



CREATION OF THE UNIVERSE ACCORDING TO THE VIEW OF THE QUR'AN AND SCIENCE

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Abstract

This article discusses the creation of the universe from the perspective of the Qur'an and science, revealing the similarities and differences between the two. Through literature study and text analysis, it was found that the concept of creation in the Koran is in harmony with modern scientific theories such as the Big Bang and the universe's expansion. The Qur'an describes creation in the "six ages," the formation of heaven and earth, and cosmic expansion that parallels scientific discoveries. This study emphasizes the importance of dialogue between science and religion to enrich our understanding of the universe. With an interdisciplinary approach, this research proposes the integration of theological and empirical views as a path to a more holistic understanding.

Keywords: Physics, Tauhid, Teori Big Bang

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INTRODUCTION

The Qur'an, the holy book of Islam, provides an in-depth narrative regarding the creation of the universe. Verses in the Qur'an, such as those in Surah Al-Anbiya (21:30) and Surah Adz-Dzariyat (51:47), describe the universe as the result of Allah's planned and orderly act of creation. The Qur'an states that the heavens and the earth were initially united before being separated and that the heavens continue to expand. This view has become the basis for much theological reflection on how God created and organized the universe.

Modern science offers an empirical explanation of the creation of the universe through the Big Bang theory, which states that the universe began from an extremely hot and dense singularity about 13.8 billion years ago. This process was followed by cosmic expansion that continues to this day, which is explained by the laws of physics, including the theory of general relativity and quantum mechanics. Edwin Hubble's discovery of galactic expansion in the early 20th century also provided significant support for this theory.

Discussing the relationship between the Qur'an and science does not only focus on the many branches of science contained in it, but it is also important to consider whether the Qur'an or the messages of its verses support or hinder the development of science. The progress of science is measured not only by its contribution to society or the development of ideas and methods but also by the psychological and social conditions that are met, which influence the progress of science. Thus, the Qur'an, in essence, indirectly shows that it is a source of scientific knowledge (Afifah et al., 2020)

From an Islamic religious perspective, the Big Bang theory is one of the theories of the creation of the universe. The universe (Big Bang Theory) was created by a cosmic explosion about 10 to 20 billion years ago, which caused its expansion. (Evolution of) the Universe (Wright, 2009). The Big Bang theory states that all objects initially had a shape but then separated. This means all matter was born in a big explosion from a single point and formed the universe. The 30th verse of the Al-Quran, Surah Al-Anbiya, describes That those who disbelieve do not know that the heavens and the earth were once one whole, and then we separated the two and made everything living from the air. So why don't they also believe? (Cicilia et al., 2019).

The theological perspectives of the Qur'an and scientific explanations of the creation of the universe are often considered different, with one based on revelation and spiritual belief, while the other is based on observation and experimentation. However, some researchers and thinkers argue that there may be harmony between religious descriptions and scientific findings, which could lead to a more holistic understanding of the origins and structure of the universe.

Given the rapid development of science and the increasing interest in dialogue between science and religion, the need to integrate and explore the relationship between theological and scientific views is increasingly important. This research aims to analyze the description of creation in the Qur'an, compare the views of the Qur'an with scientific theory, and explain the integration between science and religion.

METHODS

This research was designed as library research and text analysis using various literature sources as research data. The library research process involves reviewing the literature and analyzing relevant topics. Library searches can utilize sources such as journals, books, dictionaries, documents, magazines, and other sources without conducting field research.

RESULTS AND DISCUSSION

The mysterious universe, consisting of stars, planets, nebulae, comets, meteors, and space, is so vast in diameter that its extent can only be expressed in numbers that amaze our imagination, and that too without being able to convey an accurate impression of this vastness. The Koran describes the awesomeness of the lowest heavens. The lowest sky is topped by the Milky Way, which astronomers say has a hundred billion stars. Therefore, the total number of stars cannot be imagined. The universe is the entirety of space and time, including all matter, energy, planets, stars, galaxies, and the empty space between these objects. This includes everything that exists and may exist, both observable and invisible, as well as all the physical laws and structures that govern the existence and interactions of its components.

