

A Critical Review of the Qur'anic Interpretation of the Universe and Modern Scientific Thought

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Abstract:

This study explores the Qur'anic interpretation of the universe in light of modern scientific thought, highlighting both similarities and differences between revealed knowledge and empirical inquiry. The Qur'an, while primarily a book of guidance, presents a consistent and profound cosmological outlook. It invites human beings to contemplate the natural world, recognize the signs of divine wisdom and appreciate the harmony and purpose in creation. Verses referring to the creation of the heavens and the earth, the expansion of the universe and the balance in nature reflect an awareness of physical realities that science has only recently begun to understand. On the other hand, modern science approaches the universe through observation, experimentation and theoretical modeling, emphasizing causality and natural law without reference to metaphysical or theological dimensions. Concepts such as the Big Bang, the expanding universe and the fine-tuning of physical constants show surprising parallels with Qur'anic descriptions but are interpreted within a secular framework. This article critically examines the epistemological foundations of both paradigms; Qur'anic revelation and scientific empiricism, arguing that while methodologies differ, their insights into the cosmos can be complementary rather than contradictory. By reviewing selected Qur'anic verses and comparing them with contemporary scientific theories, the paper demonstrates that the Qur'an encourages a holistic understanding of the universe that integrates spiritual meaning with physical reality. The article concludes that a dialogical approach, based on mutual respect between Islamic thought and modern science, can lead to deeper intellectual and spiritual insights. It also recommends educational and interdisciplinary initiatives to bridge the gap between scientific knowledge and Qur'anic worldview in Muslim academic settings.

Keywords: *Qur'an, Universe, Cosmology, Scientific Thought, Islamic Philosophy, Big Bang, Epistemology*

1. Introduction

To consider the Holy Quran merely as a religious and spiritual book is tantamount to ignoring its scientific aspects. While this divine book sheds light on beliefs, worship and

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ethics, it also invites the human intellect to reflect and ponder, especially on the phenomena of nature and the universe. The Quran repeatedly mentions the system of the universe, its creation, order and balance, which not only makes man feel the greatness of the Creator but also provides intellectual inspiration for scientific research. The Almighty says:

"إِنَّ فِي خَلْقِ السَّمُوتِ وَالْأَرْضِ وَاجْتِذَافِ اللَّيْلِ وَالنَّهَارِ لَآيَاتٍ لِّأُولِي الْأَبْصَارِ"²

“Indeed, in the creation of the heavens and the earth and the alternation of night and day, there are signs for people of understanding.”

This verse makes it clear that the Quran is not limited to teachings of faith or worship, but also provides a system of consciousness that makes the universe a center of contemplation.

On the other hand, modern scientific thought is based on observation, experimentation, and deductive logic. Its goal is to explore the material and physical aspects of the universe and understand the laws of nature. Theories such as the Big Bang theory, the expansion of the universe, and quantum physics are today considered milestones of human knowledge and are studied in the light of science. These two systems, the spiritual, monotheistic system of the Quran and the experimental, physical system of science, appear to be separate on the surface, but if we look deeper, they also have some common aspects that create the possibility of mutual connection and harmony. For example, the verses of the Quran mention the origin, expansion, order and balance of the universe, which seem to be consistent with scientific research. This paper presents a critical study of these aspects and attempts to determine the extent of intellectual coherence or contradiction between the Quran and modern scientific interpretations of the universe. It will also discuss how dialogue between Islamic thought and scientific theories can be fostered to create a balanced, spiritual and rational understanding of the universe.

2. Qur'anic Interpretation of the Universe

The Quranic interpretation of the universe is not merely a substitute for scientific interpretations, but rather provides a comprehensive concept that integrates the material, spiritual and moral aspects of the universe. From the Quranic perspective, the universe is an organized, purposeful and conscious entity, every aspect of which reflects the attributes, Lordship and wisdom of the Creator of the universe.

². Āl ‘Imrān 3:190.

2.1. Monotheism and Objectivity:

The most striking aspect of the Quran is that it views the universe under the principle of monotheism. Everything is a manifestation of the power and knowledge of Allah Almighty:

"اللَّهُ خَالِقُ كُلِّ شَيْءٍ وَهُوَ عَلَى كُلِّ شَيْءٍ وَكِيلٌ"³

"Allah Almighty is the Creator of all things and He is over all things competent."

The creation of the universe is not a mere accidental or automatic process, but a deliberate and purposeful creation. The Quran repeatedly highlights this purposefulness:

"مَا خَلَقْنَا السَّمَوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا لَاعِبِينَ"⁴

"We did not create the heavens and the earth and all that is between them in play."

