

A Study of the Qur'ānic Approaches towards Cosmology

☆Dr. Aysha Naeem

Lecturer, Virtual University, Lahore, Pakistan

☆☆Dr. Hafiz Sfarish Ali

Lecturer GC University, Lahore, Pakistan



Citation :

Naeem, Dr. Aysha and Dr. Hafiz Sfarish Ali "A Study of the Qur'ānic Approaches towards Cosmology." Al-Idrāk Research Journal, 4, no.1, Jan-June (2024): 1– 22.

ABSTRACT

Cosmology deals with theoretical concepts of astronomy that belong to evolution, origin and the future of the universe. Cosmologists have a special concern about the origin and future of the universe. The Qur' ān has such exclusive features as no other revealed book has. If we associate it with the discoveries of present age, it comes to know that it unseals new possibilities and boulevards which brace our faith. The Qur' ān consists of the facts related to science and universal phenomenon in a way that any person who has no prejudice against the Qur' ān should not have any reluctance to accept the miracles of the Qur' ān. The research paper aims at to unveil reality of cosmology presented in the Qur' ān centuries ago.

Key Words: The Qur' ān, Cosmology, Big bang, Big Crunch, Creation, Expansion

Introduction

The Qur'ān is not the book dealing with the facts of science and other disciplines of knowledge directly but it does talk about many of them in terms of the creation, temporal nature of it, its ending and the life hereafter indirectly. The Qur'ān is the source of knowledge of every type. Many scholars have been the exponent of this view. Imām Ghazālī says in *Iḥyā 'Ulūm al-Dīn*,

وذلك لا يحصل بمجرد تفسير الظاهر وبالجملة فالعلوم كلها داخلة في أفعال الله عز وجل وصفاته وفي القرآن شرح ذاته وأفعاله وصفاته وهذه العلوم لا نهاية لها وفي القرآن إشارة إلى مجامعها والمقامات في التعمق في تفصيله راجع إلى فهم القرآن.¹

You might say that there are many sciences in it other than this, like medicine, astrology, cosmology, anatomical dissection of animals magic and others.

The principle of these sciences, which we have enumerated and it is not required by only external exegesis. And all types of knowledge are included in the actions of Allah and his attributes of Holy being, the actions and attributes have been explained in the Holy Qur'ān, there is no limit of these sciences and the Holy Qur'ān alludes to them collectively. The detail of the expressions that are deep in meaning and deep end on one understands of the Qur'ān and the apparent exegesis of it.

In “Jawāhir al- Qur'ān” (The Jewels of the Qur'ān), the chapter entitled “The Stemming of the Sciences of the Ancients and the Moderns from the Qur'ān Imām Ghazālī discuss it as:

ولعلك تقول: إن العلوم وراء هذه كثيرة، كعلم الطب والنجوم، وهيئة العالم، وهيئة بدن الحيوان وتشريح أعضائه، وعلم السحر والطلسمات، وغير ذلك.²

“And of those which we have not specified, are not outside the Qur'ān, for all of these sciences are drawn from one of the seas of knowledge of God—may He be exalted—i.e., the sea of His works”.

The Qur'ān is a sea having no shore. The Holy Qur'ān applauds that we look round the earth to observe the beginning of creation; this means that we have to achieve scientific realities through our senses. It is contrary to the essence of the Qur'ān that Muslims should remain sluggish while others get access to some of the mysteries of nature, and then we use their discoveries and depend on them.

According to the Holy Qur'ān, we can get access to cognition of nature if we use our senses and intellect. In fact, the main reason that our great scholars, in the glorious period of Islamic civilization, paid attention to foreign (e.g., Greek) sciences was due to the Qur'ān's emphasis on the study of nature. They studied nature to discover the mysteries of creation

1 Abū Hāmid Muḥammad bin Muḥammad al Ghazālī al ṭusī Imām, Iḥyā –al-'ulūm al-Dīn, (Dār al-Ma'rifah Bayrūt), vol. 1, p.289.

2 Ghazālī Imām, Jawāhir al- Qu'ān (Bayrūt: Dār Iḥyā al-Ulūm, 1986), p.45.

and to become aware of Allah's wisdom and power. Al-Biruni¹ has explicitly stated that the motive behind his research in scientific fields is Allah's words in the Qur'an.

In Sūrah Āl 'Imrān:

وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ بِدَا بَاطِلًا²

“And contemplate the [wonders of] creation in the heavens and the earth, [With the thought]: "Our Lord! not for naught Hast Thou created [all] this”

The fact which persuades human beings to ponder about the creation of the heaven and the earth, a creation which is purposeful and not vain. The study of the so-called scientific verses in the Qur'an should motivate Muslims to go after natural and physical sciences, The world consists everything is organized and focused on the majesty of Allah.

There are many views about the creation of the universe. Maurice Bucaille³ said in this context:

- 1) Existence of six periods for the Creation in general.
- 2) Interlocking of stages in the Creation of the Heavens and the Earth.
- 3) Creation of the Universe out of an initially unique mass forming a block that subsequently split up.
- 4) Plurality of the Heavens and of the Earths.
- 5) Existence of an intermediary creation 'between the Heavens and the Earth'.

Cosmology

In cosmology, theoretical concepts of astronomy are discussed that belongs to evolution, origin and the future of universe. Cosmologists have a special concerned about the origin and future of the universe.

Cosmology is defined as:

“Cosmologists ponder particular about the origins and the future of the universe dealing with universe as a whole”.⁴

1 Mehdi Golshani, The scientific dimension of the Qur'an, Retrieved on April 25, 2015.

2 Al-Qur'an 3:191

3 Maurice Bucaille, The Bible Qur'an and Science, tr. Alastair D. Pannell & Author (Karachi: Darul-Ishaat Urdu Bazar -1, 2004), p.142.

4 Techhydra. com/science/branches of physics, retrieved Feb 6.2016.

The concepts such as the big -bang, dark matter, black holes and expansion of the known universe are the major areas of cosmology. The term علم الكونيات is used for cosmology in Arabic language.

