# Does the Qur'an allude to scientific developments?

Before answering this question, we should point out one important fact: Considering science as opposed to religion and scientific study as separate from and independent of the Qur'an is just as mistaken as trying to reduce the Qur'an to a science textbook by showing that every new scientific theory or fact can be found in it.

For example, some have claimed, especially in Turkey, that the dabbet al–ard (a little moving creature) mentioned in Qur'an 27:82 is the virus that causes AIDS. However, this is a hasty conclusion for several reasons: the Qur'an is silent about this dabbe's nature; if we accept this assertion, we also must accept other venereal disease-causing bacteria or viruses; and, we cannot know whether new and more lethal viral diseases will appear in the future. The context in which dabbet al-ard appears suggests that it will emerge toward the end of this world, when almost no one believes in God. So, we must not show haste in trying to find some type of correspondence between a Qur'anic verse and every new development in science and technology.

Scientific theories are usually like clothes—both are discarded after a while. Trying to show that every new scientific fact or theory can be found in the Qur'an displays the Muslim world's inferiority complex and makes science more important than the Qur'an. Each Qur'anic verse and expression has a universal content. Therefore, any time-specific interpretation can address only one aspect of that universal content.

Every interpreter, scientist, and saint prefers a particular aspect as a result of his or her spiritual discovery or intuition, personal evidence, or natural disposition. Besides, we accept both Newton's physics and Einstein's physics as science and therefore true. Although in absolute terms both may be false, there certainly must be some truth in both.

Causality is a veil spread by God Almighty over the rapid flux of existence so that we can plan our lives to some degree. This means that Newton's physics and Einstein's physics are only relatively true. In short, while pondering the Qur'anic verses, we should consider the relative truths found in existence and our lives, which are much more numerous than the unchanging absolute truths.

Qur'anic expressions have multiple meanings. For example, consider the verses: He let forth the two seas that meet together, between them a barrier, they do not overpass (55:19-20). These verses indicate all the pairs of “seas” or realms, spiritual and material, figurative and actual, from the realms of Lordship and servanthood to the spheres of necessity and contingency, from this world to the Hereafter (including this visible, corporeal world and all unseen worlds), the Pacific and Atlantic oceans, the Mediterranean and Red seas, salt water and sweet water in the seas and underground, and such large rivers as the Euphrates and Tigris that carry sweet water and salty seas to which they flow. All of these, together with many others I do not need to mention here, are included in these verses, whether literally or figuratively.

So even if a Qur'anic verse or expression appears to point exactly to an established scientific fact, we should not restrict its meaning to that fact. Rather, we should consider all other possible meanings and interpretations as well.

On the other hand, sometimes the Qur'an does point or allude to specific scientific developments and facts. Being the Divine Revelation that includes everything of wet or dry (6:59), it cannot exclude them. Indeed, it refers to them directly or indirectly, but not in the manner of science and materialistic or naturalistic philosophy.

The Qur'an is not a science textbook that has to expound upon cosmological or scientific matters; rather, it is the eternal interpretation of the Book of the Universe and the interpreter of all natural and other sciences. It comments upon the visible and invisible worlds, and discloses the spiritual treasures of the Divine Beautiful Names in the heavens and the Earth. The Qur'an is the key leading to an understanding of the hidden realities behind events taking place in nature and human life, and is the tongue of the hidden worlds in the manifest world.

The Qur'an is like the sun shining in the spiritual and intellectual sky of Islam. It is the sacred map of the next world; the expounder of the Divine Attributes, Names, and acts; and the educator of humanity that guides us to truth and virtue. It is a book of law and wisdom, worship and prayer, Divine commands and prohibitions. Fully satisfying our spiritual and intellectual needs, it leaves no theological, social, economic, political, or even scientific issue undiscussed, whether in brief or in detail, directly or through allusion or symbols.