2.2. Order and Balance:

The Quran repeatedly emphasizes that there is a grand system of order and balance in the universe, which is evidence for the existence of a wise Creator:

"وَالسَّمَاءَ رَفَعَهَا وَوَضَعَ الْمِيزَانَ"⁵

"And He raised the heavens and established the balance."

These verses point to the scientific principle of balance and the laws of nature. This balance is prominently seen in physical systems, ecological balance and biological systems, which are also the subject of scientific research.

2.3. Evolutionary Indicators and Cosmic Phenomena:

There are verses in the Holy Quran that point to the evolutionary process of the universe. For example:

"أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا"⁶

"Have the disbelievers not seen that the heavens and the earth were joined together, then We separated them?"

This verse seems close to the concept that is presented in science regarding the beginning of the universe through the Big Bang. Similarly, God Almighty says:

³. Al-Zumar 39:62

⁴. Al-Dukhān 44:38

⁵. Al-Raḥmān 55:7.

⁶. Al-Anbiyā' 21:30

"وَالسَّمَاءَ بَنَيْنَاهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ"⁷

"And the heaven We created with Our power, and We will expand it."

The Holy Quran describes man as the axis of the universe and the responsible guardian. Man has been made "vicegerent on earth"⁸ and has been given the ability to understand, improve and use the cosmic order. This concept goes beyond scientific revelations and also carries a moral and spiritual consciousness.

2.4. An Invitation to Contemplation:

The Holy Quran repeatedly invites man to reflect, ponder and reason, as it says:

"قُلْ انظُرُوا مَاذَا فِي السَّمَاوَاتِ وَالْأَرْضِ"⁹

"See what is in the heavens and the earth."

This attitude is the power of scientific inquiry, which emphasizes the pressure of observation and investigation to the Creator of the universe. However, the Quran encourages this investigation to be seen.

The Qur'anic interpretation of the universe can not only be compatible with scientific thought, but also provides it with a spiritual and moral foundation. The Quran integrates scientific observations with a principle of purpose, wisdom and monotheism that is generally absent in modern science. This perspective not only provides guidance for Muslim scientists but also lays the foundation for a balanced dialogue between science and religion.

3. Modern Scientific Thought

Modern scientific thought is based on a specific cognitive, observational, and experimental foundation that emerged in response to the religious stagnation and ecclesiastical control of the Middle Ages. The goal of this thought is to understand and control the phenomena of the universe under rational, material and natural laws. According to modern science, the universe is an automatic, purposeless system operating under natural law, in which no supernatural force is considered necessary.

3.1. Scientific Basis:

Science is based on experience, observation and reasoning. The criterion for validity in this is that any theory should be testable. According to the philosophy of science, a theory is valid as long as it matches observational evidence, otherwise it can be rejected.

⁷. Al-Dhāriyāt 51:47

⁸. Al-Baqarah, 2:30

⁹. Yunus, 10:101

3.2. Concept of the Universe:

Modern scientific thought views the universe as a soulless, purposeless and material reality. According to renowned physicist Stephen Hawking:

*"The universe is governed by laws of science. The laws may have been decreed by God, but God does not intervene to break the laws."*¹⁰

This concept considers the universe to be a machine operating under purely mechanical principles, with no place for revelation or spirituality.

3.3. Big Bang Theory:

The most recent scientific explanation for the origin of the universe is the Big Bang Theory. According to it, the universe exploded from an extremely dense and hot state about 13.8 billion years ago and began a process of continuous expansion. This theory was proposed by George Lemaître and Edwin Hubble provided evidence of the expansion of the universe.¹¹

3.4. Laws of Nature:

Science describes the universe as a system governed by laws of nature, which were explained by Newton, Einstein, and other scientists. According to these laws, there is order and repetition in the universe, but this order is not given any philosophical or theological meaning. According to science, everything in nature is causal and every phenomenon has a possible material explanation.¹²

3.5. Irrelevance to the Metaphysical and Moral Aspects:

Science is not only unrelated to metaphysical realities but also considers morality to be outside its scope. In scientific research, right or wrong is determined only by experimental results, not by religious or moral principles. This is why scientific advances, from nuclear weapons to artificial intelligence, while providing benefits, have also raised ethical questions that science cannot answer on its own.

