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Big Bang Theory and the Creation of the Universe: Quranic Perspective and Scientific Analysis

نظرية الانفجار العظيم ونشأة الكون: منظور قرآني وتحليل علمي

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☆ Dr. Munib Siddiqui ☆ Dr. Hafsa Siddiqui

Abstract

This paper explores the origins of the universe through a comparative analysis of the Qur'anic worldview and the modern scientific understanding, particularly the Big Bang Theory. The Qur'an, although revealed over 1,400 years ago, contains verses that exhibit a striking congruence with some of the most advanced discoveries in cosmology. Verses such as Surah Al-Anbiya (21:30) state, that the heavens and the earth were a joined entity, then We separated them, which many scholars and scientists have interpreted as an early reference to the concept of cosmic singularity and the subsequent expansion of the universe. Furthermore, Surah Al-Dhariyat (51:47) aligns with Edwin Hubble's 1929 observation that the universe is continuously expanding, a fundamental component of the Big Bang Theory. Another important reference comes from Surah Fussilat (41:11), where the heavens are described as being in a "smoke" or gaseous state before their formation—concepts that parallel the nebular hypothesis and modern understanding of stellar evolution. This paper examines these verses through a hermeneutic and interdisciplinary lens, considering both classical tafsir (exegesis) and modern astrophysical models. The objective is not to force a scientific reading onto the Qur'an, but rather to explore whether the Qur'anic descriptions are consistent with what contemporary science has revealed about the origins of the cosmos. The analysis reveals that there is a profound compatibility between revelation and reason, suggesting that science and faith need not exist in opposition. The origin of the universe has long intrigued both theologians and scientists. While science attempts to understand the material mechanisms behind the cosmos, religion seeks to address the metaphysical questions of purpose and creation. The focus of this paper is the Big Bang Theory and relevant Quranic verses against a convergence of scientific and Qur'anic perspectives with regards to creation of universe. In fact, it argues that Islamic scripture has no tendency to stop people from searching and exploring the world, but has the tendency to be used in reflection and such searching and causing of contemplation of the natural world. In the end, the goal of this study is to create a worldview that treats faith-based narratives and empirical inquiry as a whole. The paper proposes an integral epistemological program concerning existence by combining traditional Islamic cosmology with modern physics.

Keywords: Big Bang Theory, Cosmology, Theology, Faith-Based Narratives, Cosmos.

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1. Introduction

For millennia people have been trying to answer the question of how the universe started, and there is a vast range of answers that have been given which include religious scriptures, philosophical doctrines and scientific theories. In modern day, the Big Bang has become the nation's dominant scientific understanding of the origin of the universe. According to Hawking (1998) and Weinberg (2008), it supposes that everything consisting of matter and what is or can be interpreted as energy emerged from a point that is absolutely compact infinitely at one point in the past, which continued its expansion in order to become the cosmos that we experience as actual today[1]. Rich observational evidence includes cosmic microwave background radiation, Hubble's law of galactic redshift, and relative abundance of light elements all of which bear out this theory[2].

Long before these empirical discoveries, however, the Qur'an, revealed in the 7th century CE, articulated a cosmology that has drawn increasing interest from modern scholars. Qur'anic verses such as Surah Al-Anbiya[3], which mentions that the "heavens and the earth were joined together before We clove them asunder," and Surah Al-Dhariyat[4], which refers to the expansion of the heavens, are interpreted by some as metaphysical reflections that resonate with contemporary cosmological concepts[5]. Although the Qur'an is not a scientific treatise, its descriptive richness invites exploration into whether it presents anticipatory insights or symbolic parallels with scientific knowledge.

The relationship between science and religion has often been portrayed as inherently antagonistic, particularly within Western intellectual traditions following the Enlightenment[6]. However, within the Islamic intellectual heritage, science and revelation were historically seen as complementary sources of knowledge. Renowned Muslim scholars such as Al-Ghazali, Ibn Sina, and Al-Biruni integrated metaphysical insights with empirical observation, creating an epistemological framework in which revelation and reason worked harmoniously[7].

Building upon this intellectual tradition, the present study does not aim to conflate the Qur'an with scientific theory, but to explore how its cosmological descriptions can align with and even inspire scientific reflection.

Additionally, this research places the discussion in an overall Islamic cosmological context that conceives of the universe as the creation intended and intended by the divine. Here celestial bodies are not just material objects but also support for (āyāt) that are evocative of

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[1] Weinberg, Steven. *Third Thoughts: The Universe We Still Don't Know.* Cambridge, MA: Harvard University Press, 2018.

