally, God’s attributes of Justice and Mercy would have no meaning if there is no life after death.

## Journey into the Hereafter

Muhammad, the Prophet of Islam who passed away in 632, related: Gabriel came to me and said, “O Muhammad, live as you wish, for you shall eventually die. Love whom you desire, for you shall eventually depart. Do what you please, for you shall pay. Know that the night-prayer is the Honour of a believer, and his pride is being independent on others”. There is one thing certain about life, it ends. This truism instinctively raises a question which preoccupies most people at least once in their life: What lies beyond death? At the physiological level, the journey that the deceased takes is plain for all to witness. If left alone to natural causes, the heart will stop

beating, the lungs will stop breathing and the body's cells will be starved of blood and oxygen. The termination of blood flow to the outer extremities will soon turn them pale. With the oxygen cut off, cells will respire anaerobically for a time, producing the lactic acid which causes rigor mortis, stiffening the corpse's muscles. Then, as the cells begin to decompose, the stiffness wanes, the tongue protrudes, the temperature drops, the skin discolours, the flesh rots and then the parasites have their feast, until all that is left is dried-out tooth and bone. As for the journey of the soul after death, this is not something that can be witnessed. Even in a living body, the conscious or soul of a person cannot be subjected to empirical experimentation. It is simply beyond human control. In this regard, the concept of a Hereafter, a life beyond death, resurrection and a Day of Reckoning; not to mention the existence of a Divine, Omnipotent Creator, His angels, destiny, comes under the subject of belief in the unseen. The only way in which man can come to know anything of the unseen world is through divine revelation. "And with God are the keys of the unseen, none knows them but He. And He knows whatever there is in or on the earth and in the sea; not a leaf falls, but He knows it. There is not a grain in the darkness of the earth, nor anything fresh or dry, but is written in a Clear Record."

While what has come down to us of the Torah, the Psalms, the Gospel, the scriptures revealed to early prophets, all speak of a Hereafter, it is only through God's Final Revelation to humanity, the Holy Qur'an, as revealed to His Final Prophet, Muhammad, that we learn most about the afterlife. And as the Qur'an is, and will forever remain, preserved and uncorrupted by human hands, the insight it gives us into the world of the unseen is, for the believer, as factual, real and true as anything that can be learnt through any scientific endeavour. "We have neglected nothing in the Book; then unto their Lord they shall all be gathered." Coupled with the question of what happens after we die? It is only if one first accepts that our intelligent design, our creation, necessitates an intelligence and designer behind it, a Creator who will judge us for what we do, that life on earth carries any significant meaning. "Did you think that we created you in vain and that to us you would not be returned? Exalted be God, the Sovereign, the Truth; no deity is there but Him, Lord of the Supreme Throne." A person despairs of this worldly life while having little, no, or imperfect faith in an afterlife, that they may commit suicide. After all, what else do the unhappy, unloved and unwanted; the depressed and despairing have to lose? "And who despairs of the Mercy of his Lord except those who are astray?" So can we accept that our death is limited to mere

physiological termination, or that life is merely a product of blind, selfish evolution? Surely, there is more to death, and so to life, than this.

## Why does God allow suffering?

Throughout history this question has plagued humanity. The general stance is that if there was a perfectly good, all-knowing, all-powerful God, then there would be no evil or suffering in the world i.e. death, disease, old age, earthquakes and starvation would not feature in life's equation. When addressing the question it becomes apparent that the above statement takes on board the following premises: A. a good God that is all powerful exists. B. Evil exists. Therefore a good God that is all powerful does not exist. However, the above conclusion assumes some further hidden premises that are not directly mentioned. For instance, it assumes that:

1. If God is all powerful, then He can create any world He wants - For example, a world where all human beings always do the right thing and do not fall into evil or suffering. However, this would mean that God would deprive us of the freedom to choose and compulsion is not a characteristic that God imposes on humans.
2. If God is good, then He prefers a world without evil. The above two hidden premises assume a very Christian type of God (one that is just good and omnipotent) and secondly that God doesn't have any reason to permit evil and suffering in the world.

## Attributes of God

Muslims do not believe that God is just good and omnipotent. "Sometimes we see the manifestation of the divine beauty, grace and forgiveness and sometimes we see manifestations of the divine rigour and wrath. This is one of the big differences between the Islamic understanding and Christian understanding. Christians say God is love and will then have trouble explaining evil in the world. Muslims say Allah is the most beneficent, most merciful, the all loving, these attributes do predominate. And at the end, when good and evil are differentiated we will see the mercy predominates over the wrath. But Allah is also the overwhelming, the avenger, the judge, Muslims believe that the world is the endlessly subtle interaction of ninety nine names, which includes names of rigour as well as names of beauty. The Prophet said: "How amazing is the case of the believer; there is good for him in everything, this characteristic is

exclusively for him alone. If he experiences something pleasant, he is thankful, and that is good for him; and if he comes across some adversity, he is patient, and that is good for him."

## Why God may permit evil

Sceptics may focus on the negative aspect of things, claiming evil and suffering have no purpose to serve whatsoever. Muslims believe that God created us for a test. In a verse in the Qur'an, Allah says: "The one who created life and death, so that He may put you to test, to find out which of you is best in deeds; He is the all-mighty, the all-forgiving." In some religions, a person's good status in the world is seen as an indication that God is pleased with them. So instance, if someone has a good job or a nice house the inference made is that God loves them. However, in Islam, health, wealth, poverty, sickness etc. are not signs of success or failure; rather they are a means of testing the individual to determine their response to a particular situation. But even when faced with hardships in life, the Prophet said: "No calamity befalls a Muslim, but that Allah expiates some of his sins because of it, even though it were the prick from a thorn." Generally speaking, any evil or suffering experienced in life is exception and not rule. Illness is relatively short-lived in comparison to good health as are earthquakes in comparison to the age of the earth. Moreover, just because our intellectual capacity is limited and we can't evaluate what wisdom is, doesn't mean it isn't there. In some cases, sickness results in the build-up of immunity, earthquakes relieve pent up pressures within the earth, volcanoes spew out minerals resulting in rich fertile soil for agriculture. There is an ancient wisdom that states "Out of the snakes poison comes the antidote". How else can one appreciate goodness without having experienced hardship to use as a comparator? Would it be possible to appreciate good health if illness did not occur?

"It is said that evil in the world is like shaded spaces in a painting; if you come close to it you'll see these as defects, but if you draw back to a distance you will discover the shaded areas are necessary in fulfilling an aesthetic function within the artwork."

Perceived evil or suffering also allows second order good. For instance if there weren't any starving people how could we show our generosity? Similarly following the tsunami, humanity was at its very best and showed generosity and support by sending in medical assistance, food, money etc. Therefore a negative event enabled the

positive to be manifested. On the subject of the tsunami, for those who lost their lives, although this may seem unjust it is because we are judging negative and positive based on this world, and neglecting the hereafter. It is possible that a person may get rewarded by something far greater than the adversity they experienced in this world. Afflictions can also help individuals return to the obedience of God. In many cases, the returning to Allah and having full reliance on Him opens doors that one could never have imagined. An interesting story is that of the musician Cat Stevens. Stevens had gone swimming at the house of Jerry Moss, his American record boss, at Malibu Beach, and after half an hour could barely stay afloat in the perilous currents of the Pacific Ocean. He attempted to swim to land, but the sea was too strong. He realised he was going to drown and he called out to God. Miraculously the tide swiftly turned, a sudden wave lifted him and he swam easily back to shore. His inner faith revealed itself further when his elder brother David gave him a copy of the Qur'an. It provided the key to the answers he had been looking for: It was the timeless nature of the message, he said, the words all seemed strangely familiar yet so unlike anything he had ever read before. Privately, Steven started applying Islam's spiritual values to his own life: he began praying directly to God and gradually cut down drinking, clubs and parties. He retreated from the music business and finally embraced Islam in 1977, changing his name to Yusuf Islam."

## Conclusion

A number of responses to the perceived problem of evil have been discussed herein. Ultimately the absence of any evil or suffering would point towards absolute perfection, but this is something which is reserved for God alone. Life on earth cannot ever be a flawless paradise. This state can only be earned by those who pass the test of this worldly existence.

## Miracles of the Qur'an - The Universe

The Holy Qur'an consists of scientific miracles by highlighting certain scientific facts which were discovered fourteen centuries later. The Qur'an is full of miracles and it is a miracle by itself.

### Black Holes

The 20th century saw many new discoveries regarding celestial phenomena in the universe. One of these entities, which has only recently been encountered, is the Black Hole. These are formed when a star which has consumed all its fuel collapses within itself, eventually turning into a black hole with infinite density and zero volume and an immensely powerful magnetic field. We are unable to see black holes even with the most powerful telescope, because their gravitational pull is so strong that even light is unable to escape from them. However, such a collapsed star can be perceived by means of the effect it has on the surrounding area. In Surah al-Waqi'a, Allah draws our attention to this matter by swearing upon the position of stars: "I swear by the stars' positions-and that is a mighty oath if you only knew". The term "black hole" was first stated in 1969 by the American physicist John Wheeler. Previously, we imagined that we were able to see all the stars. However, it later emerged that there were stars in space whose light we were unable to perceive. Because, the light of these collapsed stars disappear. Light cannot escape from a black hole because it is such a high concentration of mass in a small space. The enormous gravitation captures even the fastest particles, i.e. Photons. For example, the final stage of a typical star, three times the mass of the Sun, ends after its burning out and its implosion as a black hole of only 20 kilometres (12.5 miles) in diameter! Black holes are "black," they nevertheless reveal themselves indirectly, by the tremendous suction which their gravitational force exerts on other heavenly bodies. As well as depictions of the Day of Judgement, the verse below may also be pointing to this scientific discovery about black holes. "When the stars are extinguished". Moreover, stars of great mass also cause warps to be perceived in space. Black holes, however, do not just cause warps in space but also tear holes in it. That is why these collapsed stars are known as black holes. This fact is be referred to in this verse, demonstrating that the Qur'an is the word Allah: "I swear by Heaven and the Tariq! And what will convey to you what the Tariq is? The Star Piercing, the darkness."

## The Star, Sirius

The Sirius star system is mentioned in Surat an-Najm 49: "It is He Who is the Lord of Sirius". Considering the irregularity movement of Sirius, the brightest star in the night sky, scientists discovered that Sirius is actually a set of two stars, known as Sirius A and Sirius B. The larger of these is Sirius A, which is also the closer to the Earth and the brightest star that can be seen with the naked eye. Sirius B, however, cannot be seen without a telescope. The Sirius stars orbit in ellipses around one another. The orbital period of Sirius A & B is 49.9 years. This scientific data is today accepted. This information is reported as follows: Sirius - brightest star, is actually a twin star, its orbit lasts 49.9 years. As is known, the stars Sirius-A and Sirius-B orbit each other in a double bow every 49.9 years. However, this scientific fact, the accuracy of which was only realised in the late 20th century, was miraculously indicated in the Qur'an 1,400 years ago. When verses 49 and 9 of Surat an-Najm are read together, this miracle becomes apparent: "It is He Who is the Lord of Sirius". "He was two bow-lengths away or even closer". Once again proof that the Qur'an is the word of Almighty Allah.

## Structural differences, the Sun, the Moon and Stars

"We built seven firm layers above you. We installed a blazing lamp". As we know, the only source of light in the Solar System is the Sun. With advances in technology, astronomers discovered that the Moon was not a source of light but merely reflects the light reaching it from the Sun. The expression "lamp" in the above verse is a translation of the Arabic word "siraaj," which most perfectly describes the Sun, the source of light and heat. In the Qur'an Allah uses different words when referring to such celestial bodies as the Moon, the Sun and the stars. This is how the differences between the structures of the Sun and Moon are expressed in the Qur'an: "Don't you see how He created seven heavens in layers, and placed the Moon as a light in them and made the sun a blazing lamp?" In the above verse, the word "light" is used for the Moon ("Noor" in Arabic) and the word "lamp" for the Sun ("siraaj" in Arabic.) The word used for the Moon refers to a light-reflecting, bright, motionless body. The word used for the Sun refers to a celestial body which is always burning, a constant source of heat and light. "It is the star that pierces through darkness"! These facts were revealed in the Qur'an in an age when mankind simply did not have the means to make scientific discoveries. It was an age when peoples' knowledge of celestial bodies was severely

restricted, to say the least. This further emphasises the miraculous nature of the book of Islam.

## Orbits and the Rotating Universe

One of the most important reasons for the balance in the universe is the fact that celestial bodies follow specific paths. Stars, planets and satellites all rotate around their own axes and also rotate together as a system. The universe functions within a finely-tuned order. There are more than 100 billion galaxies in the visible universe and each small galaxy contains approximately a billion stars. Furthermore, each big galaxy contains more than a trillion stars. Many of these stars have planets and many of those planets have satellites. All these celestial bodies follow the most finely calculated paths and orbits. For millions of years, each one has been moving on its own path in flawless harmony with all the others. In addition to these, there are also a many comets moving along in their own pre-determined paths. Paths in the universe are not restricted to a few celestial bodies. The Solar System and even other galaxies also exhibit considerable motion around other centres. Every year, Earth, and the Solar System with it, move some 500 million km (310 million miles) from where they were the previous year. It has been calculated that even the slightest deviation from celestial bodies' paths could have drastic consequences which might spell the end of the entire system. For example, the consequences of the Earth's deviating from its course by a mere 3 mm have been described in one source as follows: While rotating around the sun, the earth follows such an orbit that, every 18 miles, it only deviates 2.8 millimetres from a direct course. The orbit followed by the earth never changes, because even a deviation of 3 millimetres would cause catastrophic disasters: If the deviation were 2.5 mm instead of 2.8 mm, then the orbit would be very large, and all of us would freeze. If the deviation were 3.1 mm, we would be scorched to death. Another characteristic of heavenly bodies is that they also rotate around their own axes. The verse which reads "I swear by Heaven with its cyclical systems," indicates this truth. Naturally, at the time when the Qur'an was revealed, people had no telescopes with which to study bodies millions of kilometres away in space. It was therefore impossible to establish that space had "its swing orbits," as described in the verse. The Qur'an however, revealed at that time, provided clear information concerning that fact. This is proof that this book is indeed Allah's word.

## The Sun's Trajectory

It is stressed in the Qur'an that the Sun and Moon follow specific trajectories: It is He Who created night and day and the Sun and Moon, each one swimming in a sphere. The Sun does not move randomly through space but it rotates around its axis and follows a course. The fact that the Sun is not fixed in position but rather follows a specific trajectory is also stated in another verse: And the Sun runs to its resting place. That is the decree of the Almighty, the All-Knowing. These facts set out in the Qur'an were only discovered by means of astronomical advances in our own time. According to astronomer's calculations, the Sun moves along a path known as the Solar Apex in the path of the star Vega at an incredible speed of 720,000 kmph (447,000 mph). In rough terms, this shows that the Sun traverses some 17.28 million km (10.74 million miles) a day. All planets and satellites within its gravitational field also travel the same distance.