1. Big Bang Theory

Our universe came in to being nearly fifteen billion years ago. Before 1950 people believe on 'steady state theory'. The axiom of this theory was:

“An eternal universe without beginning or end suggested no need for God either”.¹

In 1950's the Big Bang theory was first propounded by Ralph Alpher, Hans Bethe and George Gamow, starting from the Einsteinium concept that the universe had to expand. . According to the Astrophysical knowledge it can be said that the Big Bang theory dealing with the vast primordial explosion At the result of this explosion the universe came in to being as follows²

Being a Muslim we cannot believe the idea of the eternal universe, because the Holy Qur'an does not verify this type of concept. The only eternal is the Allah Almighty. Everything in the universe, and also the universe is created by him. The Holy Qur'an declares this fact in Sūrah Al-An'am:

3 الْحَمْدُ لِلَّهِ الَّذِي خَلَقَ السَّمَوَاتِ وَالْأَرْضَ وَجَعَلَ الظُّلُمَاتِ وَالنُّورَ

“Praise be Allah, Who created the heavens and the earth, and made the darkness and the light. Yet those who reject Faith hold [others] as equal, with their Guardian-Lord”.

This verse of the Holy Qur'an sheds light on the fact that all of these are not eternal. It must have starting, also will be ended. Nothing is absolute but Allah Almighty.

Sūrah Al-Maryam also verifies this truth as:

4 إِذَا قَضَىٰ أَمْرًا فَإِنَّمَا يَقُولُ لَهُ كُنْ فَيَكُونُ⁴

“When He determines a matter, He only says to it, ‘Be’, and it is”.

1 Sultan Bashir Mahmood, The Miraculous Qur'an a Challenge to Science and Mathematics (Islamabad: Dar-ul-Hikmat International, 2010), p.16.

2 Nur Baqi Haluk, Qur'ani Āyāt 'aur science Hqā'iq, tr, Gilani, Muhammad Feroz Shah, Syed (Karachi: Indus Publishing Corporation, 2000), pp.233-237.

3 Al Qur'an 6:1

4 Al-Qur'an 19:35

The most accepted theory about the universe is Big Bang theory that rejects the eternity of the universe.

This theory states that

“The universe burst into existence out of nothing, with an awesome explosion, nearly fifteen billion years ago”¹.

In 1965 Arno Penzias and Robert Wilson, the two American scientists, discovered cosmic background radiations and prove that physical universe began from a single entity which they name Minute cosmic egg something which was carrying tremendous energy. It suddenly burst and resulted in the creation of different strata of this universe and later different galaxies were formed. The four basic forces² also came into being, had discussed earlier under the topic of energy. This process is going on at tremendous rate and so the universe is continuously expanding.³ Do not the Unbelievers see that the heavens and the earth were joined together [as one unit of creation], before we clove them asunder? The Qur'an presents this idea of 'Big Bang' fourteen centuries ago in Sūrah Al-Anbiyā' as :

أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا⁴

All the strata of the universe were one single block which was sundered and different parts were separated and this process kept on expanding.

“The two words Ratq (رتق) and Fatq (فتق) needs special attention. The reference to a separation process (fatq) of a primary single mass whose elements were initially fused together (ratq). It must be noted that in Arabic 'fatq' is the action of breaking, diffusing, separating, and that 'ratq' is the action of fusing or binding together elements to make a homogenous whole”⁵.

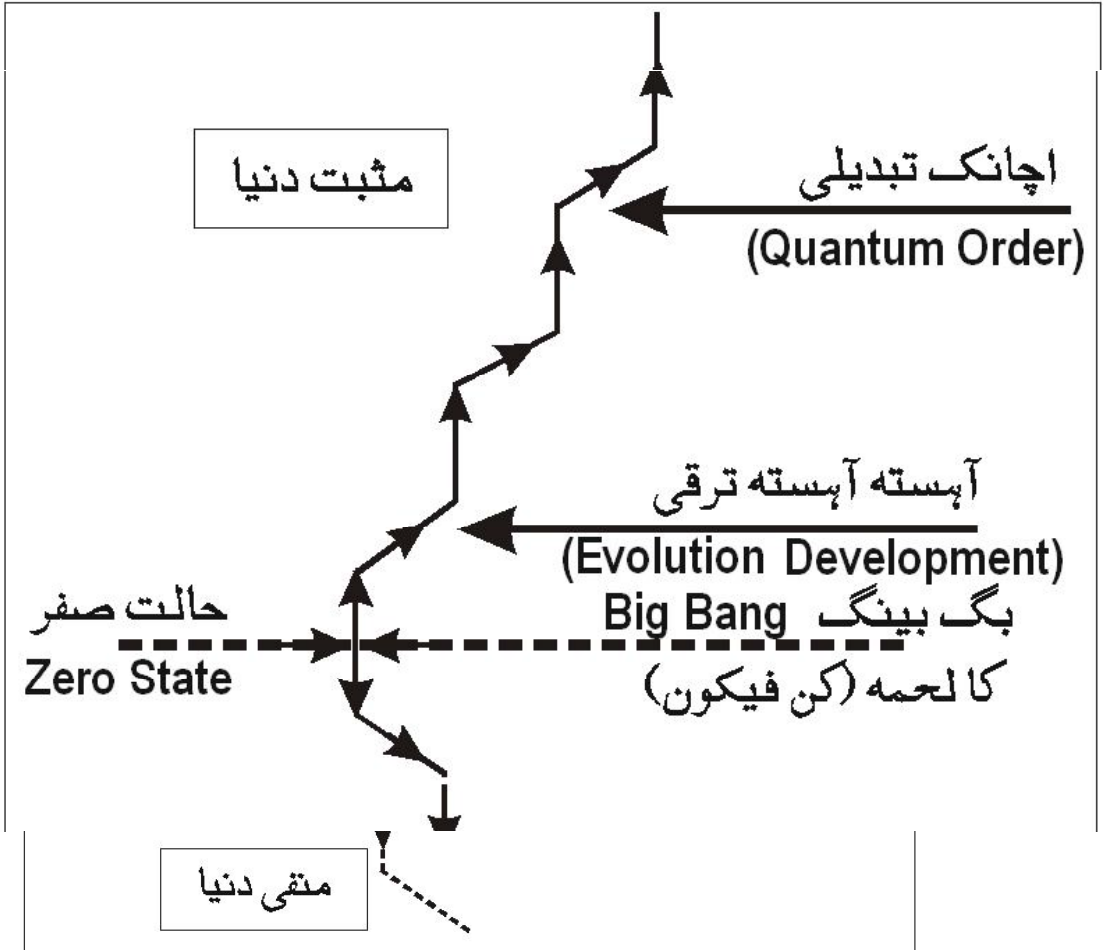
1 Sultan Bashir Mahmood, The Miraculous Qur'an a Challenge to Science and Mathematics (Islamabad: Dar-ul-Hikmat International, 2010), P.18.