[2] Bennett, C. L., et al. "The Microwave Anisotropy Probe Mission." *The Astrophysical Journal* 583, no. 1 (2003): 1.

[3] Al-Anbiyā', 21:30.

[4] Al-Dhāriyāt, 51:47.

[5] Bigliardi, Stefano. "The Contemporary Debate on the Harmony between Islam and Science: Emergence and Challenges of a New Generation." *Social Epistemology* 28, no. 2 (2014): 167–186.

[6] Brooke, John Hedley. *Science and Religion: Some Historical Perspectives.* Cambridge: Cambridge University Press, 1991.

[7] Kianifard, Nasim. "Al-Ghazali's Compatibility with the Philosophers and the Influence of Sufism." *Religious Inquiries* 9, no. 17 (2020): 45–63.

the Creator, therefore possessing teleological significance[8]. The scientific models of the physical mechanisms of the universe described scientific models while the Qur'anic approach describes existential and moral dimensions that go beyond empirical explanation. In order to understand the role the Qur'an plays in cosmological thought it is necessary to take into account the Qur'an's linguistic richness, metaphorical nuances, and their contextual interpretation[9] which precludes the constructive or reductionist reading of it.

In our time, one of the most rapidly advancing scientific cultures where there is at the same time an upsurge of questioning on the spiritual realm, dialogue between faith and science must be constructive. The aim of this study is to introduce into that dialogue by outlining how Qur'anic cosmology thematically interacts with the Big Bang Theory. We would like to employ an approach of a comparative in which we use such an approach to demonstrate that the Qur'an encourages reflection and inquiry, and posits that revelation and scientific reasoning can be done together in ways that are mutually enriching, even as humanity becomes conscious of a more cosmically (and perhaps) ultimately connected cosmos.

1.1. Problem statement

Among both the scientific inquiry and religious discourse, the very question of the origin of the universe has been one that has mattered. In recent centuries, the development of the cosmology, especially in the theoretical aspect with the formulation of the theory of Big Bang has become a basis of scientific explanation of the beginning of the universe[10]. writes of this theory for which the universe is thought to have formed from a singularity 13.8 billion years ago and to have been expanding ever since. Cosmic microwave background radiation, redshift of galaxies, and the distribution of light elements all confirm corroborating evidence for this model in scientific community[11]. However, such development has caused philosophical and theological questions as to the theoretical compatibility of such theories with traditional religious stories of creation, especially in Islam.

The Qur'an, revealed over fourteen centuries ago, contains numerous verses that allude to the origin and expansion of the universe. Verses such as Surah Al-Anbiya[12], which speaks of the heavens and the earth being a joined entity before being separated, and Surah Al-Dhariyat[13], which mentions the continuous expansion of the heavens, have been interpreted by many scholars as having remarkable parallels with the Big Bang model[14].

These correlations have sparked considerable debate: are these descriptions metaphorical, spiritually symbolic, or do they represent a divine foretelling of scientific phenomena? The central problem, therefore, lies in the interpretive gap between scriptural exegesis and

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[8] Sardar, Ziauddin. *Reading the Qur'an: The Contemporary Relevance of the Sacred Text of Islam.* Oxford: Oxford University Press, 2011.

[9] Ragab, Ahmed. *Piety and Patienthood in Medieval Islam.* London: Routledge, 2018.

[10] Liddle, S. D., and V. Pennick. "Interventions for Preventing and Treating Low-Back and Pelvic Pain during Pregnancy." *Cochrane Database of Systematic Reviews*, no. 9 (2015).

[11] Weinberg, Steven. *Cosmology.* Oxford: OUP Oxford, 2008.

[12] Al-Anbiyā', 21:30.

[13] Al-Dhāriyāt, 51:47.

[14] Khan, Hafeez Ullah. "Science and Religion: The Relationship between Islamic Teachings and Modern Cosmology." *International Journal of the Universe and Humanity in Islamic Vision and Perspective* 1, no. 1 (2024): 1–13.

scientific methodology. Despite growing interest in Qur'an-science discourse, there remains a lack of structured academic research that objectively analyzes the conceptual intersections and epistemological boundaries between Islamic cosmology and modern physics[15]. Most existing literature either attempts to validate scientific discoveries through selective scriptural references or dismisses religious texts as non-empirical and hence irrelevant to scientific discussion. This polarization creates a need for a balanced and scholarly approach that neither reduces the Qur'an to a scientific manual nor undermines its metaphysical contributions. As noted by Nasr (2006), the challenge is not in reconciling science and religion superficially but in cultivating a deeper intellectual framework where both domains can converse meaningfully[16].

