

The Six Periods of the Creation Universe in the Perspective of the Study Quranic Interpretation with Science

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Abstract: The universe as a creature of God with a vast expanse of reality which is full of various mysteries and secrets that will never be finished being revealed by mankind. The process of the creation of the universe as it is constantly being investigated by scientists, and the divine existence of the tendencies from which they originated has always been a never-ending question. The Al-Quran as a miracle of God's word and complement of previous books stores information on various things. Among them are verses about science that show the majesty and power of God in this universe. On QS. An-Naziat verses 27-33 there explain the kauniyah verses of natural phenomena concerning the creation of the universe. This research uses literature research with thematic interpretation method. Through the study of interpretations by scholars with various styles, the result is that in QS. An-Naziat verses 27-33 describes how the six periods of creation regarding the universe.

Keywords: Creation, Six Times, interpretation.

Introduction

The universe as a creation of the creator with various mysteries and secrets that will never be completed will always be interesting for humans to study and discuss. The divine existence of natural appearances is an interesting question and the tendency to think about it is very large to find out where they come from. The gift of thinking and reasoning is the greatest human strength that is not possessed by other creatures in understanding scientific methodology and producing various kinds of scientific disciplines. Through the gift of thinking and reasoning it is also a way for humans to understand the universe towards their own lives, and to know the existence of God as the creator of himself and all creatures.

Religiosity sometimes on the other hand makes humans stop to think about everything, those who believe that they understand everything will not find out, nor do they accidentally discover something, do not try to think objectively. It is things like this that make stupidity and bigotry in

thinking objectively. As we know, Islam was born brought by Muhammad bin Abdullah SAW as God's treatise in 610 AD. Al-Quran as the holy book of Muslims as well as the word of God contains guidelines for human life. The Al-Quran does not only talk about aqidah, fiqh, or law, but the Al-Quran is a holy book that stores information on various things. As a complement to the previous books, the Koran also presents Kauniyah verses. The verses of law, muamalat, morals, and creed are instructions for humans to know God and behave properly according to divine guidance. Thus, verses about science are also indications of God's majesty and power in this universe. Statements like these should be underlined that religiosity is not the end of a bottleneck in thinking, but is the beginning of knowing God's broad love.

The universe is God's verses which are always a reminder of its existence. On QS. Ali Imron verses 190-191 "Verily, in the creation of the heavens and the earth and the alternation of the night and the day there are signs (of Allah's greatness) for people of understanding, 191.

(namely) those who remember Allah while standing, sitting, or in a state of lay down, and thought about the creation of the heavens and the earth (saying), "O our Lord, you did not create all this in vain. Glory be to You. Protect us from the torment of hell." There it is clearly stated that God does not create anything in vain. Al-Quran always invites mankind to remember God and think about the creation of the universe. human view there are two views of human thinking about the universe. The first are those who pursue science and are immersed in their rational methodology (reducing things that are unseen related to spirituality), resulting in humans drifting away, not knowing or forgetting the Creator of the universe, Allah Rabbul 'Ālamīn, and even setting aside or leaving religion. Another view is those who are lazy to use their minds so they don't have the chance to see the meaning of the creation of this extraordinarily large and magnificent universe so that Allah's creation is neglected and does not touch their lives.

In order to achieve the degree of piety of an ideal Muslim. Through this description it can be seen that in the Islamic view there is no dichotomy of science and religion. Religion and science do not collide with one another, but are synergized through the human mind with thought processes. It is this reason's ability to become a bridge to integrate rational thinking and feeling, eliminating the dichotomy between science and religion. Remembering the Universe is so special. Nidal said. A professor of physics and astronomy once said that if we take a closer look at nature, the further human beings reveal the universe along with its vast spatial and temporal scales and the immeasurable diversity of objects. So the more they realize that humans are not special at all and are only a grain of dust in an almost limitless universe landscape.

In the end, rationally and empirically it is increasingly seen that the Koran is a book that is still very relevant until the end of time. Likewise regarding the discussion of the universe in the Al-Quran, the discussion of the creation of the universe has always been an interesting topic of conversation and will never run out. The author considers the description of verse fragments from the Al-Quran in Surah An-Naziat verses 27-33 by

the author to be interesting in representing the creation of the universe which is divided into six periods. This research refers to the Ministry of Religion's Scientific Interpretation of the series on the creation of the universe.

Materials and Methods

The research method used library research by collecting bibliographical materials, which are related to the research objectives, collection techniques using the library method, and organizing by presenting data. Therefore, the researcher collects data and then examines books or other reading sources which are relevant sources of primary and secondary data in this study. The primary sources used are Scientific Interpretation published by the Indonesian Ministry of Religion, Jalalain Tafsir, Al Misbah Tafsir, Origin Books by Neil deGrasse Tyson, and Cosmos Books by Carl Sagan. Meanwhile, secondary data sources use sources that do not directly provide data to data collectors. Secondary data sources can be in the form of writings that discuss universe studies and other literature. The data analysis method used is content analysis which is used to find valid conclusions and is re-examined by adjusting the context.

Results and Discussion

The emergence of the meaning of the six periods cannot be separated from the explanation in the Al-Quran which states that the creation of the heavens and the earth occurred during six periods. The Universe in simple terms, consists of the heavens and the earth. The various shapes of the earth and the sky in it, such as the planets and stars. Al-Quran mentions about the creation of the heavens and the earth occurred during six times revealed seven times. (10) Verily your Lord is Allah who created the heavens and the earth in six times,³⁴¹) then He resided on the 'Throne³⁴²) (while) governing all affairs. There is no intercessor, except after (getting) His permission. That is Allah, your Lord. Then, worship Him! Don't you take lessons?