2 Gravitational force, electrical force, strong nuclear force, weak beta decay forces.

3 Tahir-ul-Qadri, Dr., Creation and Evolution of the Universe (Lahore Minhaj-ul-Qur'an Publications, 2012), pp.13-14.

4 Al Qur'an 21:30

5 Maurice Bucaille, The Bible Qur'an and Science, tr. Alastair D. Pannell & Author (Karachi: Darul-Ishaat Urdu Bazar -1, 2004), p.139.

Figure 3.1 ¹

In the explanation of above-mentioned verse Imam al-Rāzī said:

وَهُوَ قَوْلُ الْحَسَنِ وَقَتَادَةَ وَسَعِيدِ بْنِ جُبَيْرٍ وَرَوَاهُ عِكْرَمَةُ عَنِ ابْنِ عَبَّاسٍ رَضِيَ اللَّهُ عَنْهُمْ أَنَّ
الْمَعْنَى كَانَتْ شَيْئًا وَاحِدًا مُلْتَزِمَتَيْنِ²

According to Ḥasan al-Baṣarī

, Qatādah, Sa‘īd Ibn Jubayr and the narration of ‘Ikrimah from Ibn ‘Abbās ‘Ratq’ means one unit of substance.

1 Sultan Bashir Mahmood, Talash Ḥaqeeqat (Islamabad: Dar-ul-Hikmat International, 2010), p.37.

2 Al-Rāzī, Fakhar al-Dīn, Imam Mafātihul Ghaib, (Bayrūt: Dār ihyā al-turāth al-‘arabiy, 1420Ah), p.137.

قَوْلُ أَبِي مُسْلِمٍ الْأَصْفَهَانِيِّ: يَجُوزُ أَنْ يُرَادَ بِالْفَتْحِ الْإِجَادَ وَالْإِظْهَارَ¹

By Fatq means Abu Muslim Al- Asfahānī means creation and deposition.

According to Sultan Bashir Mahmood² 'Ratq' can be Primordial Fluid³, and it is proved from scientific methods that "In remote possible time universe was concentrated in a very small volume. The sun earth and moon were not separate. The whole system of universe was 'Extremely high density plasma of gases'.

The word dukhān has been presented in Sūrah Ḥāmīm explicates this phenomenon as:

ثُمَّ اسْتَوَى إِلَى السَّمَاءِ وَبَيَّ دُخَانٌ فَقَالَ لَهَا وَ لِلْأَرْضِ...⁴

"Moreover He comprehended in His design the sky, and it had been [as] smoke: He said to it and to the earth"

"The statement of the existence of a gaseous mass with fine particles, for this is how the word 'smoke' (dukhān in Arabic) is to be interpreted. Smoke is generally made up of a gaseous substratum, plus, in more or less stable suspension, fine particles that may belong to solid and even liquid states of matter at high or low temperature".⁵

Paul Davies a physicist says about Big Bang:

"There are many strands of evidence to support this astonishing theory. Whether one accepts all the details or not, the essential hypothesis- that there was some sort of creation _seems from the scientific point of view, compelling."⁶

British physicist Stephen Hawking says:

"the observation that we have all made, that the sky at night is dark, is very important. It implies that the universe cannot have existed forever in the state we see today. Something must happen in the past to make the stars light up a finite time ago, which means that the light from the very distant stars has not

1 Ibid.

2 Sultan Bashir Mahmood, Talash Ḥaqeeqat (Islamabad: Dar-ul-Hikmat International, 2010), p.31.

3 The beginning existing form, collective compound of all things that is safe and enclosed in its own unit.

4Al Qur'ān 41:11

5 Ibid.

6 Sultan Bashir Mahmood, The Miraculous Qur'ān a Challenge to Science and Mathematics (Islamabad: Dar-ul-Hikmat International, 2010), p.18.

had time to reach us yet. This would explain why the sky at night isn't glowing in every direction”.

If the stars had just been sitting there forever, why did they suddenly light up a few billion years ago? What was the clock that told them it was time to shine? As we've seen, this puzzled those philosophers, much like Immanuel Kant, who believed that the universe had existed forever.”

If we observe the statement of Dr. Hawking about darkness and light in process of creation, darkness was the first in order of priority. Light came later. Now think over again in the verse (6:1) quoted already, “He made darkness and light.”¹

Imam Rāzī² said in the context of above mentioned verse:

وكانت السموات والأرض مُظْلِمَةً أَوَّلًا

Before the creation of heaven and the earth (i.e. the solar system) there was no light.

The Qur'anic verses of Sūrah Al-Baqara that verify this theory are given below:

بَدِيعَ السَّمَوَاتِ وَ الْأَرْضِ ۗ وَإِذَا قَضَىٰ أَمْرًا فَإِنَّمَا يَقُولُ لَهُ كُنْ فَيَكُونُ³

To Him is due the primal origin of the heavens and the earth:

When He decreeth a matter,

He saith to it: “Be,” and it is. When Allah Almighty willed to create the universe, only the ‘Be’ of him, resulted in a Big Bang.

Mir Anees-u-Din⁴ said in this context:

“this Big Bang was probably the ‘Be’ ordered by God, about which it is stated in the Qur'an. This ‘Be’ probably included the complete destiny of the universe; formation of stars, planets, satellites, coming and going of man on the stage of the earth and even the end of the whole show”.

In Sūrah Falaq:

قُلْ أَعُوذُ بِرَبِّ الْفَلَقِ ۝ مِنْ شَرِّ مَا خَلَقَ⁵

Dr. Tahir-ul-Qadri translated this verse as:

1 Ibid, p.19.

2 Al-Rāzī, Fakhar al-Dīn, Imam Mafātihul Ghaib, (Bayrūt: Dār ihyā al-turāth al-‘arabiy, 1420Ah), pp.137-138.

3 Al Qur'an 2:117

4 Anees-u-Din Mir, Dr., The universe seen through the Qur'an (Canada: Al-Attique Publishers, 2001), P.40.

5 Al Qur'an 113:1-2

Say I take refuge with the Lord of post-big-bang creation, from the evil of all created things.