## The Moon's Orbit

The Qur'an states in the following verse; and we have decreed set phases for the Moon, until it ends up looking like an old date branch. It is not for the Sun to overtake the Moon nor for the night to outstrip the day; is each one swimming in a sphere. The Moon does not follow a regular orbit like the satellites of other planets. As it orbits the Earth, it sometimes moves behind it and sometimes in front. It also moves with the Earth around the Sun, it actually follows a constant pattern resembling the letter "S" in space. This route, traced by the Moon in space, is described in the Qur'an as resembling an old date branch. There is no doubt that it was impossible for anyone to have any knowledge about the orbit of the Moon 1,400 years ago. The way that this pattern, identified by modern technology and accumulated knowledge, was revealed in the Book is yet another scientific miracle of the Qur'an.

## World of Jinn's

Throughout history man has always had a deep attraction for the supernatural and the unseen. The existence of a world parallel to our own has always fascinated people. This world is commonly referred to as the spirit world. With some people, these spirits are no more than the souls of dead people or ghosts. With others, spirits are either forces of good or evil both battling against one another to gain influence

over humanity. These explanations are more in tune with folk tales and fantasy. The true explanation of such a world comes from Islam. Without knowledge of this world, Muslims would be like the non-Muslims, running around looking for an answer. So, who or what are Jinns?

## Existence

Jinn are beings created with free will, living in a world parallel to mankind. They are physically invisible from man. Invisibility is the reason why some people deny their existence. However, the affect which the world of the Jinn has upon our world, is enough to refute this modern denial of one of God's creations. The origins of the Jinn can be traced in the Qur'an and the Sunnah. God says: "Indeed we created man from dried clay of black smooth mud. And we created Jinns before from smokeless flame of fire." As for their physical origin, Prophet Muhammad said: "Angels are created from light and Jinns from smokeless fire." It is this description of the Jinns which tells us so much about them. Because they were created from fire, their nature has generally been fiery and thus their relationship with man has been built upon this. Like humans, they too are required to worship God and follow Islam. Their purpose in life is exactly the same as ours, as God says: "I created Jinns and mankind to worship me, only." Jinn's can thus be Muslims or non-Muslims. However, due to their fiery nature the majority of them are non-Muslims. All these non-Muslim Jinn's form a part of the army of the most famous Jinn, Satan, consequently, these disbelieving Jinn's are also called devils. Jinn's also become Muslims, as they did in the time of the Prophet when a group of them were amazed by the recitation of the Qur'an. God ordered the Prophet to tell the people of this event: "Say O' Muhammad: It has been revealed to me that a group of Jinn's listened and said; 'Indeed we have heard a marvellous Qur'an. It guides to righteousness so we believe it, and we will never associate partners with our lord.'" Jinns are similar to us. They eat and drink, they marry, have children and die. The life span however, is far greater than ours. Like us, they will also be subject to a Final Reckoning by God the Most High. They will be present with mankind on the Day of Judgment and will either go to Paradise or Hell.

## Abilities

What distinguishes the Jinns from mankind, is their power and abilities. God has given these powers as a test. If they oppress others with them, then they will be held accountable. By knowing their powers, we can often make sense of much of the

mysteries which go on around us. One of the powers of the Jinns, is that they are able to take on any physical form they like. Thus, they can appear as humans, animal's, trees and anything else. Thousands of people have sighted strange looking creatures all over the world and it seems more plausible all the sightings of such creatures may have been Jinn's parading in different forms. The ability to possess and take over the minds and bodies of other creatures is also a power which the Jinns have utilized greatly over the centuries. This however, is something which has been prohibited to them as it is wrong to possess another being. Human possession is something which has always brought about great attention. But true knowledge of this subject is rare. Over the last 3 decades the subject of possession has become much commercialized. During the 70's, films such as *The Exorcist* and *Rosemary's Baby* were used to educate people about possession. However, because such institutions (the film industry) were heavily influenced by Christianity, knowledge of the subject was non-existent. Rather than educate people about Jinns possession, films such as *The Exorcist* just tended to scare the living daylights out of us! Only through Islam can we understand such a phenomena. We know as Muslims, that Jinn's possess people for many reasons. Sometimes it is because the Jinn or its family has been hurt accidentally. It could be because the Jinn has fallen in love with the person. However, most of the time possession occurs because the Jinn is simply malicious and wicked. For this reason we have been commanded to recite the Qur'an frequently as the Prophet said: "Indeed, Satan flees from the house in which Surah Al-Baqarah (the 2nd chapter of the Quran) is recited." If a person does become possessed, then the name of God has to be used in expelling the Jinn. If we look at the practice of the Prophet and his companions, we find many invocations to exorcise the Jinns. All of them invoke God to help the possessed person. Many exorcists, often invoke names of others besides God to exorcise the Jinn. When the Jinn leaves, these people believe that their way was successful. However, this is a ploy of the Jinn, as it knows that if it obeys the exorcist, then it has succeeded in making him worship others besides God. The Jinn often returns when the exorcist leaves, as it knows that nothing except the words of God can stop it from oppressing others. It is not only humans which are possessed, but also animals, trees and other objects. By doing this, the evil Jinns hope to make people worship others besides God. The possession of idols is one way. Not so long ago the world-wide phenomenon of Hindu idols drinking milk, shocked the world. From Bombay to London, Delhi to California, countless idols were lapping up milk. Ganesh the elephant god, Hanuman the monkey god and even Shiva lingam, the

male private organ, all seemed to guzzle down milk as if there was no tomorrow! Unfortunately people were taken in by this and many flocked to feed the Hindu gods. This feat was undoubtedly done by the Jinn as a classic attempt to make people worship false gods.

## Creation of the Universe

One of the oldest questions to be asked about the universe was "How did it begin?" This question always puzzled mankind. In the early days of the Greek philosophers the universe was the making of gods and goddesses, but how they actually performed the act of creation was not to be inquired into, for such matters were considered divine and, thus, laid outside man's comprehension. The Greek plan incorporated a marvellous scientific picture of the universe, for whilst they described the motions of the planets with mathematical precision, they believed them to be, like the stars, made of celestial material that never decayed. In ancient China, the whole universe, everything on earth and in the sky, was considered part of a giant organism. However, they envisaged a universe that was many millions of years old and, in this respect, they were close to today's view. Western civilisation has grown up under the influence of Greek ideas and also that of Chinese teachings, which insist on a single God who is creator and Sustainer of the universe; a God, who is also the single God of the Muslim faith. The Bible states that God created the universe but does not contain detailed scientific information about the process of the creation. Galileo used to be fond of saying that the Bible teaches the way to go to heaven, not the way heavens go. The Church, in its constant attempts to keep the masses under its control, permitted no speculation into these divine matters. The misfortune of Copernicus, as a result of his statement, that it was the sun and not the earth to be the centre of the spherical universe, is well known. Even after the beginning of the modern scientific period, when Newton had worked out the motions of planets in great detail and also invented the idea of universal gravitation, people still considered the creation of the universe to be a divine act that lies above speculation.

With the vast amount of information collected by observation of deep space in the last century, as well as the development of relativity and quantum theory, scientists are at last in a position to work out how the universe began. Today, speculation and scientific research into cosmology lies outside the realm of religion, to the extent that some

scientists today do not consider the creation of the universe to be a divine act altogether. However, these scientists are forgetting that when they trace the origin of the universe to its origin, or to that moment that sparked the beginning, they too concede that science becomes unable to function, for at that initial moment all the laws of physics seem to break down. The failure of some scientists to contribute this initial moment of creation to a divine creator stems from the fact that they regard this initial moment as the moment when all the laws of physics break down, rather than being the moment when all the laws of physics came to be. The creation of the universe is a subject that is given great attention in the Qur'an. The huge and varied amount of information contained in the Qur'an about almost every stage and aspect of the creation continues to astound scientists today because of its accurate agreement with current knowledge. How can a book written in the 7th century contain such a rich amount of scientific information that was to be attained 14 centuries later? Much of this information was discovered only in the last sixty years! Neutral and unbiased observers do consider this to be valid evidence that such a book could never have been the product of any human being for the simple reason that, at that time, no human possessed such knowledge.

All the evidence available today suggests an explosive origin to the universe that brought both space, time and matter into existence. This is what is referred to as the Big Bang. The theory of the Big Bang which has successfully replaced the "Steady state" theory was worked out in the 1920's by two scientists, the Russian meteorologist Aleksandra Friedman and the Belgian mathematician Georges Lemaitre. The Big Bang itself resulted from an extremely dense singularity. The creation of the universe is one of matter, space and time that are intimately linked together. Matter and space were joined as one and then separated in the explosion. This is very accurately described in the Qur'an: "Do not the unbelievers see that the skies (space) and the earth (matter) were joined together (as one unit of creation) and we ripped them apart?" The subsequent history of the Big Bang saw Americans George Gamow, Ralph Alpher and Robert Herman indicate that the whole event took place at a very high temperature; it was a hot Big Bang. This view has been confirmed by the later discovery of the background microwave radiation. The eventual formation of galaxies resulted as condensation, under gravitational pull, of hot gases which were mainly Hydrogen, but may also have contained Helium and a few other light elements. With passing time and the formation of galaxies, the gas gradually condensed into

individual stars. The universe in its very early stages was, thus, still in the form of hot gases. This is confirmed in the Qur'an in the following verse: "Then He took hold of the sky when it was smoke." Note that the verse did not say clouds or gas, but smoke, which is a very accurate description as smoke is hot gas.

Once these stars were formed a system had to be devised to govern their motion. The kinetic energy stored in the forward movement of these bodies could not be relied upon on its own, otherwise stars and also planets would have shot off in straight lines dispersing into space. No planet would ever revolve around its mother star, which also applies to earth and, thus, life would not have evolved on earth, because the whole of life on earth is dependent on the sun. Gravity was the brilliant divine invention, working as an equating factor to the centrifugal force to induce precise orbits for all heavenly bodies. The speed, mass and distance of two bodies have to be worked out very precisely to induce an orbit. If you were to throw a tennis ball upwards towards the sky, it would travel upwards as a result of the kinetic energy stored in the throw but, eventually, the gravity of the earth will take over and the ball will fall back to the ground. But, if you were to throw the ball at a very high speed (say 10km per second) it would escape the gravity of the earth and leave the earth altogether. This is what is known as the escape velocity. It is the speed required for a moving body to enable it to escape the gravity of a planet or star. When an artificial satellite is placed in orbit around the earth, what happens is that at a required distance, while the satellite is shooting out of the earth's gravitational field, its speed is reduced which reduces its kinetic energy and with some directional adjustments its kinetic energy can be equated with the earth's gravity. All these adjustments must be very precisely executed at a precise distance and speed otherwise a correct orbit cannot be obtained.

When one looks at the endless intricate orbits and mathematical precision in the universe one can only gasp in awe. All the planets that circulate around stars, which in turn revolve around the centre of gravity of their own galaxies. These very accurate balances are mentioned in the following verses: "The sun and the moon follow courses precisely computed" This explains how very precise adjustments have to be affected in order to obtain an orbit of an orbiting satellite. "And the sky He raised and set the balance" The orbits of the heavenly bodies are mentioned in the verse: "And the sun and the moon, all travelling in orbits." Note the last verse said "all" and not "both" which indicates that the reference to the sun and the moon is symbolic, that is, of all other

heavenly bodies that obey the same rules. The next stage sees these massive newly formed stars start to shrink under their own gravitational pull. As a result, their central regions become denser and, thus, hot. When the material in the centre of the star has heated up sufficiently, to be exact, at least seven million degrees K., nuclear reactions begin. These reactions, which are similar to those which take place in a hydrogen bomb, continue throughout the life of the star. These reactions are distinctly different from ordinary combustion (as in burning wood). What actually takes place inside a star is that hydrogen is converted to helium with the emission of huge energy.

This is precisely what the Qur'an speaks of with the words: "As if it were a brilliant star whose oil (fuel) is well lit, even no fire touches it." The verse mentions a star, its fuel and a reaction which is not combustion (fire). Short of saying "nuclear reactions" the verse is a very accurate description of what goes on inside a star. These nuclear reactions cause the stars to radiate all types of radiation into space, from x-rays and gamma rays in the short waves all the way to the longer radio waves. The visible section of those waves which are found between the ultra-violet and the infra-red is what we call sunlight. On the other hand, the planets do not emit any light of their own, but only reflect light. This differentiation between natural light and reflected light is pointed out with the words: "Blessed is He who made constellations in the sky and placed there in a lamp, and a moon giving light." And also: "It is He who made the sun to light up (the sky) and the moon that is lit."

In 1965, a very important discovery was made, it was the background radiation which confirmed the Big Bang theory. But, the Big Bang theory, together with the detection of the red shift in the spectrum of faraway galaxies, gave birth to yet a new concept which stated that the universe is expanding. Further confirmation of the theory of the expanding universe was obtained from the spectrum analysis of faraway galaxies. When analysing the light we receive from distant galaxies it was found that they all had a red shift meaning that they were flying away from us. This contribution of the red shift analysis meant that the universe is indeed expanding. This conclusion is mentioned in the Qur'an: "And the heavens we created with mighty power and we are expanding it." Note that the word "expanding" is used in the present tense and not in the past which again is in agreement with the fact that the expansion of the universe is a continuous process. At the time of the Quran (7th century), it was still believed that all the stars in the sky, including our sun, were eternal and are made of a material

that never fades or decays. No one was really aware of the nature of the reactions that took place inside stars for that was to be 20th century atomic theory territory but that (as mentioned before) was mentioned in the Quran. These atomic reactions would take place inside a star for a finite time and then the star would eventually run out of energy when it uses up all its resources. When that stage is reached, a star like our sun will undergo a series of drastic changes. First, it will expand to become a red giant. The nearest planet, Mercury, would be swallowed up and the intense heat given off by the sun in this red giant stage would cause all the seas and oceans on earth to boil over and evaporate, signalling the end of life on earth. Eventually, the star would start to collapse and lose its lustre and end up as a white dwarf. Here, the Qur'an uses the very accurate scientific words: "When stars lose their lustre", the finite life of stars is also referred to: "He has ordained the sun and the moon, each one runs (its course) for an appointed time." Surah, 81 in its opening verses, describes the end of time as follows: "When the sun is rounded (swelling like a ball), when the stars have collapsed and when the oceans boil over in a swell." It is very significant how the verse said "when the stars have collapsed" and not "when the sun has collapsed", because the boiling of the oceans will be a result of the expansion of the sun (red giant stage) and not its collapse, that is, the ocean will boil over long before the sun starts to collapse. Also, the term "collapse", as used in the Qur'an, is the precise term used by today's astronomers to describe that stage of a star's life.

