

Question 37: Rotation of The Earth

Question: Astronomers believe that the shape of the Earth is spherical and it revolves around its axis; is it confirmed by science or still undecided?

And if the Earth really revolves what are its scientific and perceptible signs?

What is the reason that the Polestar, by means of which direction of Qibla is ascertained, always shows up at the same location?

Other than this, is there any matter available in the Holy Qur'an and Islamic traditions that supports this?

Answer: In the present age it is scientifically proved that earth is spherical and it rotates around its axis and for this different arguments are given. The most evident proof of the movement of the earth is the "Proof of Pendulum".

It is that if a heavy thing is hung with a rope that it can oscillate freely; when it is moved, it continues its movement for quite a long time. Now if the earth were immobile and without movement, then it is necessary that, the movement of the related thing should be up to a fixed line, but experience shows that the movement is not up to a fixed line and that it gradually moves away from the first line.

It is also known by this experience that the earth always moves from one fixed direction toward the other. The direction of this movement, which is from West to East, can be determined by the cause of lines. (For better understanding and explanation of this argument take the benefit of the books on astronomical science in which different sketches are present).

In the same way it is known by experience that if a stone is slowly left to fall from a height it does not fall in an exactly straight line but it falls slightly towards the West; and this shows that earth is moving from West to East.

Of course, what we see that the Polestar is always at one place, it is so because it is situated almost opposite to the axis of the earth. It is obvious that if a ball is turned round on its axis (for example a needle is pierced in the middle of an apple and the apple is rotated around the needle) then the point of

the axis will always remain the same. For example the tip of the needle will always remain at the same place. That is reason that the polestar is always seen at one place.

As far as the behavior of earth is concerned, we should pay attention towards the point in front (lower part of the earth), since the shape of earth is almost like a ball. Wherever we go we will see its behavior as the same. That is we find the point above our head will be sky and the point below our feet will be earth and the gravitational pull keeps us on the land everywhere.

There are many stars, which are seen in the southern hemisphere and cannot be seen in the northern hemisphere and contrary to that planets also can be seen sometimes from one part and sometimes from other parts of the earth. The summary of this discussion is this that the logical behavior of the planet, which is opposite to us, is exactly like the one on which we live.

Following are some verses and traditions that support the theory of the rotation of the earth.

(1) And you see the mountains you think them to be solid, and they shall pass away as the passing away of the cloud – the handiwork of Allah who has made everything thoroughly. [1](#)

Sometimes it is considered that this verse has connection with Qiyamat. That man will see the mountains in that condition on the Day of Resurrection but the sentence; **the handiwork of Allah who has made everything thoroughly**, negates this, because this passage of writing is not concordant to the day of resurrection and the day of Qiyamat is not the day for Allah to be resolute; but it is the day when the Solar System would be destroyed. And at the end of the verse, Allah mentions the permanence of His creation in clear words not through the revolutionary changes, but it denotes stability of the system.

The apparent meaning of the verse points out that the mountain is in motion, though they appear to be stationary and motionless. It is possible that here a question may be asked that why has Allah mentioned the movement of mountains instead of the movement of earth, whereas the movement of mountains is subordinate to the movement of earth? And wasn't it more appropriate that instead of (mentioning the) movement of the mountains the earth's movement were mentioned?

Nevertheless the answer to this question is clear, and it is that when a sphere rotates around its axis its movement is apparent by means of those teeth, and marks and paints, which are engraved on it. Other than that mountain is mentioned because it has always remained a sign of greatness and eminence and is a universally admitted fact that without the movement of the earth the movement of mountains does not have any meaning and sense.

One point worth attention is that instead of motionlessness, the word inertness is used, because this word, in this context is more according to the expression and the thought of the earth being stationary to express (regarding which the man gets engaged in misgivings) is more evident.

The reason Qur'an compares the movement of the mountains to the movements of clouds because the movement of the earth is just like the movement of clouds; being quiet, smooth and swift.

(2) **(Allah) *Who made the earth for you a cradle...***[2](#)

The Holy Qur'an compares our earth to the cradle and it is possible that the reason of such comparison may be that the as the rocks softly in circulatory movement, the same is also the movement of the earth.

[1.](#) Surah Naml 27:88

[2.](#) Surah Taha 20:53

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