The words in this verses that have vital importance are:

- i. Falaq (فلق)
- ii. Khalaq (خلق)

The word Khalaq denotes to the 'process of creation'¹. It seems to be relevant that the word Falaq has a closer link with the process of creation. According to Dr. Nurbaqi², the Falaq bears various meanings. The basic meaning of the word, however, is "a sudden splitting and violent explosion". It is derived from the root falaq. Another meaning of this word is it bears the sense 'exploded'; it is a concept assigned to the result of phenomenon. Falaq is the outcome of violent explosion; it carries the sense of 'extreme and extra ordinary speed'. An example of this is 'Tafalluq', running at extreme speeds.

In these verses the Holy Qur'an describes the powers of Allah Almighty his power of creation giving refuge from the evil ones.

Dr. Tah ir ul Qadri³ says about this:

The meaning of Falaq in different dictionaries is as follows:

- 1) A creature that emerges with great speed from the splitting of nonexistence.
- 2) The plant that emerges from a splitting seed.
- 3) A meaning that is derived by analogy, the light that splits and emerges from darkness, and hence the dawn, the sun shine or the day break.

Some persons prefer the analogical description of this word:

Day break, Dawn, Sun shine.

In Some commentaries the meaning 'the region of violent explosion in Hell.It means the result, or entities, arising from a sudden or violent explosion. The other meanings are the secondary meanings.It can be said that the Holy Qur'an has shed light the concept of bigbang nearly fourteen hundred years ago while science explored this fact later.

1 Tahir-ul-Qadri, Dr., Qur'an on Creation and Expansion of Universe, (Lahore: Minhaj-ul-Qur'an Publications, 2012), p.30.

2 Nur Baqi Haluk, Qur'ani Āyāt 'aur science Hqā'iq, tr, Gilani, Muhammad Feroz Shah, Syed (Karachi: Indus Publishing Corporation, 2000), P.231

3 Tahir-ul-Qadri, Dr., Qur'an on Creation and Expansion of Universe, (Lahore: Minhaj-ul-Qur'an Publications, 2012), P.31

2. Kun Fayakūn and Uncertainty Principle of Heisenberg

This concept of uncertainty was initially progressed by a physicist named Hendrick Casimir in 1948.

“Because of uncertainty of quantum events, the energy of an electron fluctuates even after all energy has removed for it, and the same applies to the point in a vacuum. These ‘zero point fluctuations’, if they could be tapped, would represent gigantic amounts of energy and can be thought of as borrowing energy from other points in the universe. As a result a particle could be created and then immediately destroyed with this borrowed energy. This type of particles is called ‘virtual’ or ‘ghost’ particles. If certain amount of energy is provided from the outer side, they can be actualized. The existence of such particles was provided in the same year by the American physicist Willis Lamb.¹

Paul Davies declared that the emergence of new matter from nothingness in this way a proof of omnipotence of God. These modern concepts have aided and enhanced our comprehension of the big bang and divine might of Allah. We therefore see that an explosion was the source of universe and was responsible for its physical structure and for the existence of stars and galaxies. According to the recent calculations, the gigantic explosion completed its initial phase within a billionth of second at which time the matter that would form galaxies and star was fused together. The incipient separations occurred in the first thousands of second.

So again in the light of astrophysical and cosmological knowledge it can be said that the term Falaq to designate that they have come into existence after the primordial explosion. The synthesis of the attribute of Lordship with the word Falaq is the major aspect of the verse. In ten billionth of a second, a billion stars were spawned in an explosion of cosmic dimensions. This is possible only through God’s Lordship might.

God willed the forms of material universe and created an explosion with the command “كن فيكون” (Be and it started being). The Falaq, beings resulting from this explosion, were than co-ordinated within an incredible computerized order the Mighty Lordship of Allah. This is the reason why

1 Nur Baqi, Huluk, Dr., Verses of Qur’ān and Facts of Science, tr, Muhammad Feroz Shah Galini, Syed (Karachi: Indus Publishing Corporation), P.234

the verse has synthesized the words Rab (Lord) and falaq (explosion). For all creatures have been created by a rupture or explosion. However, before anything can possess the properties necessary for existence, it has to be conditioned by the attribute of Lordship, receiving a physical or biological computer program. ¹

Dr. Nūr Baqī² said in this context:

This sūrah had given original prescription that describes the initial situation of all creations. “Take refuge in My Omnipotence from all created things, which have been formed by an explosion and ordered by My lordship attribute. I am your lord, the ruler of the galaxies, which i have scattered in to the infinite reaches of space through a magnificent explosion that started from a singularity, and through this explosion a lot of forces, energies, radiations and reactions came in to existence, which may be damaging for life, so take refuge from those evils. Because whoever takes refuge in ‘Me’ is protected from all evils.”

No doubt the Qur’ān presented the uncertainty principle a long time before when the cosmological laws did not exist

3 The Expansion of the Universe

The fact has been proved by Astrophysics that universe size does not remain the same, but expanding outwards into the space in all directions. But this fact is mentioned in Sūrah al- Dhāriyāt fourteen centuries ago as follows:

وَالسَّمَاءَ بَنَيْنَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ ³

“With power and skill did We construct the Firmament: for it is We Who create the vastness of pace”.

Dr. Tahir-ul-Qadri⁴ translated this verse as:

“And we have built the Heaven (the spatial strata of the universe) with Might (Energy), and undoubtedly, we are expanding the universe vast”.

1 Tahir-ul-Qadri, Dr., Qur’ān on Creation and Expansion of Universe, (Lahore: Minhaj-ul-Qur’ān Publications, 2012), P.34-35.

2 Nur Baqī Haluk, Qur’ānī Āyāt ‘aur science Hqā’iq, tr, Gilani, Muhammad Feroz Shah, Syed (Karachi: Indus Publishing Corporation, 2000), P.237.

3 Al-Qur’ān 51:47

4 Tahir-ul-Qadri, Dr., Qur’ān on Creation and Expansion of Universe (Lahore: Minhaj-ul-Qur’ān Publications, 2012), P.23.

The universe which Allah Almighty has created and built with power and energy, (His Might), is going on all directions. The word 'لَمُّوسِعُونَ' is very obvious and self-evident on expansion. Qur'an denotes the process of expansion as the continuation of creation.

M. M Qureshi¹ used this translation:

We have built the heaven with (Might of) hands, and We it is Who make the vast extent (thereof) ...”