The Qur'an considers creation only for the sake of knowing its Creator; science considers creation only for its own sake. The Qur'an addresses humanity; science addresses only those who specialize in it. Since the Qur'an uses creation as evidence and proof to guide us, its evidence must be easily understandable to all of us non-specialists. Guidance requires that relatively unimportant things should be touched on briefly, while subtle points should be discussed as completely as possible through parables and comparisons. So that people are not confused, guidance should not change that which is obvious. If it did, how could we derive any benefit?

Essentially, like everything else, science has its source in one of God Almighty's Beautiful Names. The Name All-Healing shines on medicine; geometry and engineering depend on the Names All-Just, All-Shaping, and All-Harmonizing; and philosophy reflects the Name All-Wise. As pointed out above, the Creator refers in the Qur'an to everything that He has allowed us to learn and use for our material and spiritual progress.

The Qur'an's primary aims are to make God Almighty known, to open the way to faith and worship, and to organize our individual and social life so that we may attain perfect happiness in both worlds. To achieve this aim, it refers to things and events, as well as scientific facts, in proportion to their importance. Thus the Qur'an provides detailed explanations of the pillars of faith, the fundamentals of religion, the foundations of human life, and essentials of worship, but only hints at other relatively less significant things. The meaning of a verse may be compared to a rosebud: it is hidden by successive layers of petals. A new meaning is perceived as each petal unfolds, and people discover one of those meanings according to their capacity and are satisfied with it.

**Examples**

One way the Qur'an hints of technological advances and marks their final development is by mentioning **the Prophets' miracles**.

It encourages us to fly in the air and alludes implicitly to the fact that one day we will make spaceships and aircraft:

*And to Solomon (We subjugated) the wind; its morning course was a month's journey, and its evening course was a month's journey (34:12).*

It invites us to learn **how to cure every illness**: (Jesus said):

*I also heal the blind and the leper, and bring to life the dead, by the leave of God (3:49),*

and hints that one day we will be so successful that people will find it hard to believe that they will actually die.

The verse:

*Said he who possessed knowledge of the Book: “I will bring it (the throne of the Queen of Saba') to you (to Solomon in Jerusalem) before ever your glance returns to you” (27:40),*

foretells that one day images or even physical items will be transmitted instantly through knowledge of the Divine Book of the Universe, just as those who have knowledge of the Book of Divine Revelation can bring things from a long distance in the blink of an eye.

The Qur'an symbolically informs us that it might be possible to identify a murderer by some cells taken from his body at the time of death by narrating that a murderer was revealed in the time of Prophet Moses, upon him be peace, by smiting the slain man with part of a cow that God Almighty ordered the Children of Israel slaughter (2:67-73).

Below are further examples to illustrate the Qur'an's allusions to scientific facts and developments.

The Creator, Who is not bound by **the human concept of time**, informs us that, in a general sense, the future will be the age of knowledge and information, as well as an age of faith and belief:

*Soon We shall show them Our signs in the outer world and in their own souls, until it becomes manifest to them that this is truth. Is it not enough that your Lord witnesses all things? (41:53).*

From the very early days of Islam, Sufis have interpreted this verse as a sign and assurance of the spiritual wisdom for which they strive. But if the verse is read in the context of scientific progress, a progress significantly initiated and advanced by Muslims, the mere fact of the verse will be seen to be a miracle.

Everything within the fold of human thinking and research affirms the Creator's Oneness, as the true nature and interrelationship of microcosm and macrocosm come to be further disclosed and better understood. When we see hundreds of books on this point, we understand that what was Divinely revealed is near at hand. Even now we feel that we shall soon hear and even understand testimonies and praises to God through thousands of nature's tongues:

The seven heavens and the Earth, and all things therein, declare His Glory. There is not a thing but celebrates His praise. And yet you do not understand how they declare His Glory. Truly He is Oft-Forbearing, Most Forgiving. (17:44)

We already understand something of this verse's import. **The smallest atoms as well as the largest nebulae speak to us**, in the language of their being, of their submission to the One God and so glorify Him. However, those who can listen to and understand this universal praise are very few.