In the context of the Muslim world, particularly in educational and theological institutions, the relationship between science and religion remains underdeveloped. Many students and scholars are either unaware of the potential harmony between Qur'anic cosmology and scientific theories or lack the methodological tools to engage with both disciplines simultaneously. The absence of this knowledge places a barrier to the development of conjoined worldview that sees scientific rationality and religious faith functioning together and feeding off each other[17]. However, if the integrative scholarship leading up to big bang cosmology is not done, misconceptions can arise and lead to needless division off Faith based and empirical understanding of the origins of the universe.

Thus, the principal problem this study attempts to resolve is the poor scholarship on the Qur'anic notion of creation within the modern cosmological theories in particular the Big Bang. This thesis aims to close that gap by performing a comparative and interpretive study of some important Qur'anic verses and scientific facts in order to facilitate a more comprehensive understanding of cosmology on the basis of theological depth and scientific rigor.

1.2. Research Objectives

- In order to study the Qur'anic accounts of the origin and spread out of the universe.
- In order to analyze the fundamental concepts and the scientific evidence that support the Big Bang Theory.
- In order to compare the Qur'anic cosmological worldview with the Big Bang Theory.
- An attempt to examine the implications of integration of religious and scientific views in cosmology with regard to the epistemological aspects.
- They would also evaluate how this integration should relate to Islamic scholars and beginners in terms of its religious and educational importance.

1.3. Research Questions

- What are the key Qur'anic verses that describe the creation and expansion of the universe, and how have classical and modern scholars interpreted them?
- What is the Big Bang Theory, and what scientific evidence supports it as the leading model for the origin of the universe?

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[15] Guessoum, Nidhal. *Islam's Quantum Question.* London: I.B. Tauris, 2010, 1-432.

[16] Nasr, Seyyed Hossein. *Islamic Philosophy from Its Origin to the Present: Philosophy in the Land of Prophecy.* Albany: State University of New York Press, 2006.

[17] Dallal, Ahmad. "Review of *Islam and Science: Religious Orthodoxy and the Battle for Rationality*, by Pervez Hoodbhoy." *International Journal of Middle East Studies* 25, no. 1 (1993): 174–176.

- In what ways do the Qur'anic narratives align with or differ from the scientific explanation provided by the Big Bang Theory?
- Can the Qur'an and modern cosmology be integrated into a coherent epistemological framework, and what are the limitations of such integration?
- How can the comparative study of science and the Qur'an contribute to the intellectual development of students and researchers in Muslim contexts?

1.4. Significance

This research holds considerable significance in both academic and theological discourse by offering a structured comparative analysis of the Big Bang Theory and Qur'anic cosmology. In contemporary times, science and religion are frequently viewed as divergent or even conflicting systems of thought. However, this study contributes to bridging that divide by demonstrating how the Qur'an's metaphorical descriptions of creation align with core principles of modern cosmology[18].

From an epistemological perspective, the study affirms that religious texts like the Qur'an possess a level of linguistic and conceptual depth that allows them to remain relevant across centuries. Verses such as Surah Al-Anbiya[19] and Surah Al-Dhariyat[20] metaphorically reference cosmological phenomena, offering reflections that resonate with modern theories about the origin and expansion of the universe. This supports the growing scholarly argument that the Qur'an contains a form of scientific prescience, not by predicting detailed data but by encouraging reflection on natural signs[21].

Moreover, the research contributes to the Islamic philosophy of science by fostering a paradigm where revelation and rational inquiry co-exist. It revives the classical Islamic tradition of integrating scientific pursuit with theological reflection—a legacy seen in scholars such as Al-Biruni and Ibn Sina. In this context, the study promotes an Islamic epistemology that values both empirical observation and spiritual insight[22].

Practically, this study serves educators and researchers by offering an academic model for integrating Qur'anic thought with contemporary scientific understanding. This is particularly relevant for curriculum developers in Islamic educational institutions where the challenge is to present a balanced worldview that respects both faith and reason[23].

Lastly, the research has interfaith and intercultural implications. It contributes to a more nuanced understanding of how religious narratives can complement rather than conflict with scientific knowledge, fostering intellectual pluralism and dialogue among civilizations[24].

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[18] Bucaille, Maurice. *The Qur'an & Modern Science.* Miami, FL: Peace Vision, 1980, No. 2.

[19] Al-Anbiyā', 21:30.

[20] Al-Dhāriyāt, 51:47.