The greatest virtue of modern scientific thought is that it has provided verifiable explanations for many phenomena in the universe. But its greatest shortcoming is that it excluded spirituality, revelation, and morality from the boundaries of knowledge. Thus, a comprehensive understanding of the universe that includes the human mind, soul and purpose of life is missing from scientific thought. Allama Iqbal says about this:

¹⁰. Hawking, Stephen. *A Brief History of Time*. New York: Bantam Books, 1988, p.122

¹¹. Hubble, Edwin (1929). "A relation between distance and radial velocity among extra-galactic nebulae". *PNAS*. 15 (3): 168–173.

¹². Davies, Paul. *The Mind of God: The Scientific Basis for a Rational World*. New York: Simon & Schuster, 1992, p.83–85

*"Science deals with the facts of experience as they appear within the narrow limits of experimental inquiry, whereas religion is more concerned with the whole of experience."*¹³

4. Applied and Comparative Studies

The Quran and modern scientific thought both have different perspectives on the understanding of the universe. The Quran presents the universe as divine revelations, while science understands the universe in terms of natural laws and material phenomena. There are some significant similarities and differences between the two perspectives, which are reviewed in the following research.

4.1. The Beginning of the Universe:

It is stated in the Holy Quran:

*"أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا"*¹⁴

"Do the disbelievers not see that the skies and the earth were joined together, then We tore them asunder?"

This verse suggests the beginning of the universe as a single unity, which was later divided, a theory similar to the Big Bang Theory. Scientifically, this theory states that the universe emerged from an extremely dense and hot state about 13.8 billion years ago and has been continuously expanding ever since.¹⁵

Observations by Georges Lemaître and later Edwin Hubble proved that cosmic bodies are constantly moving away from each other, which means that the universe once began from a single point.¹⁶

Both the Quran and science agree that the universe had a beginning. However, the Quran calls this creation the will of Allah, while science calls it the product of the laws of physics.

4.2. Expansion of the Universe:

The Quran states:

*"وَالسَّمَاءَ بَنَيْنَاهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ"*¹⁷

"And We created the heaven with might, and We will expand it."

¹³. Iqbal, Muhammad. *The Reconstruction of Religious Thought in Islam*. Lahore: Sheikh Muhammad Ashraf, 1930, p.7

¹⁴-Al-Anbiyā' 21:30

¹⁵. Hawking, *A Brief History of Time*, 1988, p.50

¹⁶. Hubble 1929, p.173

¹⁷-Al-Dhāriyāt 51:47

This verse clearly points to the expansion of the universe, which is consistent with modern astronomical research. Edwin Hubble proved in his research in 1929 that all galaxies are moving away from Earth, meaning that the universe is expanding.¹⁸

There is a striking agreement between the Quranic statement and scientific research. This agreement points to a unity of thought rather than a facile harmony, where the Quran invites reflection and science confirms it through experience.

4.3. System and Balance:

The Quran states:

"وَالسَّمَاءَ رَفَعَهَا وَوَضَعَ الْمِيزَانَ."¹⁹

"And He raised the heavens and established balance."

This verse speaks of cosmic order and balance, which are among the fundamental principles of modern science. The Law of Gravity, the Laws of Thermodynamics, and quantum mechanics testify to the existence of a grand order in the universe.²⁰

Both the Quran and science acknowledge that the universe is an orderly system, however, the Quran considers this order to be the result of Allah's wisdom and Lordship, while science considers it to be the automatic order of natural laws.

4.4. Human Consciousness and Purpose:

The Quran considers human existence to be the axis and purpose of the creation of the universe:

"وَمَا خَلَقْتُ الْجِنَّ وَالْإِنْسَ إِلَّا لِيَعْبُدُونِ."²¹

"I created the jinn and mankind that they might worship me."

Modern science eschews purposiveness. According to it, the universe is a random occurrence. As Richard Dawkins writes:

"The universe we observe has precisely the properties we should expect if there is at bottom, no design, no purpose."²²

Here comes the fundamental difference between the Quran and science: the Quran considers the universe to be a purposeful system, while science considers purposelessness to be impossible. This comparative study shows that:

¹⁸. Hubble 1929, p.170

¹⁹. Al-Raḥmān 55:7

²⁰. Davies, *The Mind of God: The Scientific Basis*, p.83

²¹. Al-Dhāriyāt 51:51

²². Dawkins, Stephen. *A Brief History of Time*. New York: Bantam Books, 1995, p.133

- There are several Quranic verses that seem to be in harmony with modern scientific discoveries.
- The focus of the differences is primarily on objectivity, divine knowledge, and ethical aspects, which are beyond the scope of science.
- The Quran makes scientific research the basis of reflection and thought, not an interpretation dependent on science itself.