What the Qur'an reveals about **the embryo's formation and developmental phases** in the uterus is striking. Consider the following:

O mankind! If you have a doubt about the Resurrection, (con-sider) that We created you out of dust, then out of sperm, then out of a leechlike cloth, then out of a lump of flesh, partly formed and partly unformed, in order that We may manifest (what We will) to you. (22:5)

In another verse, this development is explained in greater detail, and the distinct phases are emphasized more clearly:

Man We created from a quintessence (of 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 (embryo); then we made out of that lump bones and clothed the bones with flesh. Then We de-veloped out of it a new (distinct, individual) creature. (23:12–14)

What the Qur'an says about **milk and its production** is as brilliant as the drink itself, and our understanding of it has brought us great benefits: And verily in cattle (too) will you find an instructive sign. From what is from their bodies, between excretions and blood, We produce, for your drink, milk, pure and agreeable to those who drink it (16:66).

The Qur'an narrates the process in remarkable detail: part-digestion and absorption of what is ingested as food, and then a second process and refinement in the glands. Milk is a wholesome and agreeable source of human nourishment, and yet its owner rejects it as useless.

The Qur'an reveals that **all things are created in pairs**:

Glory be to God, who created in pairs all things, of what the earth produces, of themselves, and of which they have no knowledge (36:36).

Everything that exists has counterpart, whether opposite or complementary. The complementarity of human, animal, and certain plant genders has long been known. But what about the pairs of things of which we have no knowledge? This may refer to a whole range of entities, inanimate as well as animate. In the subtle forces and principles of nature within (and among) animate or inanimate entities, there are many kinds of pairs. All things, as our modern instruments confirm, occur in twos.

The Qur'an recounts, in its own unique idiom, **the first creation of the world and its living inhabitants:**

Do not the unbelievers see that the heavens and the earth were joined together (as a single mass), before We clove them asunder? We made from water every living thing. Will they not then believe? (21:30).

This meaning of this verse is clear, and should not be obscured with hypotheses as to whether the primary material in creation is an ether or a large cloud, a huge nebula or a mass of hot gas, or something else. The Qur'an states that every living thing was created of wa-ter. Whether the water itself was caused by gases and vapors rising from the ground, condensing, and then returning as rain to form seas and prepare a suitable environment for life, or by some other process, is relatively unimportant.

The verse explicitly presents the universe as a single miracle of creation. Each thing in it is an integral part of that miracle, and contains signs that prove its claim. Everything is interconnected, just like the leaves of a massive tree—they are all different, but resemble each other and are linked to a common root. The verse also emphasizes water's vitality and significance, for it constitutes three-fourths of the body mass of most living creatures.

**The sun has a special and significant place.** The Qur'an reveals its most important aspects in four words, whose full meaning cannot be rendered easily:

And the sun runs its course (mustaqarr) determined for it. That is His decree, the Exalted in Might, the All-Knowing (36:38).

Given the context, mustaqarr may mean a determined orbit, a fixed place of rest or dwelling, or a determined route in time. We are told that the sun follows a predetermined course toward a particular point. Our solar system is heading toward the constellation Lyra at an almost inconceivable speed: Every second we come ten miles closer (almost a million miles a day). Our attention also is drawn to the fact that when the sun finishes its appointed task, it will abide by a command and come to rest.[[1]](#footnote-1)

Such is the richness of the Qur'an, which explains many truths in so few words. Here, in only four words, many vague things were clarified at a time when people generally believed that the sun made a daily circuit around the Earth.

Another inspiring and eloquent Qur'anic verse concerns **the universe's expansion**, mentioned in only four words: And the firmament:

We constructed it with power and skill, and We are spreading it (51:47–48).