The creation of the universe is one manifestation of the power of Allah SWT. Many verses in the Koran invite us to reflect on His creation, including the universe. The universe is a container that includes biotic and abiotic life, as well as various natural phenomena that humans can or cannot understand (Afifah et al., 2020)

The word 'Universe' Provides a lot of descriptions and discussions about the things we live in, including the entire earth and everything in between. The universe still holds many mysteries, both in its creation and development. The universe includes all quantities, from the smallest particles below atoms to a collection of galaxies that cannot

be described. *Nature* is defined as the universe, world (world), condition or state (condition), and the form of the state (state of being). In terms of terms, the author defines *Nature* as everything that exists both in the sky and on earth, whether empirically or not. According to al-Syaibani, the universe consists of whatever forms it except the one who created it, Allah SWT. As said by Quraish Shihab, everything that has a form or existence other than Allah SWT, whether known or unknown to humans, is called Nature. In Islam, everything that the human senses can see is called 'alam shahadah, which means phenomenon, while the opposite is called noumena (Cicilia et al., 2019)

Astrophysicists describe a phenomenon called the Big Bang that is related to the universe's origin. Astronomers and astrophysicists have conducted observations and experiments for decades to support this theory. The Big Bang confirmed that the entire universe emerged from a giant nebula (primary nebula). Galaxies formed through secondary separation after the Big Bang. After that, stars, planets, suns, and other celestial bodies appeared in the galaxy.

He (Allah) is the Creator of heaven and earth. How (possible) does He have children when He does not have a wife? He created all things, and He knows everything." This explanation of the Qur'an is in line with scientific discoveries about the formation of the universe. Everyone agrees that extraterrestrial matter existed as "gas" before the formation of galaxies. In short, massive gas and clouds of material existed before galaxies formed. The term "smoke" is more appropriate to describe this celestial material than the term "gas."

The Qur'an provides corroborating evidence that God, Allah, is the Creator of all things. Every element in the universe is proof of God's power and existence. Allah will not waste His creation; all this shows His greatness and the creation of the universe. The consistent use of the Qur'an provides strong evidence of His intelligence and creation. Everything inside and outside the human body and any fundamental elements that may be new or confusing are part of the universe. Everything in this world, including what humans believe in, is part of our understanding of the universe, except Allah and His attributes. The universe includes various types, including aqidah and the unseen world. In English, the "universe" is often called "universe," meaning the whole, while the general term for it is "universe."

The word Alam (العام) in Arabic means the entire Universe. When it is said al-kawni (الكوني) or al-'alami (العالمي), it refers to something that encompasses the whole world. In Greek, the term for the Universe is "kosmos," which means "harmonious" or "harmonious." In terms of etymology, alam (nature) has the same roots as 'ilm (science, knowledge) and 'alamat (address, sign). This is because the Universe is considered a sign of the existence of a Creator, namely Allah SWT. The Universe is also called verses that provide knowledge and lessons for humans. One of the lessons from observing the Universe is the harmony and order contained in it, not chaos. Thus, studying the Universe can bring a person to positive conclusions and an attitude full of appreciation (Zaini, 2018).

The purpose of the creation of the Universe In the view of the Qur'an, the purpose of the Universe is to show the greatness and power of Allah, which can be seen through the order and beauty of His creation. The Universe also functions as a testing arena for humans, where they are responsible as caliphs on Earth to protect and maintain the environment and carry out their duties wisely. In addition, this creation reflects perfect balance and order, which supports life and provides benefits and favors

to all creatures, confirming God's wisdom and compassion. Regarding the creation of the Universe according to the view of the Koran:

1. Creation from Nothing: The Qur'an states that Allah created the universe from nothing. In Surah Al-Anbiya' (21:30), it is stated:

"And do those who disbelieve do not know that the heavens and the earth are both one and one, then We separated the two? Moreover, from water, we make everything. So why don't they also believe?"

This verse explains that heaven and earth were once unified entities, but Allah separated them. Additionally, it confirms that all living things were created from water, which underscores the importance of water in the creation of life. This verse is also a call to unbelievers to reflect on and acknowledge God's power in the creation and arrangement of the universe.

2. Heaven and Earth as Initial Entities: The Qur'an describes that heaven and earth are initial entities created by Allah. Surah Al-Baqarah (2:29) states: "It is He who created everything on earth for you, then He went to the heavens, then He made up the seven heavens. Moreover, He is All-Knowing of everything." This verse explains that Allah created everything on earth for the benefit of humans, and then He arranged and formed the heavens into seven layers. In addition, this verse confirms that Allah has comprehensive knowledge about everything.

3. Creation Process: The Qur'an explains that the creation of the heavens and the earth involved certain times and stages. Surah Al-Furqan (25:59) states: "It is He who created the heavens and the earth and what is between them in six days, then He sat on the Throne. Allah is the Most Gracious God, so ask Him about everything with deep knowledge." This verse explains that Allah created the heavens, the earth, and everything in them within six days and then sat on the Throne (His Throne). It also emphasizes that Allah is the Most Gracious God and knows everything in depth.