5. Critical Evaluation of the Qur'anic and Scientific Interpretations of the Universe:

Both the Quran and modern science attempt to understand the reality of the universe, but their intellectual foundations, assumptions and objectives are very different. The Quran is a divine book that emphasizes the purpose of life, the Creator, morality and the supernatural, while modern scientific thought is based on empirical observation, sensory information and rational reasoning that is limited to explaining the apparent universe.

5.1. Nature of Knowledge: Revelation versus Experience:

In the Quranic concept of knowledge, revelation is recognized as the absolute source of knowledge, as God Almighty says:

23 "عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ"

"Allah taught man that which he did not know."

As if this knowledge consists of revelation, inspiration, nature, and reason. On the other hand, scientific knowledge is based solely on sensory experience and repeatable observation. In modern philosophy of science, thinkers such as David Hume and Karl Popper have also recognized the empirical limitations of scientific knowledge.²⁴

The comprehensiveness of Quranic knowledge is much broader than scientific thought. Where science only observes, the Quran invites access to the reality beyond observation. This raises a philosophical question: Are the senses alone sufficient to identify reality? The Quran answers this in the negative.

5.2. Cause and Effect: Laws of Nature or Divine Will?

Science considers cause and effect to be subject to natural laws. For example, Newton's law of gravity or Einstein's theory of relativity, all of them describe a sweet continuity in the universe. Quran, on the other hand, associates cause and effect with the will of Allah:

²³. Al-Alaq, 96:5

²⁴. Popper, *The Logic of Scientific Discovery*, p.27

"وَاللَّهُ خَلَقَكُمْ وَمَا تَعْمَلُونَ"²⁵

"Allah created you and your deeds."

Science describes the universe as automatic and subject to automatic laws, while the Quran calls it a willful creation and a subjugated universe.²⁶ In Islamic philosophy, the Ash'arites also adopted the same view that every effect is a creation of Allah, not a natural consequence of a cause.²⁷

5.3. The Reality of the Universe: Matter or Meaning?

Modern science considers the universe to consist of purely material phenomena. Under naturalism, the universe has no transcendent purpose. Bertrand Russell says:

"The universe is just there, and that's all."²⁸

On the contrary, the Holy Quran says:

"وَمَا خَلَقْنَا السَّمَاءَ وَالْأَرْضَ وَمَا بَيْنَهُمَا بَاطِلًا"²⁹

"And We did not create the heavens and the earth and all that is between them in vain."

Here a question arises: does the universe have any meaning? The Quran answers in the affirmative; it says that the universe is a manifestation of the Creator's will, knowledge and wisdom. Scientific thought does not recognize this meaning, which can be considered a philosophically unprovable belief.

5.4. Metaphysics: God, the Soul and the Supersensible:

Modern scientific thought excludes metaphysical realities (the soul, angels, heaven and hell, the Creator) because they are not subject to empirical verification. However, in Islamic philosophy, concepts such as the existence of God, spiritual reality and moral objectivity are not only permissible but also indispensable. Ibn Rushd said:

"العقل لا يعارض النقل إذا فهم كليهما فهماً صحيحاً"³⁰

That is, the contradiction between reason and revelation only occurs when one is misunderstood.

Here the fundamental clash between ontology and transcendence comes to the fore. The Quran considers man to be a spiritual and moral being, while science considers him to be

²⁵. Al-Şaffāt 37:96

²⁶. Al-Jāthiyah 45:13.

²⁷. Al-Juwaynī, 'Abd al-Malik ibn Abī Muḥammad 'Abd Allāh. *Kitāb al-Irshād*. Cairo: Maktabat al-Thaqāfah al-Dīniyyah, p. 109.

²⁸. Russell, Bertrand, *Why I Am Not a Christian*, London: George Allen & Unwin, 1927, p.107

²⁹. Şād 38:27.

³⁰. Ibn Rushd, Abū al-Walīd Muḥammad. *Faṣl al-Maqāl*. Karachi: Iqbāl Academy, 1973, p. 54.

a mere biological machine. This is a very important contradiction in man's self-knowledge. There are four major differences on the philosophical level between the Quranic and scientific interpretations of the universe:

- Basis of knowledge: revelation versus experience
- Purpose: divine meaning versus materialism
- Truth: natural laws versus divine will
- Existence: material body versus spiritual consciousness

It would not be wrong to say that scientific thought has made technological progress but has been unable to answer the question of the purpose of life. The Quran presents a cosmic interpretation that gives man a comprehensive identity by incorporating meaning, morality, God, and destiny.