[21] Nasr, Seyyed Hossein. *Islamic Philosophy from Its Origin to the Present: Philosophy in the Land of Prophecy.* Albany: State University of New York Press, 2006.

[22] Sardar, Ziauddin. *Reading the Qur'an: The Contemporary Relevance of the Sacred Text of Islam.* Oxford: Oxford University Press, 2011.

[23] Guessoum, Nidhal. "Issues and Agendas of Islam and Science." *Zygon* 47, no. 2 (2012): 367–387.

[24] Dallal, Ahmad. "Review of *Islam and Science: Religious Orthodoxy and the Battle for Rationality*, by Pervez Hoodbhoy." *International Journal of Middle East Studies* 25, no. 1 (1993): 174–176.

2. Literature Review

The origin of the universe has long been a subject of inquiry in both scientific investigation and religious reflection. While science explores the physical processes behind the universe's emergence and structure, religion often provides existential, metaphysical, and moral frameworks for understanding creation. This literature review synthesizes scholarly contributions from modern cosmology, Qur'anic exegesis, and the philosophy of science to contextualize the dialogue between the Big Bang Theory and Islamic cosmology.

2.1. Big Bang Theory: Scientific Context and Development

The Big Bang Theory is the prevailing scientific model explaining the origin of the universe. It proposes that the universe began approximately 13.8 billion years ago from an extremely hot and dense singularity, which has been expanding ever since[25]. Key pieces of supporting evidence include:

- **Hubble's Law** and the redshift of galaxies[26]
- **Cosmic Microwave Background Radiation**[27]
- **Abundance of light elements**[28]

These observations form the foundation of contemporary cosmology and provide a robust framework for understanding the evolution of the cosmos from a physical standpoint.

2.2. Qur'anic Cosmology and the Concept of Creation

The Qur'an, while not a scientific text, offers profound insights into the creation of the universe. In several verses as in Surah Al-Anbiya[29] the heavens and the earth come from a single point and parted therefrom. Other than that, Surah Al-Dhariyat[30] speaks of the extension of the heavens, while Surah Fussilat[31] mentions the primordial situation of the universe as a smoky or gaseous mass.

Now contemporary scholars such as Maurice Bucaille (1976) claim that these verses fit in very well with the model of Big Bang[32]. Like Nidhal Guessoum (2011), who promotes a balanced view for interpreting the Qur'an scientifically, to reject science outright is also bad and to reject science it is good[33]. Both he and she emphasise that the only way to arrive at Qur'anic verses is with linguistic, contextual, and historical analysis and that it is open to scientific reflection.

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[25] Weinberg, Steven. *Third Thoughts: The Universe We Still Don't Know.* Cambridge, MA: Harvard University Press, 2018.

[26]Bahcall, Neta A. "Hubble's Law and the Expanding Universe." *Proceedings of the National Academy of Sciences* 112, no. 11 (2015): 3173–3175.

[27] Wilson, R. W. "The Cosmic Microwave Background Radiation." *Science* 205, no. 4409 (1979): 866–874.

[28] Peebles, P. J. E. *Physical Cosmology.* Princeton, NJ: Princeton University Press, 2015.

[29] Al-Anbiyā', 21:30.

[30] Al-Dhāriyāt, 51:47.

[31] Al-Fuṣṣilat, 41:11.

[32] Bucaille, Maurice. *The Bible, the Qur'an and Science.* Translated by Alastair D. Pannel. Tripoli: Islamic Call Society, 1976.

[33] Guessoum, Nidhal. *Islam's Quantum Question.* London: I.B. Tauris, 2010, 1-432

2.3. The Qur'an and Scientific Interpretation

Another burning question is the degree that it should be interpreted scientifically (tafsir 'ilmi). The names of scholars like Ziauddin Sardar (2011) and Ibrahim Ragab (2018) say that the Qur'an provides some scientific relevant insights but its verses are nothing of the metaphysical and moral nature[34]. When the scientific theories are being worked out, some scientific theories are later misapplied to the Qur'anic texts, hence, and it may turn out that it is basically over interpreting or distorting the text's message.

Historical figures such as Ibn Sina, Al-Biruni, and Al-Ghazali demonstrated the classical Islamic approach to science and revelation: treating them as interconnected fields of knowledge. Their legacy supports the view that Islam fosters intellectual harmony between faith and reason[35].