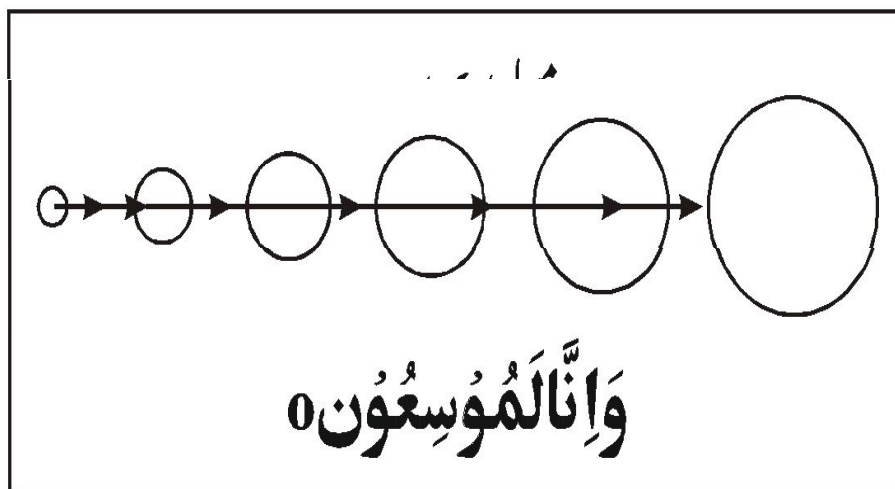


Figure 3.2

The universe is expanding.²

(Samā') means roof, heaven (i. e.) extra-terrestrial world, while the world (Mūsi'ūn) means to expand, to extend, to make more wide or more spacious. This verse represents the fact that our universe is expanding, which is confirmed by the latest discoveries of science. It has been observed that the galaxies are receding, which is more obvious and noticeable in the case of far-off galaxies. The use of the word (with hands) is also noteworthy in that it implies a personal intervention of God, in addition to order of (Be) at the initial creation.

The scientists have implied from the recession of the distant galaxies that the universe is currently expanding: this expansion is isotropic¹, that is,

1 Qureshi, M. M, “ Basic Concepts of Physics in the Perspective of Qur'an ”, Islamic Studies, vol. 28, No. 1, (1989), P.63-64.

2 Sultan Bashir Mahmood, Talash Haqeeqat (Islamabad: Dar-ul-Hikmat International, 2010), p.43.

the same in all directions. The objects not too expansion (V) equals distance over time ($TV = \text{distance}$), where 'T' is called Hubble's constant, which is estimated at 2×10^{10} years an enormous time-span. Ultimately, of course, this expansion would change in to contraction.

Mir Anees-u-din² used this translation and explained this phenomenon as:
 “And the sky We constructed it with energy, and we are the expanders (of it).”

Suppose a balloon which surface is marked with spots. The balloon is the universe and the spots are the clusters of galaxies. When the balloon is inflated it will become larger and larger as a result of which, the distance between the spots i. e. The clusters of galaxies will go on increasing. In the same way the distant galaxies are receding from us at enormous speeds. It must be made clear, that our galaxy, like most others, belongs to local clusters of galaxies, the components of which are not receding from each other; it is the distant clusters of galaxies which are receding away from our local clusters. The furthest way a clusters of galaxies is, the greater is its observed speed of recession. Recently a very distant galaxy has been observed to be receding from us at nearly half the speed half the speed of light i. e. 93,000 miles or 1.5 lakh kilometers. It now appears to be extremely like that even more distant galaxies are from us at the speed of light itself and therefore light from them can never reach us. This means all over its scientific progress we may not be able to detect even objects of the size of the galaxies, though they exist. It is probably due to this continuous expansion and change in the state of the universe that its Arabic equivalent is always used in the plural 'Alamīn the singular of which is 'Alam'.

Haluk nur Baqi used this translation:

“We built the heaven with might, and We expand it wide”.

He interprets this verse as:

The universe is expanding towards outer from one central/basic point. The expanding universe means the expansion of its magnetic band. The basic principle of majority things of the

-
- 1 The big bang theory of the evolution of the observable universe assumes that space is isotropic. It also assumes that space is homogenous. These two assumptions together are known as cosmological principle. According to this homogenous means universe is the same every where and isotropic means there is no preferred direction.
 - 2 Anees-u-Din Mir, Dr., The universe seen through the Qur'ān (Canada: Al-Attique Publishers, 2001), P.28-29.

world is expanding, that is called multiplicity. In Astrophysics this knowledge is called cosmogony. The expansion process that is the resultant of initial Big Bang is a continuous process. This concept has some controversial aspects but there are two basic principles.

- 1) To attain expansion and on a specific point.
- 2) Having that type of magnetism so that the presence on a specific support may be maintained.

So this verse shows the expansion that is the basic law of all creations and that specifies their places. This is the message of Astrophysics that gives the Holy Qur'an fourteen centuries ago. These types of interpretations can be found from the famous interpreters of the Holy Qur'an. Like Ibn -ul-'Arabī he has the same concept in his writings that the process of creation is continuous under the attribute of Allah Almighty as a creator.

In Sūrah Al-Nakhal:

وَيَخْلُقُ مَا لَا تَعْلَمُونَ¹

“And He Keeps creating (all the time) what you don't know”.

In Sūrah Al-Fatir:

الْحَمْدُ لِلَّهِ فَاطِرِ السَّمَوَاتِ وَالْأَرْضِ... يَرِيدُ فِي الْخَلْقِ مَا يَشَاءُ إِنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ²

Dr. Tahir-ul-Qadri translated this verse as:

“All praises are of Allah, Who is the Creator of infinities of the Heavens and the Earth... He keeps expanding in His creation what he wills. Indeed Allah is Potent over everything”.

In fact it was the Alexander Friedmann, a Russian physicist and mathematician who gave the assumption of the expanding universe in 1922, which was scientifically confirmed by Edwin Hubble's discovery in 1929 and finally certified in 1965 by Arno Penzias and Robert Wilson, two American physicists at the Bell Telephone laboratories in New Jersey (USA), who awarded the noble prize in 1978. It is undoubtedly a scientific miracle of the Qur'an.³

1 Al-Qur'an 16:8

2 Al-Qur'an 35:1

3 Tahir-ul-Qadri, Dr., Qur'an on Creation and Expansion of Universe, (Lahore: Minhaj-ul-Qur'an Publications, 2012), p.24.

The poet of East, Iqbal, before the discovery of Robert Wilson has very aptly put in his lyric:

“The universe is probably incomplete that I hear every minute the sound of Kun Fayakūn Qur'anic term for the order of Allah for creation.”¹

The idea of expanding universe has been mentioned in the Holy Qur'an in an obvious and significant way that is also a self-evidence of Qur'anic cosmological significance.

