Quran and Modern Science

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The Pioneer

- The first person that explored this subject was a French scientist called Maurice Bucaille.
- “The Bible, the Qur'an and science: the Holy Scriptures examined in the light of modern knowledge”
The Shape of Mountains

- 1/3 of the mountain height is above the surface of the earth
- 2/3 is below the surface of the earth
- This cross section is from the USGS website

- All ancient books and dictionaries define mountains as either a pile of rock on the earth or a wrinkle in the earth crust
- Quran is the only ancient book that defines the shape of mountains as Pegs "Have We not made the earth as a bed and the mountains its pegs?" (The Qur'an, 78:6-7)
Role of Mountains

- Where continents are thicker, as in mountain ranges, the crust sinks deeper into the mantle. Reference (General Science, Carolyn Sheets, Robert Gardner, Samuel F. Howe; Allyn and Bacon Inc. Newton, Massachusetts, 1985, s. 305)
- This role of the mountains is pointed out by a comparison with "pegs"
The Role of Mountains

- Theory of tectonic plates defines the role of mountains is to stabilize the earth crust.
- Mountains clench the plates in the Earth's crust together by extending above and beneath the Earth's surface at the conjunction points of these plates. In this way, they fix the Earth's crust, and prevent it from drifting over the magma stratum or among its plates. Briefly, we may liken mountains to nails that keep pieces of wood together.

- This fixing function of the mountains is described in scientific literature by the term "isostasy".
- Isostasy is the general equilibrium in the Earth's crust maintained by a yielding flow of rock material beneath the surface under gravitational stress. (Webster's New Twentieth Century Dictionary, 2. edition "Isostasy", New York, s. 975)
"We placed firmly embedded mountains on the earth, so it would not move under them..." (The Qur'an, 21:31)

“And He has set up on the earth mountains standing firm, lest it should shake with you; and rivers and roads; that ye may guide yourselves (The Qur'an, 16:15)

Other places in the Quran (13:3, 15:19, 27:61, 31:10, 41:10, 50:7, 27:77)
Subduction Zone and Decrease of Land

- Land is decreasing due to the movements of tectonic plates

- Don’t they See that We gradually reduce the land from its outlying boundaries? Where God commands, there is none to put back His command (Quran 13:41)

- Indeed we gave the good things of this life to these men and their fathers until the period grew long for them; don’t they see our ability in reducing the land from its outlying borders? Is it then they who will win? (Quran 21:44)
Tectonic Plates
Darkness in the Oceans and Seas

- The darkness in deep seas and oceans is found around a depth of 200 meters and below. At this depth, there is almost no light. Below a depth of 1000 meters there is no light at all. (Elder, Danny; and John Pernetta, 1991, Oceans, London, Mitchell Beazley Publishers, s. 27)

- "Or like the darkness of a deep sea which is covered by waves above which are waves above which are clouds, layers of darkness, one upon the other. If he puts out his hand, he can not see it" (The Qur'an, 24:40)
The Seas Not Mingling With One Another

- This property of the seas, that they come together yet do not mingle with one another at all, has only very recently been discovered by oceanographers. Because of the physical force called "surface tension", the waters of neighboring seas do not mix. Caused by the difference in the density of their waters, surface tension prevents them from mingling with one another, just as if a thin wall were between them. (Davis, Richard A., Jr. 1972, Principles of Oceanography, Don Mills, Ontario, Addison-Wesley Publishing, s. 92-93.)

- There are large waves, strong currents, and tides in the Mediterranean Sea and the Atlantic Ocean. Mediterranean Sea water enters the Atlantic by Gibraltar. But their temperature, salinity, and densities do not change, because of the barrier that separates them.
"He has let loose the two seas, converging together, with a barrier between them they do not break through." (The Qur'an, 55:19-20)

It is He Who has let free the two bodies of flowing water: one palatable and sweet, and the other salt and bitter; yet has He made a barrier between them, a partition that is forbidden to be passed (The Qur'an 25:53)

Who has made the earth firm to live in; made rivers in it; set thereon mountains to stabilize it, and made a separating barrier between the two bodies of flowing water? Can there be another God besides Allah? Nay, most of them know not (The Qur'an 27:61)
Breathing Gets More Difficult as You Fly Higher

- As you fly higher, the air has less and less oxygen and breathing gets more difficult. You may feel that your breast is constrained.
- And Those Whom God wants to keep astray, He makes their breast close and constricted, as if they had to climb up to the skies; this is the penalty of those who refuse to believe (Quran 6:125)
The Region That Controls Our Movements

- The motivation and the foresight to plan and initiate movements occur in the anterior portion of the frontal lobes, the prefrontal area. This is a region of association cortex... (Seeley, Rod R.; Trent D. Stephens; and Philip Tate, 1996, Essentials of Anatomy & Physiology, 2. edition, St. Louis, Mosby-Year Book Inc., s. 211; Noback, Charles R.; N. L. Strominger; and R. J. Demarest, 1991, The Human Nervous System, Introduction and Review, 4. edition, Philadelphia, Lea & Febiger, s. 410-411)

- In relation to its involvement in motivation, the prefrontal area is also thought to be the functional center for aggression... (Seeley, Rod R.; Trent D. Stephens; and Philip Tate, 1996, Essentials of Anatomy & Physiology, 2. edition, St. Louis, Mosby-Year Book Inc., s. 211)

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

- Until fairly recently, it was thought that a baby's sex was determined by the mother's cells. Or at least, it was believed that the sex was determined by the male and female cells together.