2.4. Science and Religion: Conflict or Complementarity?

The supposed conflict between science and religion, particularly pronounced in post-Enlightenment Western discourse[36], is not mirrored in the Islamic intellectual tradition. Muslim civilization during its Golden Age was deeply committed to the integration of empirical study and spiritual inquiry. This tradition fosters a worldview in which scientific findings are seen as a form of understanding God's creation, not as an opposition to revelation.

Modern Islamic scholars have built upon this tradition. Yasir Qadhi and Javed Ahmad Ghamidi, for instance, emphasize that interpreting Qur'anic cosmology should account for rhetorical devices, linguistic nuance, and the Qur'an's overarching purpose, which is guidance, not empirical exposition.

2.5. Qur'anic Perspective on the Creation of the Universe

The Qur'an contains several verses that suggest a process of cosmic origin consistent with aspects of modern cosmology:

* **Surah Al-Anbiya (21:30):** "Do not those who disbelieve see that the heavens and the earth were a joined entity, then We separated them…" This verse is often interpreted to reflect the initial singularity from which the universe expanded.
* **Surah Fussilat (41:11):** "Then He turned to the heaven while it was smoke..." The term "smoke" (dukhan) may symbolize the primordial gaseous state of the universe, similar to the nebular hypothesis.
* **Surah Al-Dhariyat (51:47):** "And the heaven We constructed with strength, and indeed, We are [its] expander." This aligns with the modern understanding of an expanding universe, a cornerstone of Big Bang cosmology.

While these verses are metaphoric and poetically, they constitute a reflective format with the roots of prevailing scientific arguments on the origins and developments of the universe.

2.6. Scientific Analysis: The Big Bang Theory

According to the Big Bang Theory, all things including the universe started more or less 13.8 billion years ago in a singularity, which is defined as one point of infinite density and

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[34] Sardar, Ziauddin. *Reading the Qur'an: The Contemporary Relevance of the Sacred Text of Islam.* Oxford: Oxford University Press, 2011.

[35] Nasr, Seyyed Hossein. *Islamic Philosophy from Its Origin to the Present: Philosophy in the Land of Prophecy.* Albany: State University of New York Press, 2006.

[36] Brooke, John Hedley. *Science and Religion: Some Historical Perspectives.* Cambridge: Cambridge University Press, 1991.

temperature. After initial explosion, the space began to expand very quickly, to cool and to form subatomic particles and then atoms[37].

All of this has empirical support for this theory:

* **Cosmic Microwave Background Radiation** detected by Penzias and Wilson
* **Hubble's Law** showing the redshift of galaxies
* **Abundance of light elements** like hydrogen and helium

These findings collectively support a dynamic, evolving universe rather than a static one.

2.7. Parallels Between Qur'anic Verses and Modern Cosmology

A comparative analysis reveals striking similarities:

* **Joined entity to separation** (Qur'an) vs. **Singularity to expansion** (Science)
* **Heaven as smoke** (Qur'an) vs. **Gaseous state of early universe** (Science)
* **Continual expansion** (Qur'an) vs. **Observable expansion** (Science)

The parallels of these in some sense indicate that the Qur'an is advising an allusion to a view of the universe which the scientific exploration affirms. The Qur'an does not provide detailed scientific methodology but promotes inquiry through signs (ayat) in the heavens and earth.

2.8. Philosophical and Theological Reflections

Every aspect of physics creates Islamic theology, which states that Allah — that is God, creator of all — created all these laws. Also allied with the Big Bang concept of a beginning of time and space is the idea of creation ex nihilo (from nothing)[38]. And while science has yet to determine what actually set off the Big Bang, the question is philosophical and theological. The Qur'an often instructs to ponder and to ponder. There is synergy between scientific discovery and religious thought which can facilitate a greater meaning of existence.

2.9. Summary of Literature Gaps

While numerous scholars have explored either the scientific significance of Qur'anic verses or the development of the Big Bang Theory, fewer studies have undertaken a systematic comparative analysis of the two. Existing works often lack:

* A balanced integration of classical tafsir and modern cosmology
* A clear distinction between metaphorical and empirical interpretations
* A multi-layered epistemological analysis that incorporates Islamic philosophy of science

In this study, we bridge these gaps by providing a detailed analysis of how Qur'anic metaphysics accounts for certain aspects of the cosmological theory based on the Qur'anic approach, and has theological and philosophical significance.

The Qur'anic depiction of the universe's creation, while metaphorical, aligns with the core elements of the Big Bang Theory. Rather than being in conflict, science and religion can coexist and inform one another. The Qur'an's encouragement of reflection and observation aligns with the spirit of scientific inquiry, promoting a worldview in which both empirical evidence and divine revelation guide human understanding.