## Age of the Universe

Whilst the Big Bang provided an explanation as to the origin of the universe, it still remained necessary to calculate its age. To do so, astronomers once again rely on red shift to calculate the speeds and distance of the furthest galaxies and quasars. These distances give us indications to the age of the universe. The most distant quasars, which have velocities of some 240,000 km/sec. (80% the speed of light), are at distances of up to 14 billion light years (a light year being the distance travelled by light in one year). When we look into depth of space, we are actually looking back far into the past. When we look at that distant quasar, we are not seeing it as it is now, but as it was 14 billion years ago. The calculation of the age of the universe during the last 70 years or so has fluctuated between 10 and 20 billion years. It is interesting to know that the age of the universe has been mentioned in the Qur'an? For that we look at two verses:

1) "The angels and the spirit ascend unto Him in a day, the measure of which was fifty thousand years."

This verse refers to the ascent of angels and the spirit (Gabriel) back to heaven after settling all matters of life in the universe. The verse clearly said a day that "was" and not a day that "is", which clearly indicates that that day was in the past (50,000 years ago).

2) "A day relative to your God is equivalent to a thousand years of your count."

With a few simple equations:

If 1 day (for God) = 1000 years (for man)

1 year (for God) = 1000 x 365 (for man)

= 365,000 years

50,000 years (for God) = 365,000 x 50,000 (for man)

= 18.25 billion!

The 50,000 years mentioned in verse 1 are meant to be of God's years, not man. This is because man was not mentioned at all in that verse, and more importantly, because the subject of the verse (creation of the universe) is obviously a matter executed by God and not by man and, so, its description must also be as related to God and not to man. This becomes evident when we compare this verse to other verses that clearly speak of years as related to man's count, like the verse: "On a day, the measure of which was a thousand years of your count."

## Multiple Universes

When astronomers discuss the universe, they are always thinking about the universe which they see and observe. If we go back to the days of the ancient Egyptians five thousand years ago, we find that the size of the universe seemed to be no more than the dome of the sky, covering the earth like the dome in a planetarium. The stars seemed, at the most, thousands of kilometres away. The Greek astronomers, some two thousand and more years ago, thought of the universe as a sphere but still

approximately of the same size. Copernicus, who believed the sun and not the earth to be the centre of the spherical universe, thought it was much bigger than this, but not until about 170 years ago did anyone really know the distance of even the nearest stars. Then they found that they should be measured in millions of millions of kilometres. But, still, it was a very small universe, with all the stars together in one large star island. Not until the 1920's did astronomers discover that our galaxy was only one of millions of others. Only then did astronomers start to appreciate the actual size of the universe. Astronomers are today debating the issue whether our universe is the only one in existence. The idea of multiple universes is closely linked with the Black Hole concept. Certainly, the squashing of matter in an infinitely small area inside a Black Hole is in sharp disagreement with the Law of conservation of matter which was referred to in Part One. It has been suggested that all the matter falling into a Black Hole could be ejected into another time-space universe in what is referred to as a "White Hole". Mathematical studies of space and time do show that this is possible in theory. Does it happen in practice? We do not know, but there certainly seem to be regions in deep space from which material is pouring out into our universe. The jet of material from the active elliptical galaxy M 87 is a case in point. Has it come from a White Hole connected to a Black Hole somewhere else? An alternate analysis that could also provide an equally valid justification for the existence of multiple universes is associated with the speed of light.

Between the years 1905-15, and in his theory of relativity, Albert Einstein stated that the speed of light is a limiting velocity in the universe; nothing can travel faster than light. His theory also took the speed of light to be constant, unaffected by the movement of its source and independent of all observers. Quasars, which are the most distant objects in the universe travel at speeds approaching 80% of the speed of light but nothing travels faster than the speed of light. Could it be that the speed of light acts as a gate, a valve or a barrier between our universe and other universes? Perhaps a different time-space universe where matter, if it can still be called so, exists and is travelling at speeds higher than that of light? We cannot cross that barrier ourselves nor can any physical matter, but there are strong indications that there is some kind of existence on the other side. A mention should be given here to some speculation concerning some new particles called "tachyons" which occur in some nuclear reactions. These particles are believed to travel faster than light. They can never travel at the speed of light, only faster. That also supports the idea of the speed of light being

a barrier. In short, "tachyons" behave in just the opposite way from matter, but as no one has actually observed a "Tachyon", could the reason be because they exist in a different dimension of time-space?

When we examine the verses in the Qur'an relating to this subject, not only do we find incredible information concerning the creation and existence of multiple universes, but also regarding the barriers that lie between them. All that 1400 years ago at a time when the size of the whole universe was estimated to be not more than a few thousand kilometres! Multiple universes are mentioned in more than one verse in the Qur'an as in: "Have you not seen how God has created seven skies (universes) one above the other?" The barriers that exist between these universes are mentioned in the following verse: "If you can penetrate through the zones of the skies and the earth, then penetrate, you will not do so without authority." The word "penetrate" implies the existence of some kind of barriers between the zones of the skies (universes). Our universe, as we know it today, includes within it all the stars and galaxies that we have detected in the sky so far. If multiple universes exist, they lie outside and beyond all these galaxies. This too seems to be in harmony with the information given in the Qur'an: "And we have decorated the lowest heaven (universe) with lanterns (stars)."

It is worth mentioning here the suggestion put forward by some interpreters concerning the boundaries that lie between the multiple universes and that are spoken of in the Qur'an. What they suggested is that the region beyond the Earth's atmosphere up till the moon forms the second universe, while the solar system constitutes the third universe and so on. They add that when man landed on the moon, he has actually moved into a higher universe. However, and if we quote the previous verse which clearly states that: "all the lanterns (stars) are to be found in the lowest universe," we can quickly dismiss this interpretation. If the lowest universe includes within it all the stars and galaxies that we know, then the next universe must lie outside the comprehension of mankind. If anything, this speaks much more favourably of the capacity of God's creation.

## Astronomy in the Qur'an

The Quran is full of reflections on the Heavens. In the preceding chapter of the Creation, we saw how the plurality of the Heavens and Earths was referred to, as well as what the Qur'an calls an intermediary creation 'between the Heavens and the Earth', modern science has verified the latter. The verses referring to the Creation already contain a broad idea of what is to be found in the heavens, i.e. of everything outside the earth. Apart from the verses that specifically describe the Creation, there are roughly another forty verses in the Qur'an which provide information on astronomy complementing what has already been given. They are reflections of the glory of the Creator, the Organizer of all the stellar and planetary systems. These we know to be arranged according to balancing positions whose stability Newton explained in his law of the mutual attraction of bodies. The Quran, contains surprising statements on astronomy, because Arabs were very knowledgeable. In general, science in Islamic countries is very much post-Qur'an.

### General Reflections concerning the Sky

Surah 50, verse 6. The subject is man in general. "Do they not look at the sky above them, how we built it and adorned it, and there are no rifts in it."

Surah 31, verse 10. "God created the heavens without any pillars, can you see."

Surah 13, verse 2. "God is the One who raised the heavens without pillars can you see, then He firmly established Himself on the throne and He subjected the sun and moon."

Surah 55, verse 7. "God raised the sky."

Surah 22, verse 65. "By his love, God holds back the sky from falling on the earth."

It is known how the remoteness of celestial masses at great distance and in proportion to the magnitude of their mass itself constitutes the foundation of their balance. The more remote the masses are, the weaker the force is that attracts one another. The nearer they are, the stronger the attraction is to one another: this is true for the Moon, which is near to the Earth and exercises an influence by laws of attraction on the position occupied by the waters of the sea, hence the phenomenon of the tides. If two

celestial bodies come too close to one another, collision is inevitable. The fact that they are subjected to an order is the sine qua non for the absence of disturbances. The subjection of the Heavens to divine order is often referred to in the Qur'an:

Surah 23, verse 86. God is speaking to the Prophet Say: "Who is Lord of the seven heavens and Lord of the tremendous throne."

Surah 45, verse 13. "For you (God) subjected all that is in the heavens and on the earth, all from Him. Behold! In that are signs for people who reflect."

Surah 55, verse 5. "The sun and moon are subjected to calculations."

Surah 6, verse 96. "God appointed the night for rest and the sun and the moon for reckoning."

Surah 14, verse 33. "For you God subjected the sun and the moon, both diligently pursuing their courses. And for you He subjected the night and the day."

Surah 36, verse 39. God is speaking: "And for the moon we have appointed mansions till her return like an old shrivelled palm branch."

This is a reference to the curled form of the palm branch which, as it shrivels up, takes on the moon's crescent.

Surah 16, verse 12. "For you (God) subjected the night and the day, the sun and the moon; the stars are in subjection to His Command. Verily in this are signs for people who are wise."

Surah 6, verse 97. "God is the One Who has set for you stars, so you may guide yourselves by them through the darkness of the land and of the sea. We have detailed the signs for people who know."

Surah 16, verse 16. "God sets on the earth landmarks and by the stars men guide themselves."

Surah 10, verse 5. "God is the One Who made the sun a shining glory and the moon a light and has determined for it phases so that you might know the number of years

and the reckoning of the time. God created this in truth. He explains the signs in detail for people who know."

The Bible calls the Sun and Moon 'lights', and merely adds to one the adjective 'greater' and to the other 'lesser', the Qur'an ascribes the differences other than that of dimension to each respectively. Agreed, this is nothing more than a verbal distinction, but how was one to communicate to men at this time without confusing them, while at the same time expressing the notion that the Sun and Moon were not absolutely identical 'lights'.

## The Sun and the Moon

The Sun is a shining glory (Diya') and the Moon a light (Nur). The difference between the Sun and Moon will be made clearer by further quotes from the Qur'an.

Surah 25, verse 61. "Blessed is the One Who placed constellations in heaven and placed therein a lamp and a moon giving light."

Surah 71, 15-16. "Did you see how God created seven heavens one above another and made the moon a light therein, and made the sun a lamp?"

Surah 78, verses 12-13. "We have built above, you seven strong heavens and placed a blazing lamp."

The blazing lamp is quite obviously the sun. Here the moon is defined as a body that gives light (Munir) from the same root as Nur (the light applied to the Moon). The Sun however is compared to a torch (Siraj) or a blazing (wahhaj) lamp. It is known that the Sun is a star that generates intense heat and light by its internal combustions, and that the Moon, which does not give of light itself, and is an inert body (on its external layers at least) merely reflects the light received from the Sun. There is nothing in the text of the Qur'an that contradicts what we know today about these two celestial bodies.

## The Stars

As we know, the stars are heavenly bodies like the Sun. They are the scene of various physical phenomena of which the easiest to observe is their light. They are heavenly bodies that produce their own light. The word 'star' appears thirteen times in the

Qur'an; Surah 86, verses 1-3. "By the sky and the Night-Visitor, who will tell thee what the Night-Visitor is, the Star of piercing brightness." (Here, the sky and a star is used to bear witness to the importance of what is to come in the text) Surah 37, verse 10. "The latter is the result of combustion."

## Planets

A good definition is nevertheless of great interest to offer an account of the comparison, it contains on the subject of the word that would seem to designate a 'planet'. Surah 24, verse 35. "God is the light of the heavens and the earth. The similitude of His light is as if there were a niche and within it a luminary. The luminary is in a glass. The glass is as if it were a planet glittering like a pearl." Here the subject is the projection of light onto a body that reflects it and gives it the glitter of a pearl, like a planet that is lit by the sun. This is the only explanatory detail referring to this word to be found in the Qur'an. In one verse, however, when seen in the light of modern science, it would seem very much that these can only be the heavenly bodies that we know to be planets. In Surah 37, verse 6, we see the following: "We have indeed adorned the lowest heaven with an ornament, the planets."

## Lowest Heaven

Prophet Muhammad said: "The Lord descends every night to the lowest heaven when one-third of the night remains and says: 'Who will call upon Me, that I may answer Him? Who will ask of Me, that I may give him? Who will seek my forgiveness, so I may forgive him?'"

## Celestial Organization

The information the Qur'an provides on this subject mainly deals with the solar system. There are two very important verses on the orbits of the Sun and Moon: Surah 21, verse 33. "God is the One Who created the night, the day, the sun and the moon. Each one is travelling in an orbit with its own motion." Surah 36, verse 40. "The sun must not catch up to the moon, nor does the night outstrip the day. Each one is travelling in an orbit with its own motion." Here an essential fact is clearly stated: the existence of the Sun's and Moon's orbits, plus a reference is made to the travelling of these bodies in space with their own motion.

## Moon's Orbit

Today, the concept is widely spread that the Moon is a satellite of the Earth around which it revolves in periods of twenty-nine days. Correction must however be made in the absolutely circular form of its orbit, since modern astronomy ascribes a certain eccentricity to this, so that the distance between the Earth and the Moon (240,000 miles) is only the average distance. We have seen above how the Qur'an underlined the usefulness of observing the Moon's movements in calculating time (Surah 10, verse 5). This system has often been criticized for being archaic, impractical and unscientific in comparison to our system based on the Earth's rotation around the Sun, expressed today in the Julian calendar. This criticism calls for the following two remarks:

a) Nearly fourteen centuries ago, the Qur'an was directed at the inhabitants of the Arabian Peninsula who were used for the lunar calculation of time. It was advisable to address them in the only language they could understand and not to upset the habits they had of locating spatial and temporal reference-marks which were nevertheless quite efficient. It is known how well-versed men living in the desert or in the observation of the sky. They navigated according to the stars and told the time, according to the phases of the Moon. Those were the simplest and most reliable means available to them.

b) Apart from the specialists in this field, most people are unaware of the perfect correlation between the Julian and the lunar calendar: 235 lunar months correspond exactly to 19 Julian years of 365 1/4 days. Then length of our year of 365 days is not perfect because it has to be rectified every four years (with a leap year).

With the lunar calendar, the same phenomena occur every 19 years (Julian). This is the Metonic cycle, named after the Greek astronomer Melton, who discovered this exact correlation between solar and lunar time in the Fifth century.

## The Sun

It is more difficult to conceive the Sun's orbit because we are so used to seeing our solar system organized around it. To understand the verse from the Qur'an, the position of the Sun in our galaxy must be considered, and we must therefore call on

modern scientific ideas. Our galaxy includes a very large number of stars spaced out as to form a disc that is denser in the centre than at the rim. The Sun occupies a position in it which is far removed from the centre of the disc. The galaxy revolves on its own axis, which is its centre with the result that the Sun revolves around the same centre in a circular orbit. Modern astronomy has worked out the details of this. In 1917, Shapley estimated the distance between the Sun and the centre of our galaxy at 10 kilo parsecs i.e., in miles, circa the figure 2 followed by 17 zeros. To complete one revolution on its own axis, the galaxy and Sun take roughly 250 million years. The Sun travels at roughly 150 miles per second in the completion of this. The above is the orbital movement of the Sun that was already referred to in the Qur'an fourteen centuries ago. The demonstration of the existence and details of this is one of the achievements of modern astronomy. The Moon completes its rotating motion on its own axis at the same time as it revolves around the Earth, i.e. 29 1/2 days (approx.), So that it always has the same side facing us. The Sun takes roughly 25 days to revolve on its own axis. There are certain differences in its rotation at its equator and poles, (we shall not go into them here) but as a whole, the Sun is animated by a rotating motion. It appears, therefore that a verbal nuance in the Qur'an refers to the Sun and Moon's own motion. These motions of the two celestial bodies are confirmed by the data of modern science, and it is inconceivable that a man living in the Seventh century A. D. -However, knowledgeable he might have been in his day (and this was certainly not true in Muhammad's case) -could have imagined them.