4. Creation of Man: According to the Qur'an, man was created from earth or clay. Surah Al-Hijr (15:26) states: "And indeed, We have created man from dry clay like pottery." This verse explains that Allah created humans from basic materials in the form of dry clay, which has a texture like pottery, illustrating humans' origin from the earth's elements.

5. Purpose and Wisdom: The Qur'an explains that the creation of the universe has specific purposes and wisdom. Surah Adh-Dhariyat (51:56) states: "And I did not create jinn and humans except that they should worship Me." This verse states that the primary purpose of creating jinn and humans is worship and devotion to Allah. This emphasizes that all these creatures were created with the specific purpose of worshipping and submitting to God.

According to the Qur'an, the creation of the universe describes that Allah created the heavens and the earth from nothing in an orderly process, including the separation and formation of the heavens into seven layers and the creation of everything living from water. Humans were created from dry clay, signifying the deep connection between

humans and the earth. This entire creation aims to worship Allah, showing that worship and devotion to God is the primary goal of the existence of jinn and humans.

In the Qur'an, many verses discuss the creation of the universe in various ways. The Qur'an emphasizes that Allah is the Creator of everything in the heavens and on earth. The main characteristic of Allah as Creator is the most dominant and apparent, and there is no creator other than Him. As the Creator, the Qur'an mentions several names of Allah, such as al-Khaliq (Creator), al-Bari' (Creator), al-Mushawwir (Maker), and al-Badi' (New Creator). Therefore, Muslims agree that Allah is al-Khaliq, the Creator, and the universe is His creation (Zaini, 2018).

In View of Science

In the view of science, the purpose of the creation of the universe can be understood as the result of cosmic processes that follow the laws of physics and natural evolution. The universe began with a big explosion (Big Bang) around 13.8 billion years ago. Since then, it has experienced expansion and the formation of structures such as galaxies, stars, and planets. This process produces balance and order that allows the development of matter and energy and the formation of conditions that support life. Scientifically, the purpose of the creation of the universe is a natural process that follows consistent physical laws, leading to the evolution and formation of the cosmic structures we observe today.

In the scientific view, the creation of the universe is not generally considered something that can be explained in terms of purpose or purpose. Science tends to focus on how the universe developed and functioned rather than asking questions about its creation's "why" or purpose. According to scientific theories, especially the Big Bang theory, the universe began about 13.8 billion years ago from a boiling and dense state and has been expanding ever since. This process involves various physical phenomena, including the formation of galaxies, stars, and planets. Science has focused more attention on these processes, explaining the mechanisms involved in forming and evolving cosmic structures.

Several Western scientists who expressed opinions about the universe's origins, including Isaac Newton, stated that the universe had no beginning, end, or creation process (Purwadi, 2002). Albert Einstein stated that nature is static (not moving or not developing), Stephen Hawking Friedman stated that the universe is dynamic (actively moving or expanding) (M. et al., 2016), Abbe Georges Lemaitre stated that the Big Bang Theory stated that the universe originated from an explosion and then expanded around 13,700 million years ago. then (Tjasyono Hk, n.d.). The general theory of relativity contains the hypothesis that the universe began with a big explosion.

CONCLUSION

In exploring the creation of the universe, both the Qur'an and science offer deep and complex perspectives. The Qur'an provides a narrative rich in philosophical and theological meaning about the creation of the heavens and the Earth, encompassing the concepts of separation, expansion, and broad periods of creation. Although metaphorical, this description reflects a deep understanding of the cosmos and its divine role in its creation.

Meanwhile, modern science provides an empirical explanation of the universe's origins through the Big Bang theory, which describes how the universe developed from a super-dense singularity to the cosmic structure we observe today. Observational evidence and complex physical theories explain the formation processes of galaxies, stars, and planets, including Earth.

A comparison between the views of the Koran and science shows that although the approaches and language used are different, there are similarities in the process of cosmic transformation and the formation of the universe's structure. This alignment allows deeper dialogue between theology and science, allowing for a more holistic integration of religious and scientific knowledge.

By understanding the creation of the universe from these two perspectives, we not only broaden our knowledge of its origins but also underscore the importance of collaboration between various scientific disciplines. This research serves as a bridge between religious and scientific understanding, offering a more complete view of its creation and structure.

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