4. Explanation of Seven Heavens

Astro Physics elaborates the concept of seven heavens as:

- 1) The first sky layer is approximately 6.5 trillion kilometers in thickness.
- 2) The second sky layer, is the diameter of our galaxy, is 130 thousand light years.
- 3) The third one or the local cluster, spans two million light years
- 4) The fourth which is collective field of clusters of galaxies forming the central core of the universe, is 100 million light years in diameter.
- 5) The fifth one is a distance of 1 billion light years.
- 6) The sixth, at 20 billion light years, and the seven is beyond that. ²

The Holy Qur'an presents this phenomenon of seven heavens in this sublime verse of Sūrah Al-Mulk:

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَاقًا ۗ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِن تَفْوُتٍ ۗ فَارْجِعِ الْبَصَرَ ۖ بَلْ تَرَىٰ مِن فُطُورٍ ³

“He Who created the seven heavens one above another: No want of proportion wilt thou see in the Creation of [Allah] Most Gracious”.

The following verses of the Holy Qur'an (65:12), (2:29),(71:15) also presents the same meaning.

1 Tahir-ul-Qadri, Dr., Creation and Evolution of the Universe (Lahore: Minhaj-ul-Qur'an Publications, 2012), p.14.

2 Tahir-ul-Qadri, Dr., Qur'an on Creation and Expansion of Universe (Lahore: Minhaj-ul-Qur'an Publications, 2012), pp.48-49.

3 Al-Qur'an 67:3

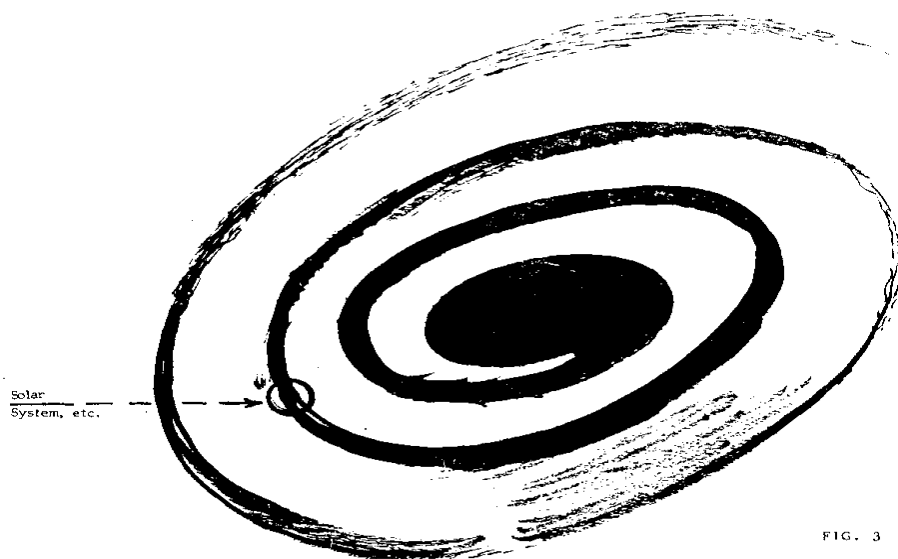


FIG. 3

Figure 3¹

Physical transport from one heaven to another is impossible, both because of the speeds involved the magnetic potentials cannot be transcended. In order to pass into these skies it is necessary to exceed the speed of light; that is to say, to pass beyond the word of matter.

Another related to the seven skies is that of infinite dimensions. Now there are various spaces composed of different dimensions in different skies. In a sense, the concept of seven skies also includes the concept of separate spatial continua. Since it cannot conceive of dimensions higher than the fourth (i. e. time), we are unable to give an account of these dimensions in our day.

Dr. Haluk Nur Baqi interpreted the cosmos and represent the diversified concentric magnetic layers. The central band consists of galaxies and clusters of galaxies composed of vast numbers of stars. Outside this, there is a second field with different magnetic properties containing quasars (the 'hatchers' of the star 'seeds'), and surrounding this, a third magnetic band encompassing the nethermost regions of the universe. The innermost circle, and particularly our own solar system with its family of planets, is the easiest region to observe. The inner structure of this system consists of three separate magnetic fields.

1 Qureshi, M. M, " Basic Concepts of Physics in the Perspective of Qur'an ", Islamic Studies, vol. 28, No. 1, (1989), P.69.

First of all each planet possess a magnetic field and –if present- an atmosphere. This refers to the vicinity of the planet. Next the planets from the second magnetic field in combination with the solar system with in a galaxy- and there at least a hundred billion stars, or suns, in our Milky way galaxy alone- constitutes a separate magnetic region. And on a higher level, galaxies close to each other are subject to another magnetic field with in clusters of galaxies. Hence, when you look at the sky or in to space from the earth or any planet, you are surrendered by seven magnetic fields receding in to infinity of space. Looking at the cosmos from the earth, there are:

- 1) The spatial field we constitute together with the solar system (the 'First sky')
- 2) The spatial field of our galaxy (the 'second sky'). The magnetic field sculpting the core of the Milky Way has only just been discovered).
- 3) The spatial field of our 'Local Cluster' of Galaxies (the 'Third Heaven').
- 4) The central magnetic field of the universe represented by the collectivity of the galaxy clusters (the 'Fourth Sky')
- 5) The cosmic band represented by quasars (the 'fifth sky').
- 6) The field of the expanding universe represented by the receding galaxies (the sixth sky).
- 7) The outermost field representing the limitless infinities of the universe (the seventh sky).

5. Gravitational Collapse of the Universe

The making and breaking up process go on side by side by side in the universe. The entire phenomenal world is subject to flux and change will ultimately pass away. The most magnificent God, the Heavenly bodies and the earth with its living creatures; the excellent work of man, the wonders of science and art, the splendours of human glory or intellect, will come to end ultimately.¹

This process of gravitational collapse has been defined in the sublime verse of Sūrah Al- M'ārij:

وَأَنزَلْنَا قُرْيَانَ يَوْمَ نَكُونُ السَّمَاءُ كَالْعِهْلِ وَ نَكُونُ الْجِبَالُ كَالْعِهْنِ²

1 Abdul Wadud Sayed, Dr., Phenomena of Nature and Qur'an, (Lahore: Sayed Khalid Wadud, 1971), p.17

2 Al-Qur'an 70:7-9

“But We see it [quite] near. The Day that the sky will be like molten brass, And the mountains will be like wool”.