This view is sometimes contested by examples from great thinkers of antiquity who indisputably predicted certain data that modern science has verified. They could hardly have relied on scientific deduction, however; their method of procedure was more one of philosophical reasoning. Thus the case of the Pythagoreans is often advanced. In the Sixth century B.C., they defended the theory of the rotation of the Earth on its own axis and the movement of the planets around the Sun. This theory was to be confirmed by modern science. By comparing it with the case of the Pythagoreans, it is easy to put forward the hypothesis of Muhammad as being a brilliant thinker, who was supposed to have imagined all on his own what modern science was to discover centuries later. In so doing, however, people quite simply forget to mention the other aspect of what these geniuses of philosophical reasoning produced, i.e. the colossal blunders that litter their work. It must be remembered for example, that the Pythagoreans also defended the theory whereby the Sun was fixed in space; they

made it the centre of the world and only conceived of a celestial order that was centred on it. It is quite common in the works of the great philosophers of antiquity to find a mixture of valid and invalid ideas about the Universe. The brilliance of these human works comes from the advanced ideas they contain, but they should not make us overlook the mistaken concepts which have also been left to us. From a strictly scientific point of view, this is what distinguished them from the Qur'an. In the latter, many subjects refer to that have a bearing on modern knowledge without one of them containing a statement that contradicts what has been established by present-day science.

### The sequence of Day and Night

The Qur'an states the following:

Surah 7, verse 54. "God covers the day with the night which is in haste to follow it"

Surah 36, verse 37. "And a sign for human beings is the night. We strip it of the day and they are in darkness."

Surah 31, verse 29. "Have you not seen how God merges the night into the day and merges the day into the night?"

Surah 39, verse 5. "He coils the night upon the day and He coils the day upon the night."

The first verse requires no comment. The second simply provides an image. It is mainly in the third and fourth verses quoted above that provide interesting material on the process of interpenetration and especially on winding the night upon the day and the day upon the night. Surah 39, verse 5. What actually happens in space? American astronauts have seen and photographed what happens from their spaceships, especially at a great distance from Earth, e.g. From the Moon. They saw how the Sun permanently lights up (except in the case of an eclipse) the half of the Earth's surface that is facing it, while the other half of the globe is in darkness. The Earth turns on its own axis and the lighting remains the same, so that an area in the form of a half-sphere makes one revolution around the Earth in twenty-four hours while the other half-sphere that has remained in darkness makes the same revolution in the same time. This perpetual rotation of night and day is quite clearly described in the Qur'an.

It is easy for the human understanding to grasp this notion nowadays because we have the idea of the Sun's (relative) immobility and the Earth's rotation. This process of perpetual coiling, including the interpenetration of one sector by another is expressed in the Qur'an just as if the concept of the Earth's roundness had already been conceived at the time-which was obviously not the case. Further to the above reflections on the sequence of day and night, one must also mention, with a quotation of some verses from the Qur'an, the idea that there is more than one Orient and one Occident. This is of purely descriptive interest because these phenomena rely on the most commonplace observations. The idea is mentioned here with the aim of reproducing as faithfully as possible all that the Qur'an has to say on this subject.

The following are examples:

Surah 70 verse 40, the expression 'Lord of Orient and Occident's'.

Surah 55, verse 17, the expression 'Lord of the two Orient and the two Occident's'.

Surah 43, verse 38, a reference to the 'distance between the two Orient's', an image intended to express the immense size of the distance separating the two points.

Anyone who carefully watches sunrise and sunset knows that the Sun rises at different point of the Orient and sets at different points of the Occident, according to season. Bearings taken on each of the horizons define the extreme limits that mark the two Orient and Occident's, and between these there are points marked off throughout the year. The phenomenon described here is rather commonplace, but what mainly deserves attention in this chapter are the other. Topics dealt with, where the description of astronomical phenomena referred to in the Quran is in keeping with modern data.

## Evolution of the Heavens

Having called modern concepts in the formation of the Universe to mind, reference was made to the evolution that took place, starting with primary nebula through to the formation of galaxies, stars and (for the solar system) the appearance of planets beginning with the Sun at a certain stage of its evolution. Modern data lead us to believe that in the solar system, and more generally in the Universe itself, this evolution is still continuing.

How anybody who is aware of these ideas can fail to make a comparison with certain statements found in the Qur'an in which the manifestations of divine Omnipotence are referred to. The Qur'an reminds us several times that: "God subjected the sun and the moon: each one runs its course for an appointed term." In addition to this, the idea of a settled place is associated with the concept of a destination place in Surah 36, verse 38: "The Sun runs its course to a settled place. This is the decree of the All Mighty, the Full of Knowledge." How do these statements fare when compared with data established by modern science? The Qur'an gives an end to the Sun for its evolution and a destination place. It also provides the Moon with a settled place. To understand the possible meanings of these statements, we must remember what modern knowledge has to say about the evolution of the stars in general and the Sun in particular, and (by extension) the celestial bodies that automatically followed its movement through space, among them the Moon.

The Sun is a star that is roughly 4½ billion years old, according to experts in astrophysics. It is possible to distinguish a stage in its evolution, as one can for all the stars. At present, the Sun is at an early stage, characterized by the transformation of hydrogen atoms into helium atoms. Theoretically, this present stage should last another 5½ billion years, according to calculations that allow a total of 10 billion years for the duration of the primary stage in a star of this kind. It has already been shown, in the case of these other stars that this stage gives way to a second period characterized by the completion of the transformation of hydrogen into helium, with the resulting expansion of its external layers and the cooling of the Sun.

In the final stage, its light is greatly diminished and density considerably increased; this is to be observed in the type of star known as a 'white dwarf'. The above dates are only of interest in as far as they give a rough estimate of the time factor involved, what is worth remembering and is really the main point of the above, is the notion of an evolution. Modern data allow us to predict that, in a few billion years, the conditions prevailing in the solar system will not be the same as they are today. Like other stars whose transformations have been recorded until they reached their final stage, it is possible to predict an end to the Sun.

The second verse quoted above Surah 36, verse 38 referred to the Sun running its course towards a place of its own. Modern astronomy has been able to locate it exactly and has even given it a name, the Solar Apex. The system is indeed evolving in space

towards a point situated in the Constellation of Hercules (alpha Lyrae) whose exact location is firmly established; it was moving at a speed already ascertained at something in the region of 12 miles per. Second. All these astronomical data deserve to be mentioned in relation to the two verses from the Qur'an, since it is possible to state that they appear to agree perfectly with modern scientific data.

## Expansion of the Universe

The expansion of the Universe is the most imposing discovery of modern science. Today it is a firmly established concept and the only debate centres on the way this is taking place. It was first suggested by the general theory of relativity and is backed up by physics in the examination of the galactic spectrum; the regular movement towards the red section of their spectrum may be explained by the distancing of one galaxy from another. Thus the size of the Universe is probably constantly increasing and this increase will become bigger the further away the galaxies are from us. The speeds at which these celestial bodies are moving may, in the course of this perpetual expansion, go from fractions of the speed of light to speeds faster than this. The following statement of the Qur'an where God is speaking, may perhaps be compared with modern ideas: Surah 51 verse 47. "The heaven, we have built it with power. Verily. We are expanding it."

## Conquest of Space

From this point of view, three verses of the Quran should command our full attention. One expresses, without any trace of ambiguity, what man should and will achieve in this field. In the other two, God refers for the sake of the unbelievers in Mecca to the surprise they would have if they were able to raise themselves up to the Heavens; He alludes to a hypothesis which will not be realized in the latter.

1) The first of these verses is Surah 55, verse 33: "O assembly of Jinns and Men, if you can penetrate the regions of the heavens and the earth, then penetrate them! You will not penetrate them save with a Power." This verse is followed by an invitation to recognize God's blessings. It forms the subject of the whole of the Surah that bears the title 'The Beneficent'. God is addressing the spirits (jinn) and human beings, and not essentially allegorical figures. The Power these men will have to achieve this enterprise would seem to come from the All-Mighty. There can be no doubt that this

verse indicates the possibility men will one day achieve 'the conquest of space'. One must note that the text of the Qur'an predicts not only penetration through the regions of the Heavens, but also the Earth, i.e. the exploration of its depths.

2) God is speaking of the unbelievers in Mecca: "Even if we were to open for them a gate to Heaven and they were to continue ascending therein, they would say. Our sight is confused as in drunkenness. We are people bewitched."

When talking about the conquest of space, therefore we have two passages in the text of the Qur'an: one of them refers to what will one day become a reality thanks to the powers of intelligence and ingenuity God will give to man, and the other describes an event that the unbelievers in Mecca will never witness, the event will however be seen by others, as intimated in the first verse quoted above. It describes the human reactions to the unexpected spectacle that travels in space will see. Their confused sight, as in drunkenness, the feeling of being bewitched. This is exactly how astronauts have experienced this remarkable adventure since the first human spaceflight around the world in 1961. It is known in actual fact how once one is above the Earth's atmosphere, the Heavens no longer have the azure appearance, we see from Earth, which results from the phenomena of absorption of the Sun's light into the layers of the atmosphere. The human observer in space above the Earth's atmosphere sees a black sky and the Earth seems to be surrounded by a halo of bluish colours due to the same phenomena of absorption of light by the Earth's atmosphere. The Moon has no atmosphere, it appears in its true colours against the black background of the sky. It is a completely new spectacle and the photographs of this spectacle are well known to man. Here again, it is difficult not to be impressed, when comparing the text of the Qur'an to the data of modern science, by statements that simply cannot be ascribed to the thought of a man who lived more than fourteen centuries ago.

## The Earth

The verses of the Qur'an dealing with the Earth are dispersed throughout the Book. It is difficult to classify them. To explain them more clearly, one might begin by singling out a certain number of verses that deal with more than one subject at a time. These verses are largely general in their application and constitute an invitation extended to men to reflect on divine Beneficence by pondering on the examples provided. Other groups of verses may be singled out which deal with more specific subjects, as follows:

- 1) The Water cycle and the Seas
- 2) The Earth's Relief
- 3) The Earth's Atmosphere

## Verses Containing General Statements

Although these verses provide arguments intended to lead man to meditate on the Beneficence of God towards His creatures, here and there they contain statements that are interesting from the point of view of modern science. On the one hand, these verses express simple ideas readily understood by to those people to whom, for geographical reasons, the Qur'an was first directed: the inhabitants of Mecca and Medina, the Bedouins of the Arabian Peninsula. On the other hand, they contain reflections of a general nature from which a more cultivated public of any time and place may learn something instructive, once it starts to think about them: this is a mark of the Qur'an's universality. As there is apparently no classification of such verses in the Qur'an, they are presented here in the numerical order of the Surah's:

Surah 2, verse 22. "God is the One who made the earth a couch for you and the heavens a towering sky scraper, and he sent water down from the sky. He brought forth therewith fruits for your sustenance. Do not join equals with God when you know."

Surah 2, verse 164. "Behold! In the creation of the heavens and the earth, in night and day, in the ship which runs upon the sea for the profit of mankind, in water which God sent down from the sky, thereby reviving the earth after its death in the beasts of all kinds he scatters therein. In the change of the winds and the subjected clouds between the sky and earth. There are Signs for people who are wise."

Surah 13, verse 3. "God is the One who spread out the earth and set thereon mountains standing firm, and rivers. For every fruit He placed two of a pair. He covers the day with the night. Verily in this there are Signs for people who reflect."

Surah 20, verses 53 and 54. "God is the One Who has, made for you the earth like a cradle and inserted roads into it for you. He sent water down from the sky and thereby we brought forth pairs of plants, each separate from the other. Eat! Pasture your cattle! Verily in this are Signs for people endowed with intelligence."

Surah 27, verse 61. "It is Allah, who made the earth an abode and set rivers in its gaps and mountains standing firm. He placed a barrier between the two seas. Is there any divinity besides God? Nay, but most people do not know."

Here a reference is made to the general stability of the Earth's crust. It is known that at the early stage of the Earth's existence before its crust cooled down, the latter was unstable. The stability of the Earth's crust is not, however strictly uniform, since there are zones where earthquakes intermittently occur.

Surah 67, verse 15. "God is the One Who made the earth accommodating for you. So walk upon its shoulders! Eat of His sustenance! Unto Him will be the Resurrection."

Surah 79, verses 30-33. "After that God spread the earth out. Therefrom He drew out its water and its pasture. And the mountains He has firmly fixed. Goods for you and for your cattle."

In many such verses, emphasis is laid upon the importance of water and the practical consequences of its presence in the earth's soil, i.e. the fertility of the soil. There can be no doubt that in desert countries, water is the most important element governing man's survival. The reference in the Qur'an, however goes beyond this geographical detail. According to scientific knowledge the character the Earth has of a planet that is rich in water, unique to the solar system, and this is exactly what is highlighted in the Qur'an. Without water, Earth would be a dead planet like the Moon. The Qur'an gives first place to water among the natural phenomena of the Earth. The water cycle is described with remarkable accuracy in the Qur'an.

## Earths Relief

When referring to the Earth's relief, the Qur'an only describes, as it were, the formation of the mountains. Seen from the present point of view, there is indeed little one can say about the verses that only express God's Beneficence to man with regard to the Earth's formation, as in the following verses?

Surah 71, verses 19 and 20. "For you God made the earth a carpet so you may travel along its roads and paths of valleys."

Surah 51, verse 48. "The earth, we have spread it out. How excellently we did that." The carpet which has been spread out is the Earth's crust, a solidified shell on which we can live, since the globe's sub-strata are very hot, fluid and hostile to any form of life.

The statements in the Qur'an referring to the mountains and the references to their stability subsequent to the phenomenon of the folds are very important. Modern geologists describe the folds in the Earth as giving foundations to the mountains, and their dimensions go roughly one mile to roughly 10 miles. The stability of the Earth's crust results from the phenomenon of these folds. So it is not surprising to find reflections of the mountains in certain passages of the Qur'an, such as the following:

Surah 79, verse 32. "And the mountains, God has fixed them firmly."

Surah 31, verse 10. "God cast into the ground (mountains) standing firm, so that it does not shake with you."

These verses express the idea that the way the mountains are laid out ensures stability and is in complete agreement with geological data.

## Earth's Atmosphere

In addition to certain statements specifically relating to the sky, the Qur'an contains several passages dealing with the phenomena that occur in the atmosphere. As for the comparison between them and the data of modern science, it is to be noted here, as elsewhere, that there is absolutely no contradiction between today's modern scientific knowledge and the phenomena described.

### Altitude

A familiar feeling of discomfort experienced at high altitude, which increases the higher one climbs,

Surah 6, verse 125. "Those whom God wills to guide, He opens their breast to Islam. Those whom He will, loses their way, He makes their breast narrow and constricted, as if they were climbing in the sky."