The verse reveals that the distance between celestial bodies is increasing, which means that the universe is expanding. In 1922, the astronomer Hubble claimed that all galaxies, except the five closest to Earth, are moving further away into space at a speed directly proportional to their distance from the Earth. According to him, a galaxy one million light years distant is moving away at a speed of 168 km/year, a galaxy two million light years distant at twice that speed, and so on. Le Maître, a Belgian mathematician and priest, later proposed and developed the theory that the universe is expanding. No matter how we try to express this reality, whether through Hubble's coefficient or a future theory, the Revelation is unmistakably clear on the reality itself.

The Qur'an provides some indication of **the invisible operation of various laws as attraction and repulsion, rotation and revolution**:

God is He Who raised the heavens without any pillars that you can see (13:2).

All celestial bodies move in order, balance, and harmony. They are held and supported by invisible pillars, some of which are repulsion or centrifugal forces:

He holds back the sky from falling on earth, except by His leave (22:65).

At any moment, the heavens could fall upon the Earth. That the All-Mighty does not allow this to happen is yet another instance of the universal obedience to His Word. Modern science explains this as a balance of centripetal and centrifugal forces. What is of far greater importance, however, is that we turn our minds to that obedience and to the Divine Mercy that holds the universe in its reliable motion, rather than deciding to follow Newton's or Einstein's theories about the mechanical and mathematical terms of that obedience.

Previously, some Qur'anic commentators thought **a reference to traveling to the moon**, once considered a very remote possibility, could be found in:

By the moon's fullness! You shall surely travel from stage to stage (84:18–19).

Earlier commentators took this as a figurative reference to our spiritual life, an ascent from one stage to the next, and from one heaven to another. Others interpreted it as referring to change in general, from one state to another. Later interpreters gave ambiguous meanings, because the literal meaning did not agree with their beliefs about travelling such distances. But in fact, the more appropriate sense of the words following the oath By the moon! given the verse's immediate con-text, is that of really travelling to the moon, whether literally or figuratively.

The Qur'anic description of **the Earth's geographical shape** and change in that shape are particularly interesting:

Do they not see how We gradually shrink the land from its outlying borders? Is it then they who will be victors? (21:44).

The reference to shrinking from its borders could relate to the now-known fact that the Earth is compressed at the poles, rather than to the erosion of mountains by wind and rain, of coastal areas by the sea, or of the gradual desertification of agricultural land.

At a time when people generally believed that the Earth was flat and stationary, the Qur'an explicitly and implicitly revealed that it is round. More unexpectedly still, it also says that its precise shape is more like an ostrich egg than a sphere: After that He shaped the Earth like an egg, whence He caused to spring forth the water thereof, and the pasture thereof (79:30–31).

The verb daha' means “to shape like an egg,” and its derived noun da'hia is still used to mean “an egg.” As this scientific fact may have appeared incorrect to scientists living before the advent of modern science, some interpreters misunderstood the word's meaning. They understood it as “stretched out” perhaps fearing that its literal meaning might be difficult to understand and thus mislead people. Modern scientific instruments recently established that the Earth is shaped more like an egg than a perfect sphere, and that there is a slight flattening around the poles as well as a slight curving around the equator.

As a last example, consider what the Qur'an says about **the sun and the moon**:

We have made the night and the day as two signs; the sign of the night We have obscured, while the sign of the day We have made to enlighten you (17:12).

According to Ibn 'Abbas, the sign of the night refers to the moon, and the sign of the day to the sun. Therefore, from the sign of the night We have obscured, we understand that the moon once emitted light just as the sun does, and that for some reason God took away its light, causing it to darken or become obscured. While the verse accurately recounts the moon's past, it also points to the future destiny of other heavenly bodies.

Many other verses are related to what we now call scientific facts. Their existence indicates that our quest for knowledge is a portion of Divine Mercy graciously bestowed by our Creator. Indeed, Divine Mercy is one of the Qur'an's names for itself. All the truth and knowledge that it contains is beyond our ability to recount or even to hold in our mind.