The eternity of Allah Almighty and the mortality of this universe has been elucidated in the undermentioned verse of Sūrah Al-Qaṣas:

لَا إِلَهَ إِلَّا بُوَ كُلُّ شَيْءٍ بَالِكٌ إِلَّا وَجْهَهُ¹

“And call not, besides Allah, on another god. There is no God but He. Everything [that exists] will perish except His own Face”.

The process of disintegration of the universe described above is only evolutionary. On the other hand revolutions have interrupted the course of evolution on several occasions in the past and are again liable to do so in future. A noteworthy change in the present universe has been presented in this verse of Sūrah Al-Inshiqāq:

إِذَا السَّمَاءُ انشَقَّتْ وَأَذْنَتْ لِرَبِّهَا وَحُقَّتْ وَ إِذَا الْأَرْضُ مُدَّتْ وَ أَلْقَتْ مَا فِيهَا وَ تَخَلَّتْ
وَ أَذْنَتْ لِرَبِّهَا وَ حُقَّتْ²

“When the sky is rent asunder, And hearkens to [the Command of] its Lord, and it must needs [do so]; And when the earth is flattened out, And casts forth what is within it and becomes [clean] empty, And hearkens to [the Command of] its Lord, and it must needs [do so]; [then will come Home the full reality]”.

Our physical universe, started about 11 to 20 billion years ago, will break down nearly the 80 billion years after the first explosion of the Big Bang with another collision known as the Big crunch. A time will come in the future when our expanding universe will be followed by a contraction, going on by the force of gravity. The outward fast galaxies will slow down, stop and then fall towards the center and collide with one another. The Big crunch will produce a terrific explosion like the big bang. Celestial matter will collapse, and the result is, large Black Holes.

“The former star has become like a fathomless pit in the space.

There are celestial ghosts and are called Black Holes”.³

So the black holes are formed after the supernova explosions of massive stars. “After massive stars erupt as brilliant super nova at the end of their lives”.¹

1 Al-Qur'ān 28:88

2 Al-Qur'ān 84:1-5

3 Tahir-ul-Qadri, Dr., Qur'ān on Creation and Expansion of Universe (Lahore: Minhaj-ul-Qur'ān Publications, 2012), p.92.

Phenomena of first expansion and then contraction of the universe.² The Hydrogen and Helium of the universe will be used up in the thermonuclear fire of stars. No new stars will be born and the universe will consist of dead stars, meteoroids, rocks and other cosmic debris. When the universe is 10^{27} years old. It will consist of huge black holes surrounded by dead stars. After the more time the entire galaxies will spiral towards each other and collapse in to the super galactic black holes. Eventually after 10^{106} years, the huge black holes will evaporate in to a burst of particles and radiation equal to the explosion of a billion 1-Megawatts hydrogen bomb.

This process of destruction will start 65 billion years from now and will take 10^{140} years.

Ultimately, this process may turn the entire universe in to a 'black hole' or invisible, and may role up the whole of the matter, energy, space and time and reduce it again to a point of 'singularity' and 'zero volume' and then disappear in to 'Nothing' or 'Naught'.

This process has been described in the Holy Qur'an in the following verses of Sūrah Al-Wāqī'ah:

إِذَا وَقَعَتِ الْوَاقِعَةُ لَيْسَ لَوْقَعَتِهَا كَاذِبَةٌ خَافِضَةٌ رَافِعَةٌ رُجَّتِ الْأَرْضُ رَجًا وَ بُسَّتِ الْجِبَالُ
بَسًا فَكَانَتْ بَبَاءً مُّثْبِتًا 3

“When the Event inevitable cometh to pass, Then will no [soul] entertain falsehood concerning its coming. [Many] will it bring low; [many] will it exalt; When the earth shall be shaken to its depths, And the mountains shall be crumbled to atoms, Becoming dust scattered abroad”.

1 Ibid, p.73.

2 Qureshi, M. M, “ Basic Concepts of Physics in the Perspective of Qur'an ”, Islamic Studies, vol. 28, No. 1, (1989), P.55.