Some commentators have claimed that the notion of discomfort at high altitude was unknown to the Arabs of Muhammad's time. It appears that this was not true at all: the existence on the Arabian Peninsula of peaks rising over two miles high makes it extremely implausible that they should not have known of the difficulty of breathing at high altitude. The city of Sanaa, the capital of the Yemen, was inhabited in Muhammad's time. It lies at an altitude of nearly 7,900 feet above sea level.

## Electricity in the Atmosphere

Electricity in the atmosphere and the consequences of this, i.e. Lightning and hail, are referred to in the following verses:

Surah 13, verses 12-13. "God is the One Who shows you lightning, with fear and hope. He raises the heavy clouds. Thunder glorifies His Praise and so do the angels for awe of Him. He sends thunderbolts and strikes whom He wills while they are disputing about God. He is All Mighty in His Power."

Surah 24, verse 43. "Have you not seen that God makes the clouds move gently, then joins them together, then makes them a heap? And you see raindrops coming from within them. He sends down from the sky, mountains of hail, He strikes whom He wills and He turns it away from whom He wills. The flashing of its lightning almost snatches away the sight."

Connection between the two phenomena is verified by present-day knowledge of electricity in the atmosphere.

## Shadows

The phenomenon of shadows and the fact that they move is, very simply explained today. It forms the subject of the following observations:

Surah 16, verse 81. "Out of the things He created, God has given you shade."

Surah 16, verse 48. "Have the Unbelievers not observed that for all the things God created, how their shadow shifts right and left, prostrating themselves to God while they are full of humility."

Surah 25, verses 45 and 46. "Have you not seen how thy Lord has spread the shade? If He willed, He could have made it stationary. Moreover, we made the sun its guide and we withdraw it towards us easily."

Apart from the phrases dealing with the humility before God of all the things He created, including their shadow, God can take back all manifestations of His Power as He wills, the text of the Qur'an refers to the relationship between the Sun and the shadows. Bear in mind, in Muhammad's day, it was believed that the way a shadow moved was governed by the movement of the sun from east to west. This principle was applied in the case of the sundial to measure time between sunrise and sunset. In this instance, the Qur'an speaks of the phenomenon without referring to the explanation current at the time of the Revelation. It would have been readily accepted for many centuries by those who came after Muhammad. In the end, however, it would have been shown to be inaccurate. The Qur'an only talks about the function, the sun has as an indicator of shadow.

## Origins of Life

When the Qur'an describes the origins of life, it is extremely concise. It does so in a verse that also mentions the process of the formation of the Universe, already quoted and commented on:

Surah 21, verse 30. "Do not the Unbelievers see that the heavens and the earth were joined together, then we split them apart, and we got every living thing out of the water? Will they then not believe?"

Life is of aquatic origin and water is the major component of all living cells. Without water, life is not possible. When the possibility of life on another planet is discussed, the first question is always: does it contain a sufficient quantity of water to support life? Modern data lead us to think that the oldest living being must have belonged to the vegetable kingdom: algae has been found that date from the pre-Cambrian period, i.e. the time of the oldest known lands. Organisms belonging to the animal kingdom probably appeared slightly later. They too came from the sea.

Surah 20, verse 53. "God is the One Who sent water down from the sky and thereby we brought forth pairs of plants each separate from the other."

This is the first reference to the notion of a pair in the vegetable kingdom. We shall return to this later. In the second meaning, a liquid without any further indication of what kind, the word is used in its indeterminate form to designate what is at the basis of the formation of all animal life:

Surah 24, verse 45. "God created every animal from water."

We shall see further on how this word may also be applied to seminal fluid. It is secreted by the reproductive glands and contains spermatozoa. Whether it deals, therefore with the origins of life in general, or the element that gives birth to plants in the soil, or the seed of animals, all the statements contained in the Qur'an on the origin of life are strictly in accordance with modern scientific data.

### The Vegetable Kingdom

It is not possible to quote in their entirety all the numerous passages in the Qur'an in which divine Beneficence is referred to concerning the salutary effect of the rain which makes vegetation grow. Here are just three verses on this subject:

Surah 16, verses 10 and 11. "God is the One Who sends water down from the sky. For you, this is a drink and out of it shrubs grow which you let cattle graze freely. Therewith for you He makes sown fields, olives, palm-trees, vineyards and all kinds of fruit grow."

Surah 6, verse 99. "God is the One Who sent water down from the sky. Therewith we brought forth plants of all kinds and from them the verdure and we brought forth from it the clustered grains, and from the palm-tree, its spathes with bunches of dates (hanging) low, the gardens of grapes, olives and pomegranates similar and different. Look at their fruit, when they bear it, and their ripening. Verily, in that there are signs for people who believe."

Surah 50, verses 9-11. "We sent down from the sky blessed water whereby we caused to grow gardens, grains for harvest, and tall palm-trees with their spathes, piled one above the other-sustenance for our servants. Therewith we give new life to dead land. So will be the emergence from the tombs."

## Balance in the Vegetable Kingdom

Surah 15, verse 19. "The earth, we caused all kinds of things to grow in due balance."

## Reproduction in the Vegetable Kingdom

One must bear in mind that there are two methods of reproduction in the vegetable kingdom: one sexual, the other asexual. It is only the first which in fact deserves the term 'reproduction', because this defines a biological process whose purpose is the appearance of a new individual identical to the one that gave it birth. Asexual reproduction is quite simply multiplication. It is the result of the fragmentation of an organism which has separated from the main plant and developed in such a way as to resemble the plant from which it came. It is considered by Guilliermond and Mangenot to be a 'special case of growth'. A very simple example of this is the cutting. A cutting taken from a plant is placed in suitably watered soil and regenerated by the growth of new roots. Some plants have organs specially designed for this, while others give off spores that behave like seeds, as it were, it should be remembered that seeds are the results of a process of sexual reproduction. Sexual reproduction in the vegetable kingdom is carried out by the coupling of the male and female parts of the generic formations united on a same plant are located on separate plants. This is the only form that is mentioned in the Qur'an.

Surah 20, verse 53. "God is the One Who sends water down from the sky and thereby we brought forth pairs of plants each separate from the other."

Surah 22, verse 5. "You see grounds lifeless. When we send down water thereon it shakes and grows and puts forth every magnificent pair of plants."

Surah 31, verse 10. "We caused the growth on earth, every noble pair of plants."

Surah 13, verse 3. "All fruit place on earth by God are two of a pair."

It must be noted that for certain species, fruit can come from non-fertilized flowers (parthenocarpic fruit), e.g. Bananas, certain types of pineapple, fig, orange, and vine. They can nevertheless also come from plants that have definite sexual characteristics. The culmination of the reproductive process comes with the germination of the seed once it's outside casing is opened (sometimes it is compacted into a fruit-stone). This

opening allows roots to emerge which draw from the soil all that is necessary for the plant's slowed-down life as a shield while it grows and produces a new plant. A verse in the Qur'an refers to this process of germination:

Surah 6, verse 95. "Verily, God splits the grain and the fruit-stone."

The Qur'an often restates the existence of these components of a pair in the vegetable kingdom and brings the notion of a couple into a more general context, without set limits:

Surah 36, Verse 36. "Glory be to Him Who created the components of couples of every kind: of what the ground causes to grow by themselves and of what you do not know."

One could form many hypotheses concerning the meaning of the 'things men did not know' in Muhammad's day. Today we can distinguish structures or coupled functions for them, going from the smallest to the largest, in the living as well as the non-living world. The point is to remember these clearly expressed ideas and note, once again that they are in perfect agreement with modern science.

## The Animal Kingdom

The Qur'an describes the harmonious adaptation of Creation to man's needs; it relates in particular the case of those people who live in a rural locations.

Surah 16, verses 5 to 8. "God created cattle for you, you find warmth in them, useful services and food, sense of beauty when you bring them home and when you take them to pasture. They bear your heavy loads to lands, which you could not reach except with great difficulty. Verily, your Lord is Compassionate and Merciful; He created horses, mules and donkeys for you to ride and for ornament. And He created what you do not know."

Alongside these general remarks, the Qur'an set out certain data on highly diversified subjects:

- 1) Reproduction in the animal kingdom
- 2) References to the existence of animal communities
- 3) Statements concerning bees, spiders and birds

#### 4) Remarks on the source of constituents of animal milk

### Reproduction in the Animal Kingdom

Surah 53, verses 45 and 46. "God fashioned two in a pair, the male and the female, from a small quantity of liquid when it is poured out."

The detail which is absolutely remarkable is the precision with which it is stated that a small quantity of liquid is required for reproduction. The word itself signifies 'sperm'.

### Animal Communities

Surah 6, verses 38. "There is no animal on earth, no bird which flies on wings, that does not belong to communities like you. We have not neglected anything in the Book of Decrees. Then to their Lord, they will be gathered."

It seems there is a description of what happens to animals after their death: Then there is predestination in general. Sheik Si Boubakeur Hamza, in his translation of the Qur'an, speaks of "the instinct which, according to Divine Wisdom, pushes all beings to group together, so that they demand that the work of each member serve the whole group." Animal behaviour has been closely investigated in recent decades, with the result that genuine animal communities have been shown to exist. Of course, for a long time now the results of a group or community's work have been examined and this has led to the acceptance of a community organization.

### Human Reproduction

From the moment ancient human writings enter into detail on the subject of reproduction, In the Middle Ages and even in more recent times reproduction was surrounded by all sorts of myths and superstitions. To understand its complex mechanisms, man first had to possess knowledge of anatomy, the discovery of the microscope had to be made, and the so-called basic sciences had to be found which were to nurture physiology, embryology, obstetrics, etc. The situation is quite different in the Qur'an. The Book mentions precise mechanisms in many places and describes clearly-defined stages in reproduction, without providing a single statement marred by inaccuracy. Everything in the Qur'an is explained in simple terms which are easily understandable to man and in strict accordance with what was to be discovered much

later on. Human reproduction is referred to in several dozen verses of the Qur'an, in various contexts. It is explained through statements which deal with one or more specific points. It is imperative to recall certain basic concepts which were unknown at the time of the Qur'anic Revelation and the centuries that followed. Human reproduction is effected by a series of processes which we share in common with mammals. The starting point is the fertilization of an ovule which has detached itself from the ovary.

It takes place in the Fallopian tube half-way through the menstrual cycle. The fertilizing agent is the male sperm, or more exactly, the spermatozoon, a single fertilizing cell being all that is needed. To ensure fertilization, therefore, an infinitely small quantity of spermatic liquid containing a large number of spermatozoon's (tens of millions at a time) is required. This liquid is produced by the testicles and temporarily stored in a system of reservoirs and canals that finally lead into the urinary tract; other glands are situated along the latter which contribute their own additional secretions to the sperm itself. The implantation of the egg fertilized by this process takes place at a precise spot in the female reproductive system: it descends into the uterus via a Fallopian tube and lodges in the body of the uterus where it soon literally implants itself by inserting into the thickness of the mucosa and of the muscle, once the placenta has been formed and with the aid of the latter. If the implantation of the fertilized egg takes place, for example, in the Fallopian tubes instead of in the uterus, pregnancy will be interrupted.

Once the embryo begins to be observable to the naked eye, it looks like a small mass of flesh at the centre of which the appearance of a human being is at first indistinguishable. It grows there in progressive stages which are very well known today; they lead to the bone structure, the muscles, the nervous system, the circulation, and the viscera, etc. These notions will serve as the terms of reference against which the statements in the Qur'an on reproduction are to be compared. It is not easy to gain an idea of what the Qur'an contains on this subject. The first difficulty arises from the fact already mentioned, i.e. that the statements dealing with this subject are scattered throughout the Book. This is not, however a major difficulty. What is more likely to mislead the inquiring reader is, once again, the problem of vocabulary. In fact, there are still many translations and commentaries in circulation today that can give a completely false idea of the Qur'anic Revelation on this subject to the scientist

who reads them. The majority of translations describes, for example, man's formation of a 'blood clot' or an 'adhesion'. A statement of this kind is totally unacceptable to scientists specializing in this field. In the paragraph dealing with the implantation of the egg in the maternal uterus, we shall see the reasons why distinguished Arabic's who lack a scientific background have made such blunders.

This observation implies how great the importance of an association between linguistic and scientific knowledge is when it comes to grasping the meaning of Qur'anic statements on reproduction. The Qur'an sets out by stressing the successive transformations the embryo undergoes before reaching its destination in the maternal uterus.

Surah 82, verses 6 to 8. "O Man! Who deceives you about your Lord the Noble, Who created you and fashioned you in due proportion and gave you any form He willed."

Surah 71, verse 14. "God fashioned you in different stages."

Along with this very general observation, the text of the Qur'an draws attention to several points concerning reproduction which might be listed as follows:

- 1) Fertilization is performed by only a very small volume of liquid.
- 2) The constituents of the fertilizing liquid.
- 3) The implantation of the fertilized egg.
- 4) The evolution of the embryo.

Fertilization is performed by only a very small volume of Liquid

The Quran repeats this concept eleven times using the following expression:

Surah 16, verse 4. "God fashioned man from a small quantity of sperm."

Surah 75, verse 37. "Was man not a small quantity of sperm which has been poured out?"

Another verse indicates that the small quantity in question is put in a 'firmly established lodging' (qarar) which obviously means the genital organs.

Surah 23, verse 13. God is speaking. "Then we placed man as a small quantity of sperm in a safe lodging firmly established."

It must be added that the adjective which in this text refers to the 'firmly established lodging' making is, I think, hardly translatable. It expresses the idea of a firmly established and respected place. However, this may be, it refers to the spot where man grows in the maternal organism. It IS important to stress the concept of a very small quantity of liquid needed in the fertilization process, which is strictly in agreement with what we know on this subject today.

The Qur'an describes the liquid enabling fertilization to take place in terms which it is interesting to examine:

1. Sperm, as has been stated precisely
2. A liquid poured out. "Man was fashioned from a liquid poured out"
3. A despised liquid, The adjective 'despised' (Mahin) would, it seems, it is emitted through the urinary tract, using the channels that are employed in passing urine.
4. Mixtures or mingled liquids (amsaj): "Verily, we fashioned man from a small quantity of mingled liquids."

Modern authors, however, like the commentator of the Muntakab edited by the Supreme Council for Islamic Affairs, Cairo, have corrected this view and note here that the 'small quantity of sperm' is made up of various component parts. The commentator in the Muntakab does not go into detail, but in my opinion, it is a very judicious observation.

### What are the components of sperm?

Spermatic liquid is formed by various secretions which come from the following glands:

1. The testicles: the secretion of the male genital gland contains spermatozoa, which are elongated cells with a long flagellum; they are bathed in a sea-fluid liquid.
2. The seminal vesicles. These organs are reservoirs of spermatozoa and are placed near the prostate gland; they also secrete their own liquid, but it does not contain any fertilizing agents.
3. The prostate gland: this secretes a liquid which gives the sperm its creamy texture and characteristic odour.

4. The glands annexed to the urinary tract: Cooper's or Méry's glands secrete a stringy liquid and Littré's glands give off mucous.