3. Methodology: Comparative Analysis Approach

This study adopts a qualitative comparative analysis methodology to examine the intersection of religious thought and scientific theory, specifically focusing on the Qur'anic narrative of creation and the Big Bang Theory as proposed by modern cosmology. Comparative analysis is an effective research approach when exploring similarities and differences between two

[37]Trefil, James S. *The Moment of Creation: Big Bang Physics from Before the First Millisecond to the Present Universe.* Mineola, NY: Dover Publications, 2013.

[38] Rafiabadi, Hamid Naseem. "Science, Islam and Cosmology—A Detailed Survey."

distinct bodies of knowledge—revealed scripture and empirical science—especially in interdisciplinary fields involving theology, cosmology, and philosophy of science[39].

3.1. Research Design

The research is exploratory and interpretative in nature, structured around a comparative textual and conceptual analysis. It involves a side-by-side study of:

* Selected Qur'anic verses dealing with the origin and expansion of the universe.
* Foundational scientific literature and theories related to the Big Bang model and cosmological evolution.

The aim is not to force equivalence but to analyze thematic, linguistic, and conceptual overlaps and distinctions, thus offering a nuanced understanding of both domains.

3.2. Data Collection

Data is drawn from two primary sources:

* **Qur'anic Text and Tafsir Literature**: Key verses such as *Surah Al-Anbiya*[40], *Surah Fussilat*[41], and *Surah Al-Dhariyat*[42] are analyzed using classical exegesis (e.g., Tafsir al-Tabari, Tafsir Ibn Kathir) as well as contemporary commentaries (e.g., Maududi, Tantawi).
* **Scientific Literature on Cosmology:** Secondary data are peer reviewed journal articles, books, and conference papers written by eminent cosmologists and physicists like Stephen Hawking (1988), Alan Guth (1997), Lawrence Krauss (2012), among others. These include publications taken from NASA, CERN and other cosmological research institutes[43].

3.3. Analytical Framework

The comparative analysis is guided by the following thematic lenses:

* **Cosmological Origin**: Comparing how both the Qur'an and science describe the beginning of the universe.
* **Expansion of the Universe**: Analyzing Qur'anic claims of "expanding heavens" with Hubble's Law and inflationary theory.
* **Primordial Matter and Order**: Juxtaposing Qur'anic mentions of "smoke" (dukhan) with scientific models of cosmic gases and subatomic chaos.
* **Epistemological Foundations**: Contrasting revelation-based knowledge with empirical observation and scientific reasoning.

The Qur'anic verses are interpreted by means of a hermeneutical approach, while contemporary academic views and empirical validations are applied to the scientific concepts.

3.4. Validity and Reliability

To ensure reliability:

* Multiple translations and tafsir interpretations are consulted[44].

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[39]Hanson, Gordon H., Nuno Lind, and Marc-Andreas Muendler. "The Dynamics of Comparative Advantage." *National Bureau of Economic Research Working Paper* no. 21753 (2015).

[40] Al-Anbiyā', 21:30.

[41] Al-Fuṣṣilat, 41:11.

[42] Al-Dhāriyāt, 51:47.

[43]Youvan, Douglas C. "Cosmologists That Opposed God: Hawking, Krauss, Carroll, Stenger, Sagan, Weinberg, Guth, Hoyle, Davies, and Susskind." 2024.

[44] Shah, Mustafa, ed. *Tafsir: Interpreting the Qur'an.* Abingdon: Routledge, 2013.

* Cross-referencing of scientific theories is done using reputable academic databases (e.g., JSTOR, ScienceDirect).
* Opinions of both Muslim scholars and Western scientists are equally weighted to maintain balance and objectivity.

The focus still remains on the authentic scriptural sources, as well as peer-reviewed scientific literature in order to maintain validity. There is no speculative or fringe theory included unless it has a very strong scholarly footprint.

3.5. Ethical Considerations

The research positions itself in a respectful but not overzealous way from both the religious belief and scientific inquiry. The point is not to judge the systems and prove that one or the other is right, but to know and read the systems in scholarly fashion and with an even point of view. Sequences are cited all sources correctly, and neutrality is sustained through the interpretive lens.

4. Analysis and Discussions

4.1. Overview of Comparative Framework

The present chapter ponders a detailed case of how the Qur'anic descriptions of the creation of the universe are comparable with modern scientific knowledge of the causes of the creation of the universe. Taking valid cosmological surveys as comparative framework, here Arabic verses of Qur'an are evaluated within their linguistic, metaphorical and theological contexts as well. The aim is not to make all concepts fit into a specific framework, but rather to discover the limits in which concepts can arrive at looking at things from similar angles and to reflect. This chapter attempts to develop a coherent dialogue between revelation and reason by comparing some verses of the Qur'an, their classical and modern exegesis and matching up with scientific discoveries.