- The Quran is the only ancient book that states that sex is determined by the sperms.

- "He has created both sexes, male and female from a drop of a sperm which has been ejected." (The Qur'an, 53:45-46)
Order of Formation of the Human Body

- Embryology is the branch of science that studies the development of the embryo in the mother’s womb. Until very recently, embryologists assumed that the bones and muscles in an embryo developed at the same time.

- Recent research proved that “During the seventh week, the skeleton begins to spread throughout the body and the bones take their familiar shapes. At the end of the seventh week and during the eighth week the muscles take their positions around the bone forms. (Moore, Developing Human, 6. edition, 1998.)

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

- “We did create the human from a clay product; Then we placed a drop of sperm (Nutfah) in a place firmly fixed; Then we made the sperm into a leach structure (‘Alaqah); Then of that leach we made a chewed-like structure; then we made out of that chewed-like structure bones and clothed the bones with flesh; then we developed out of it another form of creation” (Quran 23:12-14).

- This verse from the Quran identifies the stages of pre-natal development as follows:
  1. Nutfah, which means “a drop” or “small amount of water”;
  2. ‘alaqah, which means a “leech-like structure”;
  3. mudghah, which means a “chewed-like structure”;
  4. ‘idhaam, which means “bones” or “skeleton”;
  5. kisaa ul idham bil-laham, which means the clothing of bones with flesh or muscle;
  6. al-nash'a which means “the formation of distinct fetus”.

The reference book is "The Developing Human"

Professor Moore is the author of the book entitled "The Developing Human". He is Professor Emeritus of Anatomy and Cell Biology at the University of Toronto, Canada, where he was Associate Dean of Basic Sciences at the Faculty of Medicine and the Chairman of the Department of Anatomy. He is the J.C.B. Grant Award from the Canadian Association of Anatomists.
Three Veils of darkness

- It was not until the 1970s when the operation of tube babies started that scientists discovered that if the mixing of the sperm and the egg took place in light, the resulting fetus will deform and die.
- “Allah Created you in the womb of your mothers, one form of creation after another, in three veils of darkness” (Quran 39:6)
- The three layers are understood as the abdominal wall, the uterine wall, and the membranes.
Until the dawn of the 20th century, the only view prevailing in the world of science was that "the universe has a constant nature and it has existed since infinite time". The research, observations, and calculations carried out by means of modern technology, however, have revealed that the universe in fact had a beginning, and that it constantly "expands".

"And it is We who have constructed the heaven with might, and verily, it is We who are steadily expanding it." (The Qur'an, 51:47)
Iron did not Form in Our Solar System

- Modern astronomical findings have disclosed that the iron found in our world has come from the giant stars in outer space.

- The heavy metals in the universe are produced in the nuclei of big stars. Our solar system, however, does not possess a suitable structure for producing iron on its own. Iron can only be produced in much bigger stars than the Sun, where the temperature reaches a few hundred million degrees. When the amount of iron exceeds a certain level in a star, the star can no longer accommodate it, and eventually it explodes in what is called a "nova" or a "supernova". As a result of this explosion, meteors containing iron are scattered around the universe, and they move through the void until attracted by the gravitational force of a celestial body.

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

- Because stars are many Millions of light years away from us, we do not see the actual star but we see the position of the star Millions of years ago. Sometimes the star no longer exists.

- The Quran did not refer to the stars themselves because many of them do not exist and what we see is their positions.

- “I swear by the positions of stars” (Quran 56:75)
The Sun has Its Own Light but not the Moon

- The sun has its own light but the moon doesn’t

- “And (see) how He has made the moon a light and the Sun a lamp.” (Quran 10:5)

- “Blessed is He Who has placed in the heavens great stars and placed therein a great lamp and a Moon giving light.” (Quran 25:61)

- “It is He who made the Sun a light-giving object and the Moon a light.” (Quran 71:16)
The Qur'an is the word of God and it has many miraculous attributes proving this fact. One of these attributes is the fact that a number of scientific truths that we have only been able to uncover by the technology of the 20th century were stated in the Qur'an 1,400 years ago. Of course the Qur'an is not a book of science. However, many scientific facts that are expressed in an extremely concise and profound manner in its verses have only been discovered with the technology of the 20th century. These facts could not have been known at the time of the Qur'an's revelation, and this is still more proof that the Qur'an is the word of God.

Links:
- The Qur'an and Astronomy
- The Qur'an and Physics
- The Qur'an and Earth
- The Qur'an and Biology
- The Information Given About the Future in the Qur'an
- The Knowledge of the Qur'an

More information can be found at:
http://www.miraclesofthequran.com