These are the origins of the 'mingled liquids' however, more to be said on this subject. When the Quran talks of a fertilizing liquid composed of different components, it also informs us that man's progeny will be maintained by something which may be extracted from this liquid.

Surah 32 verse 8. "God made his progeny from the quintessence of a despised liquid."

Fertilization of the egg and reproduction are produced by a cell that is very elongated: its dimensions are measured in ten thousandths of a millimetre. In normal conditions [It is estimated that in one cubic centimetre of sperm there are 25 million spermatozoon's with, under normal conditions, an ejaculation of several cubic centimetres.], Only one single cell among several tens of millions produced by a man will actually penetrate the ovule; a large number of them are left behind and never complete the journey which leads from the vagina to the ovule, passing through the uterus and Fallopian tubes. It is therefore an infinitesimally small part of the extract from a liquid whose composition is highly complex which actually fulfils its function. In consequence, it is difficult not to be struck by the agreement between the text of the Qur'an and the scientific knowledge we possess today of these phenomena.

### The Implantation of the Egg in the Female Genital Organs

Once the egg has been fertilized in the Fallopian tube it descends to lodge inside the uterus; this is called the 'implantation of the egg'. The Quran, names the lodging of the fertilized egg womb:

Surah 22, verse 5. God is speaking: "We cause whom we will to rest in the womb for an appointed term."

The implantation of the egg in the uterus (womb) is the result of the development of velocities, veritable elongations of the egg, which, like roots in the soil, draw nourishment from the thickness of the uterus necessary to the egg's growth. These formations make the egg literally cling to the uterus. This is a discovery of modern times. The act of clinging is described five different times in the Quran. Firstly, in verses 1 and 2 of Surah 96. "Read, in the name of thy Lord Who fashioned who fashioned

man from something which clings." Something which clings' is the translation of the word 'Alaq. This concept is recalled in four other verses which describe successive transformations from the small quantity of sperm through to the end:

Surah 22, verse 5. "We have fashioned you from something which clings."

Surah 23, verse 14. "We have fashioned a small quantity into something which clings."

Surah 40, verse 67. "God fashioned you from a small quantity, something which clings."

Surah 75, verse 37-38. "Was man not a small quantity of sperm which has been poured out? After that he was something which clings; then God fashioned him in due proportion."

### Evolution of the Embryo inside the Uterus

The Qur'anic description of certain stages in the development of the embryo corresponds exactly to what we today know about it. After 'the thing which clings, the Qur'an informs us that the embryo passes through the stage of 'chewed flesh', then osseous tissue appears and is clad in flesh.

Surah 23, verse 14. "We fashioned the thing which clings into a chewed lump of flesh and we fashioned the chewed flesh into bones and we clothed the bones with intact flesh."

The embryo is initially a small mass. At a certain stage in its development, it looks to the naked eye like chewed flesh. The bone structure develops inside this mass in what is called the mesenchyme. The bones that are formed are covered in muscle; the word lahm applies to them. Another verse which requires extremely delicate interpretation is the following:

Surah 39, verse 6. "God fashions you inside the bodies of your mothers, formation after formation, in three veils of darkness."

Modern interpreters of the Qur'an see in this verse the three anatomical layers that protect the infant during gestation: the abdominal wall, the uterus itself, and the surroundings of the foetus (placenta, embryonic membranes, amniotic fluid).I am

obliged to quote this verse for the sake of completeness; the perpetration given here does not seem to me to be disputable from an anatomical point of view but is this what the text of the Qur'an really means? It is known how certain parts appear to be completely out of proportion during embryonic development with what is later to become the individual, while others remain in proportion. The Qur'an also describes the appearance of the senses and the viscera:

Surah 32, verse 9. "God appointed for you the sense of hearing, sight and the viscera."

It refers to the formation of the sexual organs:

Surah 53, verses 45-46. "God fashioned the two of a pair, the male and the female, from a small quantity of sperm when it is poured out."

The formation of the sexual organs is described in two Surah's of the Qur'an:

Surah 35, verse 11. "God created you from dust, then from a sperm-drop, then He made you pairs, male and female."

Surah 75, verse 39. "And, God made of him a pair, the male and female."

Throughout the middle Ages, the most diversified doctrines originated in unfounded myths and speculations: they persisted for several centuries after this period. The most fundamental stage in the history of embryology was Harvey's statement (1651) that "all life initially comes from an egg". At this time, however, when nascent science had nevertheless benefited greatly (for the subject in hand) from the invention of the microscope, people were still talking about the respective roles of the egg and the spermatozoon. Buffon, the great naturalist, was one of those in favour of the egg theory, but Bonnet supported the theory of the seeds being 'packed together'. The ovaries of Eve, the mother of the human race, were supposed to have contained the seeds of all human beings, packed together one inside the other. This hypothesis came into favour in the Eighteenth century. More than a thousand years before our time, at a period when whimsical doctrines still prevailed, men had a knowledge of the Qur'an. The statements it contains express in simple terms truths of primordial importance which man has taken centuries to discover.

## The Qur'an and Sex Education

Our epoch believes that it has made manifold discoveries in all possible fields. It is thought that great innovations have been made in the field of sex education, and the knowledge of the facts of life which has been opened up to young people is regarded as an achievement of the modern world. In previous centuries were noted for their deliberate obscurity on this point and many people say that religion-without stating which religion-is the cause of it. The information set out above is proof, however that fourteen centuries ago theoretical questions (as it were) on human reproduction were brought to man's attention. This was done as far as was possible, taking into account the fact that the anatomical and physiological data needed for further explanations were lacking. One should also remember that, to be understood, it was necessary to use simple language suited to the level of comprehension of those who listened to the Preaching.

Practical considerations have not been silently ignored. There are many details in the Quran on the practical side of life in general, and the way a man should behave in the many situations of his existence. His sex life is no exception. Two verses in the Quran deal with sexual relations themselves. They are described in terms which unite the need for precision with that of decency. When translations and explanatory commentaries are consulted, however, one is struck by the divergences between them. I pondered for a long time on the translation of such verses, and am indebted to Doctor A. K. Giraud, Former Professor at the Faculty of Medicine, Beirut, for the following:

Surah 86, verse 6 and 7. "Man was fashioned from a liquid poured out. It issued as a result of the conjunction of the sexual area of the man and the sexual area of the woman."

The sexual area of the man is indicated in the text of the Qur'an by the word *sub* (singular). The sexual areas of the woman are designated in the Qur'an by the word *tara'ib* (plural). The behaviour of a man in his intimate relationships with his wife is stated explicitly. There is the order concerning the menstruation period, God gives the following command to the Prophet:

Surah 2, verses 222 and 223. "They (the Believers) question thee concerning menstruation. Say: This is an evil. Keep away from women during menstruation and do not approach them until they are clean. When they have purified themselves, go to them, as God ordered it to you. "Verily, God loves the repentant and loves those who purified themselves." Your wives are a tilts. Go to your tilts as you will. Do (some good act) for your souls beforehand."

The beginning of this passage is very clear in meaning: it formally forbids a man to have sexual contact with a woman who has her period. The second part describes the process of tilling which the sower performs before sowing the seed, which is to germinate and produce a new plant. Through this image therefore, stress is indirectly laid on the importance of bearing in mind the final purpose of sexual contact, i.e. Reproduction. The numerous passages quoted above on the successive transformations of the embryo make it quite clear, however, that man is considered to be constituted as the stage described by the existence of 'something which clings'. This being so, the absolute respect of the individual human being, which is referred to so often in the Qur'an, brings with it a total condemnation of provoking abortion. This attitude is today shared by all monotheistic religions. Sexual relations are permitted at night during the Fast in the month of Ramadan. The verse concerning Ramadan is as follows:

Surah 2, verse 187. "Permitted to you, on the night of the fast, is to break chastity with your wives. They are a garment for you and you are a garment for them. So hold intercourse with them and seek what God has ordained for you."

In contrast to this, no exception to the rule is made for pilgrims in Mecca during the celebration days of the Pilgrimage.

Surah 2, verse 197. "For whom undertakes the duty of the Pilgrimage in its time, no wooing and no license."

This prohibition is formal, as is the fact that other activities are forbidden, e.g. hunting and fighting etc. Menstruation is again mentioned in the Qur'an in connection with divorce. The Book contains the following verse:

Surah 65, verse 4. "For your wives who despair of menstruation, if you doubt about them, their period of waiting will be three months. For those who never have their

monthly periods and those who are pregnant their period will be until they lay down their burden."

The waiting period referred to here is the time between the announcement of the divorce and the time it comes into effect. Those women, of whom it is said 'they despair of menstruation' have reached the menopause. A precautionary period of three months is envisaged for them. Once this period is completed, divorced women who have reached the menopause may remarry. For those who have not yet menstruated, the pregnancy period has to be awaited. For pregnant women, divorce only comes into effect once the child is born.

## Last Day, means Last Age

The term 'Last Day' in reality stands for the 'Last Age', the age which would culminate the end of history, when the true Messiah, Jesus, the son of Mary, would return to rule the world from Jerusalem with justice. This would be, when the modern secular rope would have reached its predictable end in total godlessness, with such a consequent collapse of morals, and of moral consciousness, people would forget their human status and "would engage in sexual intercourse in public like donkeys". Already it is quite clear (particularly at the time of Trinidad's Carnival) that we are quite close to the fulfilment of that ominous prophecy made by Prophet Muhammad. So much so then, for the spurious claims of the one-eyed Judeo-Christian western civilization and its 'coloured house slaves' around the world. They claim that mankind is witnessing unprecedented progress that the present is the best of all ages and that modern western civilization has rendered all previous civilizations. Prophet Muhammad prophesied many more signs of the Last Day other than public 'donkey sex'. Most of these are known as 'minor' signs. Let us describe some of them before we turn to the ten 'major' signs in which we venture to include the major underwater earthquake and resultant Tsunami in South East Asia that occurred in late December 2004.

### Minor Signs

Prophet Muhammad said: "People would follow a way of life other than mine, and give guidance other than mine. I fear for my people, only leaders lead men astray. Before the Last Hour there will be great liars, so beware of them, when the most wicked member of a tribe becomes its ruler, and the most worthless member of a community

becomes its leader, and a man is respected through fear of the evil he may do, and leadership is given to people who are unworthy of it, expect the Last Hour". All these warnings have already been dramatically and ominously fulfilled. Around the world today, including Muslims, now have the worst leaders. This ominous sign of the Last Day has come to pass, yet there are so many who do not, or cannot see, and they blindly rush as dumb cattle to endorse or to follow such leaders for personal gain, or fear, or due to sheer ignorance.

Women would dress like men", we already see them today. When women parade in public "dressed, yet naked", as they do today, and when Muslims cannot prevent such, they should seek to flee from such mainstream society rather than to remain part of it until the women are fully naked and "donkey-like" sexual intercourse is on public display. If they foolishly choose to remain part of such corrupt and decadent society, then they or their children would eventually be ruined by such a society. Men would dress like women", and already this sign also has come to pass. Almost no one can tell that 'she', the so-called 'cross-dresser', is really a man; Homosexuality (and lesbianism) would become commonplace, and that is now happening before our very eyes. Social acceptance and legal protection for this abominable sexual perversion is gaining ground. Indeed those who hold fast to the divine prohibition of such sexual perversion are now demonized as a people who suffer from a disease called 'homophobia. Children born outside of marriage would become commonplace, in fact marriage, it now seems destined to become obsolete

Fornication and adultery would become commonplace that, also, appears to have already been fulfilled in a modern world in which virginity and marital fidelity are becoming old-fashioned. The disproportion in balance of men and women to such an extent that "one man would have to maintain (not marry) fifty women", that is yet to occur, but could be linked to the impact on male sperm production of such things as environmental pollution and genetically modified food. Universal consumption of alcoholic beverages, this "mother of all evils" has already become a horrendous plague in which no one is safe from the drunk driver; the unborn baby drinks when his mother drinks and suffers unimaginable for such; people, including Prime Ministers, drink and become drunk, and then behave in public like asses; Religious knowledge would disappear", since the rightly-guided scholars of Islam are demonized, marginalized, "banned", or declared to be "great security risks". Only those scholars who can skilfully skip and dance to the tunes of those who control power are allowed the unfettered

freedom to preach a sanitized cosmetic version of Islam acceptable to the godless rulers of the world. Institutions of Islamic learning are forced to submit to the control of those waging war on Islam. If they do not submit, they are shut down. Foreign students are prohibited from studying Islam in certain so-called Islamic Republics. Time would move swiftly—a year passing like a month—a month like a week—a week like a day” etc., and already the perception of swiftly moving time is a universal experience

Such prevalence of random killing, murder and violence that “a killer would not know why he is killing and the one who is killed would not know why he is being killed”, and “every age is followed by one which would be worse”—already around the world senseless random killing has arrived and is constantly escalating. Nothing would remain of Islam, but the name, and nothing would remain of the Qur’an, but the traces (of its writing) (i.e., The Qur’an would not be studied, no one would follow its guidance, it would be recited mechanically etc.); The Masjid (mosques) would be grand structures, but would be devoid of guidance; and the Ulama (religious scholars of Islam who represent such people) would be the worst people beneath the sky. From them would emerge Fitnah (trials) and they would be the centres of Fitnah (since they betray Islam)” there are many distinguished scholars of Islam who declare that this prophecy, also, has today found fulfilment. The evidence of such is overwhelming. The Islamic Khilafah (Caliphate) has been long destroyed, Zakat is no longer collected and distributed by the state, money itself is now corrupted, the universal Shirk of the modern state has corrupted all of mankind, Riba is universally prevalent, the Hajj would probably soon be abandoned

Universal consumption of Riba (i.e., money lent on interest, and transactions which ‘rip off’ people through deception in business, etc.) Around the world today Riba in modern banking and insurance, as well as in the monetary system, has already taken total control over the market and over economic life. There are some minor signs which have been couched in enigmatic language such as, a slave woman would give birth to her mistress”, made possible through a combination of Riba and the modern feminist revolution, and naked barefooted shepherds would vie with one another in the construction of high-rise buildings”. This is already being fulfilled, wealth is wasted in grandiose and expensive public relations, construction projects commissioned by people who hanker for visible symbols of status in a modern world which recognizes the rich as a ‘somebody’ and the poor as a ‘nobody’.

The Last Hour would not come until their issues from the land of the Hejaz (which is in Saudi Arabia) a fire which will illuminate the backs of the camels in Busra But for the exchange of Basra for Hejaz, this prophecy, perhaps, anticipates a nuclear attack on or around Iran which would formally launch Israel into the club of nuclear powers. So many of these minor Signs of the Last Day, and so many more not here mentioned, have already occurred, that we can now turn to the major Signs with a clear recognition that we are already living in that Last Age.