3 Al-Qur'an 56:1-6

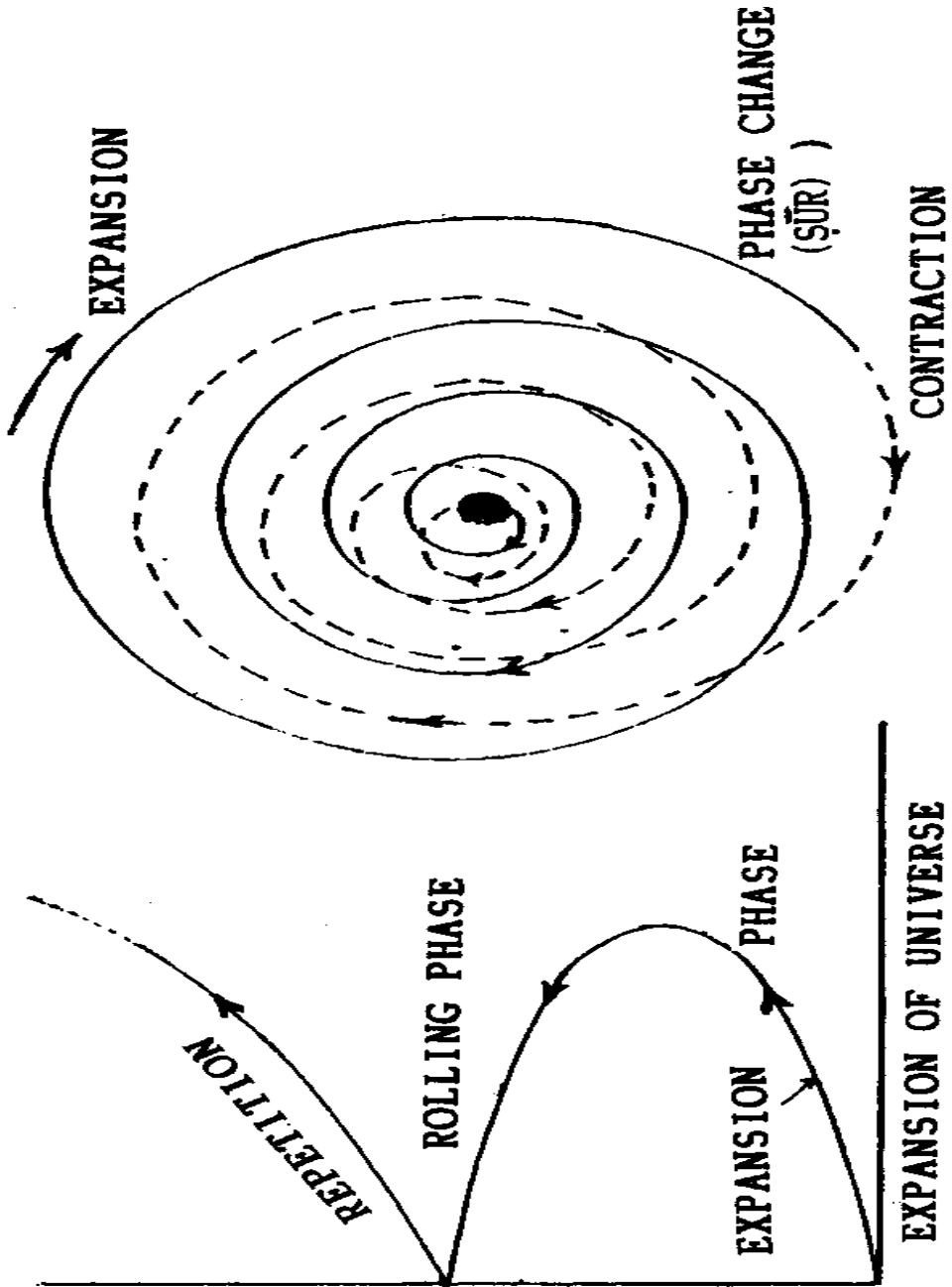


Figure 3.4

In Sūrah Al-Fajjar:

كَلَّا إِذَا دُكَّتِ الْأَرْضُ دَكًّا دَكًّا¹

“Nay! When the earth is pounded to powder”.

Dr. Tahir-ul-Qadri translated this verse as:

Yes when the earth is completely broken in to pieces and atoms.

In Sūrah Al-Takwīr:

وَ إِذَا السَّمَاءُ كُشِطَتْ²

“When the world on High is unveiled”.

Dr. Tahir-ul-Qadri translated this verse as: “And when the heaven is taken off from its place and torn away”. In Sūrah Al-Zummar:

وَ الْأَرْضُ جَمِيعًا قَبْضَتُهُ يَوْمَ الْقِيَامَةِ وَ السَّمَوَاتُ مَطْوِيَّاتٌ يَمِينًا³

“On the Day of Judgment the whole of the earth will be but His handful, and the heavens will be rolled up in His right hand”.

Dr. Tahir-ul-Qadri translated this verse as:

“He will roll up the entire earth on the day of judgment and all of the heavens (spatial strata of the universe) shall be rolled up by his might”.

عَنْ أَبِي هُرَيْرَةَ رَضِيَ اللَّهُ عَنْهُ، عَنِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ: الشَّمْسُ وَالْقَمَرُ مُكْوَرَانِ يَوْمَ الْقِيَامَةِ⁴

“On the day of judgement the sun and moon will lose their lights and will collide with each other”.

The word Mukawarān used in this Ḥadīth narrated by Abū Hurayrah signifies three meanings:

- 1) Stars will collide with each other and overlap.
- 2) Their light will be extinguished.
- 3) Not only the sun and the moon but all of the heavenly bodies would undergo a gravitational collapse.

Another Ḥadīth narrated by Miqdad:

حَدَّثَنِي الْمِقْدَادُ بْنُ الْأَسْوَدِ تُدْنِي الشَّمْسُ يَوْمَ الْقِيَامَةِ مِنَ الْخَلْقِ⁵

1 Al-Qur'ān 89:21

2 Al-Qur'ān 81:11

3 Al-Qur'ān 39:67

4 Bukhārī, Abū Abdullāh Muhammad ibn Ismā'īl, Imām, Saḥīḥ Bukhārī, kitāb, Bad' il-Khalqī, Bāb, Ṣifati al-shamsi wal-Qamari, Ḥadīth no. 3200.

5 Muslim Bin Ḥujāj Imām, Saḥīḥ Muslim, kitāb, Fi Ṣifati yawmil Qiyāmati, Bāb, Al-Jannati wa- Ṣifati Na'īmihā, Ḥadīth no. 2864.

On the day of judgement, the sun will come extremely close to the earth.

Abdullah bin 'Umar quoted another Hadīth:

أَنَّ أَبَا هُرَيْرَةَ، كَانَ يَقُولُ: قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: "يَقْبِضُ اللَّهُ تَبَارَكَ وَتَعَالَى الْأَرْضَ يَوْمَ الْقِيَامَةِ، وَيَطْوِي السَّمَاءَ بِيَمِينِهِ ثُمَّ يَقُولُ: أَنَا الْمَلِكُ أَيْنَ مُلُوكِ الْأَرْضِ"¹

On the day of judgement Allah Almighty will wrap up all the heavens (the spatial strata of the universe) and collide them by His Might. I am the Master of the universe with all the power and authority.

Conclusion

Combining both physical and spiritual sources, a comprehensive understanding of knowledge emerges, necessitating an integration of insights drawn from the Qur'ān in contemporary discourse. By harmonizing empirical observations with Qur'ānic principles, the depth of interpretation is enriched. Essentially, the Qur'ān encompasses all branches of knowledge, serving as a elucidation of the divine essence, attributes, and actions. This integration suggests an infinite potential for interdisciplinary exploration, hinted at within the Qur'ān itself. The echoes of the Big Bang theory, expansion of the universe, explanation of the seven heavens, and the uncertainty principle of Heisenberg are explored from the sublime verses of the Holy Qur'ān. This perspective suggests that the Qur'ān contains knowledge that resonates with modern scientific discoveries, such as those related to the big bang theory, the expansion of the universe, the concept of the seven heavens, and even principles like Heisenberg's uncertainty principle. The idea of synthesis and confluence between scientific knowledge and spiritual insights can be seen as an attempt to create a more holistic understanding of the world, one that transcends the boundaries between different forms of knowledge and seeks to unify them. Ultimately, this approach encourages a broader perspective that can contribute to our understanding of the universe.

1 Ibid, kitāb, Fi Şifati yawmil Qiyāmati wal- Jannati w-al-Nār, Bāb, Şifati Al-Munāfiqīna wa 'Aḥkāmihim, Hadīth no. 2787.