6. Research Findings

The following important findings have been drawn from this research study:

a. The concept of the universe in the Quranic interpretation is transcendental and objective:

In the Quran, the universe is not a mere material or mechanical entity, but rather a manifestation of a regular, purposeful and divine plan. Everything in the universe is a "divine sign" that guides us to the existence, power and wisdom of the Creator:

This verse and dozens of other verses indicate that the Quran considers the universe to be a source of spiritual and moral insight, rather than a mere observable phenomenon.

b. Scientific thought is representative of material, empirical but partial reality:

Although modern scientific thought has revealed many mysteries of the universe, its scope is limited to material phenomena. It does not cover questions such as revelation, inspiration, morality and the purpose of life. This limitation is acknowledged by scientists themselves. This is an indication of the fact that the scientific point of view represents a limited angle of interpretation of the universe, which is not the complete truth.

b. There is no conflict between the Quran and science, but the intellectual angles are different:

The research also concluded that there is no direct conflict between the Quran and science, but there is a difference in the interpretive language, assumptions and priorities of the two. The Quran views the universe with purpose and wisdom, while science

emphasizes understanding its practical laws. This difference is not a contradiction but a sign of diversity.

c. Quranic interpretation is for the expansion of human consciousness:

The Holy Quran makes the study of the universe not only an academic exercise but also a means of spiritual and moral development. According to it, the study of the universe is a stimulus for increasing faith, reflection and self-purification. This is the point of view that is missing in scientific interpretation, and the presence of which gives an all-round expansion to human understanding.

d. Scientific discoveries can help in the interpretation of the Holy Quran:

Research shows that if scientific theories are included in the understanding of the Quran along with proven and scientific principles, they can help in the understanding of the verses of the Quran, provided that revelation is recognized as the original source and not science as the standard of truth.

These results make it clear that the Quranic interpretation of the universe is based on a holistic, objective and moral basis, while modern scientific thought is based on a partial, material, and empirical basis. Both are valid within their respective scopes, but only the Quranic interpretation can encompass the complete reality because it also encompasses metaphysical, moral and spiritual dimensions.

7. Recommendations

After a thorough discussion on the subject, the following recommendations must be made:

a. Modern scientific thought should be given the status of a secondary source in the interpretation of the Holy Quran.

In the interpretation of the verses of the universe (ayat-e-kunyah) of the Holy Quran, modern scientific information should be used only to the extent that it helps in clarifying the meaning of the revelation. But they should be avoided from being considered as the original source or absolute truth. Scientific theories change with time, while the word of the Holy Quran is definite and eternal. Therefore, making science the basic criterion of interpretation can lead to instability in interpretation.

b. Comparative study courses of 'Quran and Science' should be introduced in Islamic universities:

Religious schools and Islamic universities should introduce courses that promote intellectual and scientific dialogue between the Holy Quran and modern scientific

theories to broaden the horizons of thought among students. This initiative will not only strengthen the faith of students, but will also enable them to become intellectually active in the field of science.

c. Interdisciplinary dialogue should be initiated between Islamic scholars and scientists:

Different academic institutions should organize academic dialogues between religious scholars and experts so that a critical integration of both perspectives on the concept of the universe can be possible. Such dialogues can give rise to new scientific possibilities and will help keep the Muslim Ummah in tune with scientific progress.

d. The principle of moderation should be adopted in research:

Modern science should neither be completely rejected nor should it be considered the final word in understanding the Quran. Rather, a moderate scientific approach should be adopted that maintains a balance between the original spirit of the Quran and the useful discoveries of science. Following this principle creates stability and intellectual moderation in research results, which is highly desired in today's academic world.

e. Specific research projects should be created on the verses of the Quran.

Islamic research institutions and universities should organize permanent research projects on verses of the Holy Quran that relate to the universe, creation, astronomy, botany, biology and physics. This process will become a means of expressing Quranic insights in scientific and academic language in the modern era and will improve the scientific and intellectual perception of Islam in the West.

f. Modern scientific theories should be critically analyzed in the light of Islamic principles.

Muslim scholars should not simply accept or reject scientific theories like Big Bang, Multiverse, Evolution but rather critically examine them and study their intellectual and moral implications. This approach will promote ijtihadist thought and introduce Islam as an active intellectual force.

g. Scientific awareness should be raised at the public level along with understanding the Quran.

The public should be made aware of the scientific indications of the Holy Quran and its intellectual message through mosques, madrasas and the media so that the common mind can also look at the universe with a thoughtful eye. This awareness-raising will establish a balance between faith and reason and will be a means of overcoming scientific backwardness.