## Major Signs

There are ten major Signs of the Last Day as prophesied by Prophet Muhammad: Dajjal, the false Messiah or Anti-Christ, Gog and Magog, Smoke, The beast of the earth or land (Israel), the sun would rise from the west, Three sinking's of the earth One in the east One in the west One in Arabia. A fire would come out of Yemen and would drive people to their place of assembly for judgement. The son of Mary would descend. Although these signs were not given in their chronological order of occurrence. We know from the prophecies of the blessed Prophet that the third major 'sinking of the earth', i.e., the one that would occur in Arabia, would swallow an army that would be heading south to Mecca. That army would be on its way to attack Imam al-Mahdi, the descendent of Prophet Muhammad. It was prophesied that he would restore the Islamic Caliphate in the Arabian Peninsula. It is after that sign has occurred (i.e., the third major earthquake) that the son of Mary would descend from the sky with his hands resting on the wings of two angels, and would kill Dajjal the False Messiah or Anti-Christ. The Qur'an says: "And Jesus shall be a Sign for the coming of the Hour of Judgment: therefore have no doubt about the Hour, but follow me: this is the Straight Way".

## Dajjal (Anti-Christ)

An Islamic View of the Destiny of Jerusalem', that Dajjal the False Messiah or Antichrist was released into the world in the lifetime of Prophet Muhammad. He has already completed the first stage of his mission that lasted for "a day like a year", and is about to complete the second stage that lasts for "a day like a month". The third and last stage of his mission that would last for just "a day like a week" would, I believe, commence when Israel replaces USA as the ruling state of the world. And that would occur when Israel wages a big war that would result in dramatic territorial expansion

“from the river of Egypt to the river Euphrates”. Israel would then seize control of the Suez Canal and all the oil of the Arabian Gulf. By the end of that third stage, Dajjal the false Messiah or Antichrist would have been born into the world of Jewish parents, would have risen to become ruler of Israel and, hence, would have completed his mission to rule the world from Jerusalem. And Allah Knows best!

### Gog and Magog

Gog and Magog (Zionist - Christian, Jewish alliance) were released into the world in the lifetime of Prophet Muhammad. The Qur’an itself has made mention in Surah al-Anbiyah, of a ‘town’ which was destroyed by Allah Most High, and the people of the town expelled, and banned from returning to reclaim their town until Gog and Magog were not only released but, also, had spread out around the world in all directions. “There is a ban on a town which we have destroyed: the people of the town shall not return to reclaim it as their own; until Gog and Magog are let through (their barrier), and they swiftly spread out in every direction (replicating themselves amongst all the peoples of the world).” The town has been identified as Jerusalem. And since the Jews have already returned to Jerusalem to reclaim it as their own, it follows that Gog and Magog, like Dajjal, are also close to the end of their mission. And Allah Knows best!

### Dhukhan (Smoke)

This appears to be totality of environmental pollution (not just smog and haze) that is already wreaking havoc on the earth itself and is bringing about global warming with the consequent impact of earthquakes, hurricanes, flooding etc. The modern industrial economy that Dajjal has authored, appears to be the greatest culprit of environmental pollution in the world today. In other words, we have been tricked into causing smoke which in turn spawns global warming and eventual climatic disaster. And Allah Knows best! However, it is important that we note that there are several Hadith in Sahih Bukhari that declare the sign of smoke already appeared in the lifetime of the blessed Prophet.

### Beast of the Land or Earth

The beast of the earth’ is, in fact, the Imposter State of Israel that now occupies the Holy Land. The learned Shaikh, Safar al-Hawaii, holds the view that the ‘beast’ is the Zionist Movement. And Allah Knows best!

## The Sun would Rise from the West

Those who interpret this sign literally assume that the order of nature would be reversed despite the Qur'anic declaration that there can be no change in Allah's creation. Allah says in Surah al Rum: "Set your face steadily and truly to the faith: establish Allah's handiwork according to the pattern on which He has made mankind: no change can there be in Allah's creation: that is the standard religion: but most among mankind do not understand".

But this sign has provoked numerous other non-literal interpretations, all agree that it has already occurred. Our view is that the rising of the sun from the West symbolizes an upside down world in which mankind is led by their noses to a way of life which would be the very opposite of that natural way ordained by Allah. Natural money, for example, identified in the Qur'an, is derived from precious metals. When such money is in short supply in a market such as Medina's, then a substitute in the form of commodities such as wheat, barley, dates, salt, etc., can temporarily take its place. Around the world today that natural money with intrinsic value has been replaced by artificial money with no intrinsic value and it is used as an instrument of oppression. That upside-down unnatural way of life has already been accepted by most of mankind. In this sense, therefore, the sun is already rising from the West. And Allah Knows best!

## Three Sinking's of the Earth

Many terrible earthquakes have already occurred in history. They have no relevance to our subject. We are concerned with three major 'sinking's of the earth' that would occur at a specific moment in history, i.e., they would occur at a time that would herald the return of Jesus, the Messiah, the son of Mary, and Messenger of Allah Most High. One would occur in the East, the second in the West, and the third in Arabia. When the third one takes place, the world of Islam would suddenly and dazzlingly re-enter the affairs of the Arabian Peninsula, as well as the world, in the same revolutionary way as it did in the lifetime of Prophet Muhammad. This appears to be the meaning of the last of the major signs, i.e., that a fire would come out of Yemen and drive people to their place of assembly for judgment which is Arafat in Arabia.

## First Earthquake in the East

The massive earthquake and Tsunami in South East Asia which claimed more than 100,000 lives, is the earthquake of the East mentioned by Prophet Muhammad in the ten major Signs of the Last Age. This conclusion came to be because, firstly, the prophecy of the blessed Prophet is that a 'khasf' would occur in the East, i.e., the earth sinks down or caves in. A 'Tsunami' is defined as a sea wave, it's the result of large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands. When this recent displacement of the earth occurred under the sea, resulting in the massive Tsunami, it ensured that those who maliciously conceal the Truth, they could not conceal this major Sign of the Last Age. The magnitude of the event measured 9 on the Richter scale and, more importantly, the massive damage already done and still unfolding, makes it absolutely unique for mankind today. Secondly, the location of the event - it occurred in that East which is clearly east of Medina. Thirdly, and most important of all, the time it occurred. It was after the liberation of the Holy Land (1917), and return of the Jews to reclaim the Holy Land as their own (1918-1948). It was also after the restoration of a State of Israel in the Holy Land (1948) and the growth of Israel to become a superpower in the world. Finally it occurred precisely at a time when Israel was about to wage her big war of massive territorial expansion after which Israel would replace USA as the ruling state in the world. Jesus cannot return until all these things have occurred. It also occurred at a time when the prophecy of the Prophet concerning the abandonment of the Hajj seems about to be fulfilled. Hajj would pose a gigantic security threat to the present Saudi ruling elite, whenever Israel wages its big war and assumes rule over the world. And it has occurred at that time when the US dollar begun its perhaps irreversible decline that might culminate in its collapse. Such a collapse would also bring down all the paper-money in the world and electronic money, controlled by the Jewish-controlled banking system, would then control all the money in the money-system of the world. This momentous Sign in the East that occurred at the end of December 2004 appears, therefore, to be a sign to mankind warning that dangerous change in the world will soon take place.

## Second Earthquake in the West

When a second massive earthquake eventually occurs in the west, after the recent one in the east that would further confirm the analysis presented in this essay. All that would then remain to occur for Jesus to descend from the clouds would be the third earthquake in Arabia that would swallow an entire army, and a fire would come out of Yemen. We know that the third and last major earthquake would have its epicentre on land just north of Mecca in Arabia. But it would seem that the mid-Atlantic (rather than the Pacific) may be the location of the major earthquake of the west that is to come. In case the second major earthquake occurs in the mid-Atlantic, the islands of the Caribbean and the eastern coast of USA and Canada as well as South America would be likely to be affected. It could also be a big earthquake in California along the fault.

## Third Earthquake in Arabia

Narrated Aisha: Allah's Apostle said, "An army would invade the Ka'ba and when the invaders reach Al-Baida', the ground would sink and swallow the whole army." I said, "O Allah's Apostle! How would they sink into the ground while amongst them would be their markets and business people?" The Prophet replied, "All of those people would sink but they would be resurrected and judged according to their intentions.

Narrated Umm Salamah: The Prophet said: "Disagreement will occur at the death of a Caliph and a man from Medina would come rushing forth to Mecca. Some people of Mecca would come to him, bring him out against his will, and swear allegiance to him between the Corner and the Maqam. An expeditionary force would then be sent against him from Syria but they will be swallowed up in the desert between Mecca and Medina.

It is quite clear from the above prophecy of Prophet Muhammad that the third earthquake would take place at the time of the advent of Imam al-Mahdi. But the Imam cannot emerge to liberate the Arabian heartland of Islam until Israel has become the ruling state in the world. And Allah knows best!

## Final Word

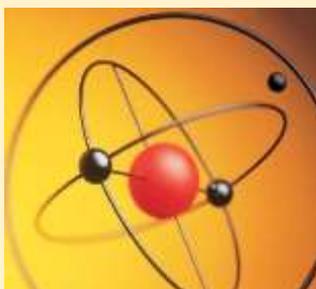
The destiny of Jerusalem is such as to give Muslims the greatest confidence and hope that Truth will triumph over falsehood and oppression. We now live in a very strange world, it is a world in which the cause of Islam appears to be a lost cause. You will know for certain that it is the destiny of Jerusalem to give a spectacular validation of Islam's claim to truth, Muslims should be able to summon the strength to resist the present war on Islam in which the godless world is making the greatest possible effort to destroy their faith in Allah Most High.

## Qur'an Healing, Cure for all Diseases

There are many cases cured every day by reciting the Qur'an; we cannot deny that because recovery does happen; Koran Healing is a critical issue which wasn't given enough study or research, Allah had put in every verse of the Qur'an a healing power for a certain disease if this verse was recited for a specific number of times.

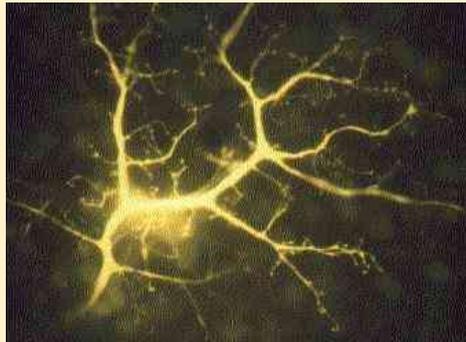
### In the beginning

When we contemplate on the universe around us, we notice that every single atom is vibrating in a specific frequency, whether this atom is part of metal, water, cells or anything else. So everything in this universe is vibrating, this is a scientific fact. The basic structure of the universe is the atom, and the basic structure of our bodies is the cell; each cell is made of billions of atoms and each atom is made of a positive nucleus with negative electrons rotating around it; because of this rotation, an electromagnetic field is generated similar to fields generated by an engine.

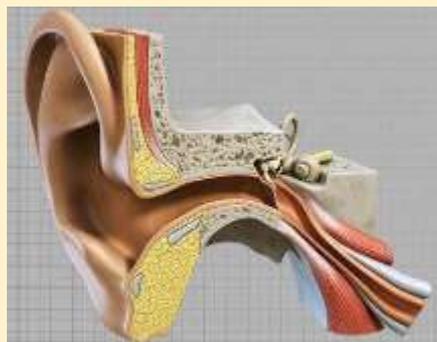


The atom is the basic structure in the universe and in our bodies; it is constantly vibrating which means that everything is vibrating according to a precise system. Cells

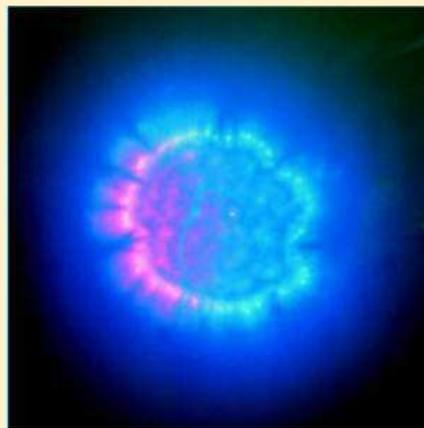
vibrate in a precise system, and any vibration around us affects our cells. The secret that makes our brain think is an accurate program inside the brain cells; this program is inside every cell doing its task precisely; the smallest defect in its job would cause imbalance and disorder of some of the body parts; the best cure for this imbalance is to restore balance to the body. Scientists discovered that body cells are affected by various vibrations such as light waves, radio waves, sound waves etc. But what is sound?



Each cell in our body vibrates in a precise system, and the smallest change in this vibration would mean an illness of some part of the body. That's why these damaged cells should be vibrated to restore balance to them. We know that sound made by waves or vibrations moving in the air is about 340m/sec. Each sound has its own frequency, and humans can hear from 20 frequencies per second to 20000 frequencies per second. These waves spread in the air and then get received by the ear, then turn into electrical signals and move along the acoustic nerve towards the acoustic bark in the brain; the cells correspond to the waves and move into various parts of the brain especially the frontal part; all these parts work together corresponding to the signals and translating them to a language the human understands. Thus, the brain analyses the signals and gives orders to various body parts to correspond to these signals.



Sound is made of mechanic vibrations that reach the ear then the brain cells which correspond to these vibrations and change their own vibration; that's why the sound is considered an effective healing power depending on the nature of the sound and its frequencies. We find healing power in the Qur'an because it is the book of Allah. From here came sound therapy; the sound is a vibration, and body cells are vibrating, then the sound influences these cells. This is what researchers discovered recently; in Washington University late in the twentieth century, scientists found that the job of a brain cell is not just to transfer information, each cell is a small computer working on collecting information, processing it and giving orders continuously round the clock. Ellen Covey, a researcher in Washington University, says that it is the first time we realize that the brain does not work as a big computer, but it contains a huge number of computers working in a cooperative way, there is a small computer in each cell and these computers are affected by the vibrations around them, especially the sound.



Experiments show that inside each cell in the brain there is a tiny computer which Allah deposited an accurate program that directs the cell and controls its work. They also show that the sound affects the cell; this is a picture of a cell getting affected by a sound and an electromagnetic field is being formed around it. Thus, we can say that the cells of each body part vibrate in a specific frequency and form a complicated and coordinated system that is affected by any sound around it. So, any disease affecting any part of the body will cause a change in the vibration of these cells and thus cause it to deviate from the general body system, affecting the whole body. This is why, when the body is exposed to a specific sound, this sound influences the vibration system of the body, especially the irregular part; this part would respond to specific sounds to restore its original vibration system, in other words, restore its healthy condition. Scientists discovered these results recently.