We must remember, however, that while the Qur'an alludes to many scientific truths, it is not a textbook of science or scientific explanations. Rather it is, and has always been understood by believers to be, the book of guidance that teaches us the way to right belief and right action so that we may be worthy of Divine Mercy and Forgiveness. It is our responsibility to ensure that the pursuit of scientific and other kinds of knowledge is conducted in the light of the Qur'an, which so encourages and supports it. Such an approach results in knowledge that will not engender arrogance and self-pride, for such feelings lead to mental desolation and human degradation, not to mention the degradation of the Earth, our temporary home and Divinely given trust.

Before elucidating other meanings and connotations, remember that earlier peoples' sense derived information led them to believe that the sun moved around a motionless Earth. Science and observation later showed that the Earth spins on its own axis and orbits the sun, which is relatively motionless. First, since people see the sun moving, the Qur'an mentions it as moving. Second, the Qur'an mentions the sun here to illustrate the magnificent order prevailing throughout the universe as a sign of God's Might and Knowledge:

A sign for them is the night. We strip it of the day, and behold! they are in darkness. And the sun moves (in its course) to a resting place for it. That is the measuring and ordaining of the All-Mighty, the All-Knowing. And for the moon We have appointed mansions till it returns like an old shriveled palm leaf. It is not for the sun to overtake the moon, nor does the night outstrip the day. They float, each in an orbit. (36:37-40)

We understand from this context that the sun's function is vital. The word mustaqarr (stability) applies to is course and the place in which stability is secured. So, the statement can mean that the sun has a central position in the universe's order. Second, the preposition used here, li, has three meanings: for, to, and in. Therefore, the exact meaning of this statement is: The sun moves following a route or course to a fixed place determined for it for the purpose of its (system's) stability.

Recently, solar astronomers have observed that the sun is not motionless; rather it quivers, shakes, and continually rings like a well hit gong. (Bartusiac, M. (1994) 'Sounds of the Sun', American Scientist, January-February, pp.61-68) The resulting vibrations reveal vital information about its deep interior and hidden layers, information that affects calculations of the universe's age. Also, knowing exactly how the sun spins internally is important in testing Einstein's theory of gen-eral relativity. Like so many other significant findings in astronomy, this one was totally unexpected. Some astronomers have commented that it is as if the sun were a symphony orchestra, with all its instruments being played simultaneously. At times, all the vibrations combine to produce a net oscillation on the solar surface that is thousands of times stronger than any individual vibration.

Commenting on the Qur'anic verse: The sun moves to a resting-place for it, several decades before this totally unexpected discovery, Said Nursi wrote:

As the word “moves” points to a style, the phrase “in its course” demonstrates a reality. The sun, like a vessel built of gold, travels and floats in the ocean of the heavens comprising ether and defined as a stretched and tightened wave. Although it quivers and shakes in its course or orbit, since people see it running, the Qur'an uses the word “travel” or “float.” However, since the origin of the force of gravity is movement, the sun moves and quivers in its orbit. Through this vibration, which is the wheel of its figurative movement, its satellites are attracted to it and preserved from falling and scattering. When a tree quivers, its fruits fall. But when the sun quivers and shakes, its fruits—its satellites—do not fall.

Again, wisdom requires that the sun should move and travel on its mobile throne—its course or orbit—accompanied by its soldiers—its satellites. For the Divine Power has made everything moving, and condemns nothing to absolute rest or motionlessness. Divine Mercy allows nothing to be condemned to inertia, which is the cousin of death. So the sun is free; it can travel, provided it obeys the laws of God and does not disturb others' freedom. So it may actually be travelling, as its travel-ling may also be figurative. However, what is important according to the Qur'an is the universal order, the wheel of which is the sun and its movement. Through the sun, the system's stability and orderliness are ensured.

1. The sun moves (in its course) to a resting place for it (36:38). [↑](#footnote-ref-1)