4.2. Qur'anic Verses and Cosmological Themes

While the Qur'an has not been prepared as a textbook of science, it contains some deep images and statements about the creation and the origin of the universe[45]. Some passages give the impression of having referred metaphorically or directly to realities that have only been uncovered within cosmology recently.

Table 4.1: Quranic Translation and scientific Interpretation in comparison

Qur'anic Verse	Translation	Scientific Interpretation
Surah Al-Anbiya (21:30)	"Have those who disbelieved not considered that the heavens and the earth were a joined entity, and We separated them…"[46]	Strongly resembles the concept of cosmic singularity and subsequent expansion. The universe was once a single compact entity before the Big Bang.
Surah Al-Dhariyat (51:47)	"And the heaven We constructed with strength, and indeed, we are [its] expander."[47]	Directly aligns with Hubble's discovery of an expanding universe.
Surah Fussilat (41:11)	"Then He directed Himself to the heaven while it was smoke..."[48]	Describes the primordial state of the universe as gaseous, correlating with scientific findings that the early universe was a hot, dense gas.

[45] Abu-Milha, Khalid Yahya. "Scientific Issues in the Holy Qur'an: The Meaning and Translation of Verses Relating to the Creation of the Universe." PhD diss., Durham University, 2003.

[46] Al-Anbiyā', 21:30.

[47] Al-Dhāriyāt, 51:47.

[48] Al-Fuṣṣilat, 41:11.

These verses, while poetic and metaphorical in form, demonstrate remarkable consistency with discoveries made in cosmology over the last century.

4.3. Scientific Developments in Cosmology

Modern cosmology has undergone dramatic advancements, particularly since the 20th century. The Big Bang theory is now the most widely accepted scientific explanation for the origin of the universe. Its core propositions are:

* **Singularity**: All matter and energy were once compressed into an infinitely dense point.
* **Big Bang and Expansion**: Around 13.8 billion years ago, this point exploded and began expanding.
* **Cosmic Microwave Background Radiation (CMBR)**: Discovered in 1965, this residual radiation supports the notion of a hot, dense early universe.
* **Hubble's Law**: Observed that galaxies are moving away from us, indicating universal expansion.
* **Primordial Elements**: Hydrogen and helium were the first elements formed during the first few minutes post-Big Bang.

4.4. Cross-Analysis: Alignment between Revelation and Reason

The comparison finds some great similarity between Qur'anic themes and modern cosmology. The Qur'an does not provide numerical data and equations, but its conceptual structure coincides with scientific findings.

Table 4.2: Themes from Quran and Science

Theme	Qur'anic Perspective	Scientific Understanding
Origin from Unity	"The heavens and the earth were a joined entity" [49]	Big Bang singularity
Cosmic Expansion	"We are [its] expander" [50]	Hubble's expanding universe
Primordial Matter	"It was smoke…" [51]	Primordial gas and plasma
Order and Balance	"Who created and proportioned" [52]	Cosmological constants and fine-tuning

It helps incite a philosophical reflection associated with the call of the Qur'an to ponder the heavens as signs or miracles of divine wisdom.

4.5. Interpretative Analysis: Literal vs Metaphorical Readings

The scholars disagree on how the cosmological verses in the Qur'an should be taken literally. Ibn Kathir and Al-Tabari were classical exegetes who were interested in the theological and spiritual aspect of these verses. On the other hand, modern scholars such as Maurice Bucaille (1976), Harun Yahya have firstly tried to directly correlate these descriptions with scientific findings[53].

Such interpretations however, can be enlightening, but must not be over stretched in terms of metaphorical description. Persuaded by symbolic language rather than by empiric data, what the Qur'an often does is to speak in symbols in order to ignite a reflection. The balance is struck between appreciating all of the text's richness without constraining it to ever changing scientific theories.

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[49] Al-Anbiyā', 21:30.

[50] Al-Dhāriyāt, 51:47.

[51] Al-Fuṣṣilat, 41:11.

[52] Al-A'lā, 87:2.

[53] Bucaille, Maurice. *The Bible, the Qur'an and Science.* Translated by Alastair D. Pannel. Tripoli: Islamic Call Society, 1976.