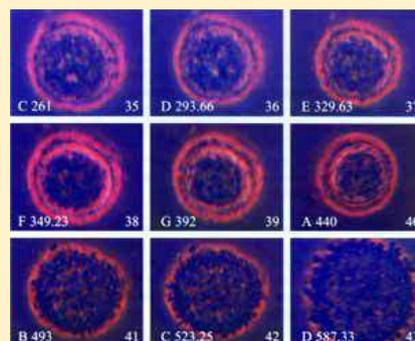
## Sound Therapy

Alfred Tomatis, a French doctor, made experiments for fifty years about the human senses and came out with the result that the hearing sense is the most important sense!! He found that the ear controls the whole body, regulates its vital operations and the balance and coordination of its movements; he also found that the ear controls the nervous system! During his experiments, he found that the hearing nerves connect with all body muscles and this is the reason why the balance and flexibility of the body and the sight sense get affected by sounds. The inner ear is connected with all the body parts such as the heart, lungs, liver, stomach, and the intestines; this explains why sound frequencies affect the whole body. In 1960, the Swiss scientist Hans Jenny found that the sound affects the various materials and reform their particulars, and that each cell of the body has its own sound and gets affected by the sounds and rearranges the material inside it (4). In 1974, the researchers Fabien Maman and Sternheimer made an astonishing discovery; they found that each part of the body has its own vibration system, subject to physics laws. A few years later, Fabien and Grimal, another researcher, discovered that sound affects cells especially cancer cells, and that certain sounds had stronger effect; the strange thing the two researchers found was that the sound that had the strongest effect on body cells is the sound of the human himself!!



The sound moves from the ear to the brain and affects the brain cells; scientists recently found that the sound has a strange healing power and an amazing effect of the brain cells which work on restoring the balance to the whole body! Reciting Koran has an astonishing effect on these cells and is capable of restoring their balance; the brain is the organ that controls the body and from it the orders comes to the rest of the body organs especially the immune system. Fabian, a scientist and musician, put blood cells from a healthy body and exposed them to various sounds; he found that

each note of the musical scale affects the electromagnetic field of the cell; when photographing this cell with Kirlian camera, he found out that the shape and value of the electromagnetic field of the cell change according to the sound frequencies and the sound type of the reader. Then he made another experiment taking a blood drop from one of the patients, and then he monitored the drop with Kirlian camera and asked the patient to make various notes. He found, after processing the pictures, that on a specific note the blood drop changes its electromagnetic field and fully vibrates responding to its owner. He thus concluded that there are specific notes that affect the body cells and make them more vital and active, even regenerates them. He came out with an important result: The human sound has a powerful and unique influence over body cells; this influence is not found in any other instrument. This researcher said literally: “The human sound has a special spiritual ring making it the most powerful healing device. Fabien found that some sounds easily explode the cancerous cell, and at the same time activate the healthy cell. The sound affects human blood cells which transfer the frequencies of this sound to the whole body through the blood circulation”.



A cancerous cell exploded by using sound frequencies only!! That’s why reciting the Qur’an has a great impact on treating the most danger cancers and incurable diseases! But is this influence limited only to cells? It became clear that sound affects everything around us. This is what Masaru Emoto, a Japanese scientist, proved in his experiments on water; he found that the electromagnetic field of water molecules is highly affected by the sound, and that there are specific tones that affect these molecules and make them more regular. If we remember that the human body is 70% water, then the sound the human hears affects the regularity of water molecules in the cells and the way these molecules vibrate, thus affects his healing. Different researchers confirm that the human sound could heal many diseases including cancer. Sound therapists also confirm that there are certain sounds that are more effective and have a healing power especially in increasing the immune system efficiency.



Water molecules shape changes when exposed to sound; thus, sound greatly affects the water we drink. If you recite the Koran on water, its characteristics would change and it would carry the Koran effect to every cell in the body causing them to heal! In the picture, we see a frozen water molecule; the electromagnetic field around this molecule changes continuously because of the sound effect.

### How the Qur'an heals

What happens inside body cells and how does sound cure? How does this sound affect the damaged cells and restore their balance? Doctors are constantly looking for means to destroy some virus; if we think about the mechanism of this virus, what moves it and makes it recognize its way to the cell? Who gave the virus the information stored within which enables it to attack the cells and multiply inside? What moves the cells against this virus to destroy it while stand helpless in front of another virus?



Viruses and germs also vibrate and are highly affected by sound vibrations especially the Koran sound; it stops them and at the same time increases the activity of the healthy cells and revives the disrupted program inside so to become ready to fight viruses and germs. The Qur'an recitation is made of a group of frequencies that reach the ear then move to the brain cells and affect them through the electronic fields these frequencies generate in these cells; the cells would respond to these fields and modify

their vibrations, this change in the vibration is what we feel and understand after experience and repetition.

It is the natural system that Allah gave to the brain cells, it is the natural balance system; this is what Allah told us in the Holy Qur'an: (Allah's handiwork according to the pattern on which he has made mankind: No change let there be in the work by Allah: that is the straight religion, but most men know not, Surah Rum 30.



A real picture of a blood cell that was exposed to the sound and started changing the electromagnetic field around it; the sound of the Qur'an changes the information this cell carries and makes it more capable of fighting viruses and the defect resulting from malignant diseases.

### What are the healing verses?

Each verse of the Qur'an has an amazing healing power for a specific disease; what is confirmed is that the Prophet, focused on specific chapters and verses, such as reading Al-Fatiha seven times, Al-Kursi verse (verse number 255 in Al-Bakara chapter), the last two verses of Al-Bakara Chapter, and the last three chapters of the Qur'an.

But the whole Qur'an heals; you can read the verses that you hope to cure your illness. For example, if you feel upset, focus your reading on Al-Sharh chapter (Have We not opened your breast for you); if you have a severe headache, read: (Had We sent down this Koran on a mountain, you would surely have seen it humbling itself and rending asunder by the fear of Allah. Such are the parables which we put forward to mankind that they may reflect) (Al-Hashr, 21); if you are suffering from pimples, warts, or skin problems then read: (then it is struck with a fiery whirlwind, so that it is burnt) (Al-Baqarah, 266). If you are afraid, keep repeating Korish chapter, especially the verse:

(and has made them safe from fear) (Korish, 4). A strong cure of depression is the repetition of these verses from the Holy Qur'an: (O mankind! There has come to you a good advice from your Lord (the Koran) and a healing for the diseases in your breasts, a guidance and a mercy for the believers\* Say: "In the Bounty of Allah, and in His Mercy (Islam and the Qur'an); therein let them rejoice." That is better than what wealth they amass (Yunus, 57-58). The greatest prophet used to say hundreds of supplications every day, do you think he was doing it in vain? He was asking Allah to protect him from evil, including diseases. You can say the supplication that protects you from diseases every day: (I seek refuge in Allah's perfect words that are obeyed by the faithful and the immoral from all that He created, made in earth and originated from it, from all that come from heaven and ascend into it, from the seductions of the day and the night, and from the night and day visitors except those who bring good, O you most Gracious). Don't you agree with me that this great prophetic supplication is the best protector from any disease?

you can find in the Qur'an and Sunnah a cure for any disease whether psychological or physical; it is preferred to read the verses in a loud voice so to make your body cells get affected by the sound of the Qur'an and to focus on the sick part and imagine that Allah has cured it; repeat these verses and start each time with Al-Fatiha and finish with Al-Falaq and Al-Nas. You can also ask for the verses that are relevant for your disease.

## Barzakh – Stage between this World and the Hereafter

Allah says: "Before them is a Partition till the Day they are raised up." (Al-Mu'minin: 100). Technically, it stands for an intermediary stage between this life and another life in the Hereafter; it's an interval between death and the Day of Resurrection. The souls of dead people are in different places according to the level of their faith: some will be in the highest paradise with the souls of Prophets and martyrs; some believers will be in a particular place in Paradise before the Day of Judgment; some will have their graves like gardens of Paradise and some will have it like the pits of Hell-Fire. It is reported that dead people feel the footsteps of those who walk over them. It is narrated that the Prophet looked at the people of the well, in which the bodies of the disbelievers killed in the Battle of Badr were thrown and said, "Have you found true what you're

Lord promised you?” Umar asked, “You are addressing dead people.” The Prophet replied, “They hear but cannot reply.”

This transitional period will come to an end when the Hour (as-Saa'ah) begins, after which people will be raised from their graves and will witness the scenes of the Day of Judgment. Even if a person's corpse is not buried in a grave or the body was destroyed, all will still be in this transitional stage of al-Barzakh. In al-Barzakh the deceased is granted some faculties, although different in scope and capacity from the abilities enjoyed by humans in this life. They will be limited in a way that Allah Wills. For example, when the deceased is buried they can hear the footsteps of those who walk away from their graves after the burial. The Prophet said, "When a human being is laid in his grave and his companions return, he hears their footsteps." Therefore, at the time of burial the believer is aware of the comforting presence of the righteous people around his grave for a period equal to the time taken to sacrifice a camel and distribute its meat. As Muslims we must wholeheartedly believe in this, even if scientifically it has been proven that when a person dies all of their senses of reason cease to function, including the ability to hear. Nonetheless, we believe, as Allah, the Almighty has described Himself: To Allah belongs the dominion of the heavens and the earth and all that is therein, and He is Able to do all things.

Truly, he has All-Ability and is the All-Powerful; therefore, He can do what He wishes and as He wishes, even if our feeble and limited intellect cannot comprehend it. At this point, in al-Barzakh, Allah, the Almighty will give the dead body the ability to hear and understand; this offers us a lesson if we are willing to learn. This lesson is that there will come a time when the very people who cared about us will leave us behind. Indeed, there will come a time when no-one will be able to help us except Allah. Those who call upon others besides Allah for help will not be able to seek their help after death, even if they were a Prophet, a Pious Saint or a Friend of Allah. If only man would listen to Allah's command: Do not invoke anyone along with Allah. Make a solemn promise to yourself that you will only call upon the One and Only True Lord alone, the one who is above the Heavens; the one who hears the cry of even the ants within the darkness of the night.

## Delights or Hellish Terrors



Life in al-Barzakh will either be filled with Delights or Hellish terrors, anguish, pain and horror. The very grave that only a few moments ago may have seemed like a mere dark excavation in the ground will either now be one of the gardens of Paradise or one of the ditches of Hell. The Prophet said, “When any one of you dies, he is shown his place in the morning and the evening. If he is one of the people of Paradise then he is one of the people of Paradise, and if he is one of the people of Hell then he is one of the people of Hell”.

An example of the torment of the grave can be found in the Qur’an, when Allah Almighty spoke about Pharaoh’s people: The fire; they are exposed to it, morning and afternoon, and on the Day when the Hour will be established (it will be said to the angels): "Cause Pharaoh People to enter the severest torment”.

These verses and prophetic narrations indicate that the torment of the grave is real and that it is ongoing in the case of some people. If a person is a disbeliever, then there is no way the delight will ever reach him, his torment will be continuous. If a person was a sinner but he was a believer, then his torment in the grave will be equivalent to his sin. For some, the punishment in the grave will not be continuous and it may stop all together.

### Punishment in the grave is of two types:

1. Continuous, it will be reduced during the period between the two blasts of the Trumpet, and then when they are raised from their graves, they will say: “Woe to us! Who has raised us up from our place of sleep”?

Further evidence that this punishment will be continuous is seen in this verse: "They are exposed to the Fire, morning and afternoon". The following prophetic narrations indicate this:

- ✚ The story of the two palm branches, where the Prophet prayed that the punishment of the people in the two graves would be reduced as long as the palm branches did not dry out. So the lessening of the punishment was connected only to the period of time that the branches remained fresh.
- ✚ The story about when the Prophet came to some people whose heads were being smashed with rocks and every time they were smashed they were then restored but they have no respite from that.
- ✚ The story of a man who put on two garments and strutted about in an arrogant manner, so Allah caused the earth to swallow him, he will remain falling till the Day of Resurrection.
- ✚ The story of a disbeliever for whom a door to Hell will be opened in his grave and he will look upon his place in Hell until the Hour comes. In some versions it was said that that a hole will be made in his grave and he will feel its distress and smoke until the Resurrection.

2. The second kind, which will last for a while and then stop.

This is the punishment of some sinners whose sins are not so great. They will be punished in accordance with their sins, then the punishment will be reduced, just as they will be punished in the fire then the punishment will end. The punishment may be stopped by Du'as', charity, seeking forgiveness or the reward of Hajj, this may reach the deceased from some of his relatives or others".

### First Night in the Grave, Day of Judgement and Life after Death

The Messenger of Allah said, "The souls of Believers are inside green birds in trees of Paradise until Allah returns them to their bodies on the Day of Resurrection."

The Messenger of Allah said, "Seek Allah's protection from the Punishment of the Grave, since punishment of the Grave is true."

The Messenger of Allah said, "Verily the grave is the first stopping place for the Hereafter; so if he is saved therein, then what comes after is easy, and if he is not saved therefrom, then that which comes after is harder."

The Messenger of Allah said, "When a dead person is buried two black-blue angels come to him, one called al-Munkar and the other called an-Nakeer, they say to him: 'What did you used to say about this man?' So he says: 'Allah's slave and His Messenger, I bear witness that none has the right to be worshipped except Allah and that Muhammad is His slave and Messenger.' So they say: 'Verily we knew that you would say that.' Then his grave is widened for him to the extent of seventy cubits by seventy, then it is made light for him, then it is said: ' Sleep.' So he says: 'I should go to my family and inform them.' So they say: 'Sleep as a newly married sleeps whom no-one awakes except his favorite wife.' Until Allah raises him up from that place of sleep. And if he is a hypocrite, he says: 'I heard people saying something so I said it too, I don't know.' So they say: 'We knew you would say that.' So it is said to the earth: 'Crush him', so he is crushed until his ribs cross over and he remains in that state of torture until Allah raises him up from that resting place."

The Messenger of Allah said, "The dead person will see both his places, hell and paradise. But a non-believer or a hypocrite will say to the angels, 'I do not know, but I used to say what the people used to say! It will be said to him, 'neither did you know nor did you take guidance by reciting the Qur'an.' Then he will be hit him an iron hammer between his ears, he will cry and that cry will be heard by whatever approaches him except human beings and Jinns."

The Messenger of Allah said, "A righteous man sits in his grave and is not alarmed or afraid, then it is said to him by angels: 'What state were you in?' So he says: 'in the state of Islam.' So it is said to him: 'Who is this man?' So he says: 'Muhammad the Messenger of Allah who came to us with clear signs from Allah, so we believed him.' Then it is said to him: 'Have you seen Allah?' So he says: 'No one sees Allah.' So an opening is made for him in the direction of the Fire, so he sees it, some parts of it smashing into others, and it is said to him: 'Look at what Allah, the Exalted, has saved you from.' Then an opening is made for him in the direction of Paradise, and he looks to its brilliance and what is therein and it is said to him: 'This is your place.' And it is said to him: 'You were upon certain Faith and died upon it and upon it you will be raised up, if Allah wills.' When a wicked man sits in his grave alarmed and terrified and

so it is said to him: 'In what state were you?' So he says: 'I do not know.' So it is said to him: 'Who is this man?' So he says: 'I heard the people saying something so I said it!' So an opening is made for him in the direction of Paradise and he sees its brilliance and what is therein, and it is said to him: 'Look at what Allah has refused you.' Then an opening is made for him in the direction of the Fire, so he sees it crashing against itself and it is said: 'This is your place, you lived upon doubt and died upon it and you will be raised up upon it, if it is Allah's will.'

The Messenger of Allah said, "Everyone who dies, his actions are sealed except for the one guarding the border in the way of Allah, his actions continue to increase for him until the Day of Resurrection and he is saved from the trials of the Grave."