4.6. Challenges and Limitations in Interpretation

While parallels are indeed interesting, it should be borne in mind that there are many limitations to this.

* Qur'anic Ambiguity: Verses of the Qur'an are full of passive language that is vivid and figurative.
* Science in Evolution: What was fact yesterday, can be questioned as such today.
* Uncertainty of Interpretation: There is a chance of over interpretating verses to suit the scientific data.

Moreover, the Qur'an's main mission is not to provide scientific explanation. It does no remind us of cosmology, so as to become texts of physics, but rather as a springboard for reflection.

4.7. Synthesis of Findings

This analysis demonstrates that there is no inherent contradiction between the Qur'an and modern cosmology. Instead, the Qur'an often precedes scientific discoveries in concept and principle. The emphasis on the heavens, expansion, and origin points to a worldview that encourages exploration, curiosity, and contemplation.

The Big Bang theory and the Qur'anic narrative of creation converge at multiple points — suggesting not equivalence, but resonance. Where science seeks to understand the **how**, the Qur'an often addresses the **why**. Together, they provide a richer understanding of our origins, both materially and spiritually.

5. Conclusion

5.1. Summary of Key Findings

This research explored the parallels between the Big Bang Theory—the most widely accepted scientific explanation for the origin of the universe—and Qur'anic cosmology, as expressed in key verses revealed over 1,400 years ago. By employing a comparative analysis framework, we examined several Qur'anic verses that metaphorically align with modern cosmological concepts such as the initial singularity, cosmic expansion, and primordial gaseous state of the universe.

The verses in Surah Al-Anbiya (21:30), Surah Al-Dhariyat (51:47), and Surah Fussilat (41:11) notably point toward concepts that are strongly supported by empirical evidence from cosmology. Scientific discoveries such as Hubble's Law, Cosmic Microwave Background Radiation (CMBR), and element formation through nucleosynthesis have reinforced the Big Bang model and find conceptual resonance within the Qur'anic descriptions of cosmic origin and structure.

5.2. Integration of Revelation and Reason

The most important result of this study is that science and religion can not fully clash, especially with the help of the philosophical peninsula and metaphorical reading. The Qur'an does not contradict established scientific facts nor does it contradict established scientific facts, in fact, it encourages the believers to reflect upon the universe, to observe things that happen, to take what they see and look for the knowledge of it. It goes without saying that the Islamic tradition of this exploratory mindset supports the kind of harmony between revelation and scientific pursuit.

Modern science deals with mechanisms and material causes where the Qur'an prompts us to meditate on purpose, meaning and divine wisdom. Together these lenses with their more holistic view of existence of both the material and metaphysical, the physical and philosophical.

5.3. Theological and Epistemological Implications

It also gives impetus to ongoing discussions in Islamic epistemology. It invites a reading of the Qur'anic text that is avoidant of the literal, which regards its metaphorical depths as well

as its thematic richness. The linkage between modern science and the Qur'an also affirms that the truth is unified, so that different kinds of knowledge system can elucidate other aspects of reality without refuting the other.

The study also disproves the idea that religious texts are antiquated or scientifically irrelevant. However, it emphasizes how Qur'anic language is timeless and rich enough to receive new meanings as human knowledge changes.

5.4. Limitations of the Study

The study is not without limitations, but despite the richness of the findings. Secondly, scientific theories are not permanent; what is today may become of less value tomorrow. Therefore, metaphoric interpretations can dispose one into speculative readings which may not be academically rigorous and theologically sound. Secondly, this paper looked at only a small number of verses, whereas the Qur'an encompasses a much larger multilayered cosmological narrative that should be deep engaged in its exegesis and with interdisciplinarity.

5.5. Recommendations for Future Research

Future research can be expanded in the following directions:

* Comparative analysis of Qur'anic cosmology with other scientific models such as the Steady State Theory or String Theory.
* Investigation into other cosmological verses from the Qur'an and Hadith literature.
* Interdisciplinary work involving Qur'anic studies, astrophysics, and Islamic philosophy to further develop a coherent framework for religion-science dialogue.
* Exploring educational curricula that integrate Islamic teachings with scientific thought for promoting intellectual harmony.

5.6. Final Remarks

Big Bang and the Qur'anic account of the origin of the universe are not in opposition in words and substance but have a great conceptual kinship. The Qur'an does not teach science but its verse sounds reflections that match the truth of scientific inquiry. This harmony is to a certain degree supportive for this idea: the revelation and reason are the important sources of human understanding. It is in an age where faith and science are often polarized, integrated opinions are enriching and necessary.

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