[Q.S Yunus: 10] They (the polytheists of Mecca) ask you (Prophet Muhammad) to hasten the doom, even though Allah will not violate His promise. Indeed, a day with your Lord is like a thousand years according to your calculations. [Q.S Al-Hajj: 47]. In the fragment of the verse it is stated that a day according to Allah is like a thousand years according to human calculations. The understanding of the word *yaum* in this verse is described as not in the actual situation which is not 24 hours. In several other verses the word *yaum* is associated with certain circumstances and situations. The interpretation of the word *yaum* in the Koran according to scientific interpretation is divided into six:

1. *Yaum* in general terms, as mentioned in the verse
"(Remember) the day when We rolled up the sky like (the case) rolls of notes.
2. *Yaum* related to the situation, as mentioned in the verse:
"O you who believe, spend some of the sustenance that We have bestowed on you before the day (of Judgment) comes when there is no buying and selling (that day), no close friendship, and no intercession. [Q.S Al-Baqarah: 254]
3. *Yaum* associated with something, as mentioned in the verse:
"The owner of the Day of Judgment. [Q.S Al-Fatihah: 4]
4. *Yaum* as a special day of the end of the natural world, as mentioned in
"To the people of Madyan (We sent) their brother (namely) Syu'aib, He said "O my people, worship Allah, hope for (the reward) of the Last Day, and do not roam the earth to do mischief. [Al-Ankabut : 39]
5. *Yaum* as an expression of a relative span of time, in this verse contains the number of years, months and days, as well as contains a comparison between a name of time to another. As explained in QS Al-Hajj verse 47
6. *Yaum* as a chronological expression, this expression has a relative meaning related to cosmological phenomena such as the creation of the universe.

line with the interpretation of QS An-Naziat Verses 27-33 by commentators and scientists. The creation of the universe reveals that the explanation of the creation of the universe through the Al-Quran and Science approaches can be explained through the understanding of the six periods of occurrence of the universe. mountain, contained in QS. An-Naziat Verse 27-33. The division of the six periods:

1. First Periode

Based on one of the quotations from the book of Al-Quran commentary. In this case taken from Tafsir Ibn Kathir interpretation of QS An-Naziat Verses 27-33 states that Allah SWT has created and perfected what He created regarding the creation of the sky, exalted the sky, made the dark night, the mountains. If you look at classic commentary books such as Tafsir Jalalain. QS. An-Naziat verse 27 is explained with the meaning *اشد ام السماء* is the more complicated creation (sky). The first period, explaining the beginning of the creation of the universe with the phrase "Is your creation greater or is the sky that He has built?

The first period in which the universe was formed, Stephen Hawking calls it the Plank Era ($t=0$ to $10^{(-43)}$ seconds). He stated that through Einstein's theory of general relativity, if it stands alone it predicts that space-time starts from a big bang singularity and will end in a big stretching singularity, or a singularity in a black hole. Followed by the Grand Unified Theory Era ($10^{(-43)}$ - $10^{(-35)}$ seconds). In this Era, the balance of matter and anti-matter will be won by matter. With a temperature $T=10^{32}$ °K, the Gravitational force separates from the superforce (Single Force). The Space-Time Continuum that emerges is still vague, where energy and space-time are not clearly distinguished.

2. Second Periode

Continuing verse 28, Jalaludin Al-Mahalli and Jalaludin As-Suyuthi in their commentary interpret the word *رفع سمكها* is about the creation of the sky Allah SWT

made it with a very high. This verse describes the expansion of the universe so that the heavenly bodies are further away. Scientific evidence regarding the expansion of the universe has been proven by observations and theoretical models. Stephen Hawking mentions it with period III: The weak Nuclear Force Era ($10^{(-35)}$ - $10^{(-10)}$ seconds). At this time, "Sop Kosmos" was formed. The Universe is experiencing inflation. Gravity emerged as a statement about the existence of matter, and the strong-core force broke away from the weak-core and electromagnetic forces. Fundamental sub-atomic particles: quarks and antiquarks begin to form. Period IV: Hadron-Lepton Era ($10^{(-10)}$ -1)sec. Atomic Nucleus Synthesis (Nucleosyntheses). End of the first period, until the temperature of the Universe drops to $T=10^{11}$ °K. Quarks undergo aggregation with each other to form the material that makes up the atomic nucleus: protons, neutrons, mesons and baryons. Period V = Era of nucleosyntheses (1 sec- 3 minutes) temperature drops to $T=10^9$ °K. At this time begins the synthesis or formation of atomic nuclei. Quarks join each other, where protons, neutrons, combine to form atomic nuclei such as: protons, neutrons, mesons, and others.

In period VI (3 minutes – 300,000 years). During this period, the first stable nuclei were formed: and the coupling of matter and radiation occurred. In Period VII (300,000 years-1000 million years). In this period there is a separation of energy. The universe becomes transparent to cosmic radiation. Through measuring the speed of expansion of the universe there is the presence of dark energy (energy that is believed to exist that accelerates the expansion of nature, but the composition of matter is still unknown). Galaxies, stars, planets, and the entire universe make up only 5% predictably, 26% of the universe is dark matter, and 69% is dark energy. Up to 400,000 years after creation, the universe expanded rapidly, then expanded relatively

slowly but accelerated. Through the Doppler theory of redshift, we can calculate the speed of the galaxy moving away, the farther away the galaxy, the faster it moves. Through a survey by the COBE telescope and other space telescopes, it has been revealed that the universe expanded from $10^{(-13)}$ seconds after the creation of the universe, then inflation occurred until nature was 300,000 years old. By knowing that the universe is expanding, it can be said that humans, planets, stars and galaxies occupy a fixed position in space, and that space is expanding. With this, we do not know that there is space outside of nature, meaning that we cannot ask whether there is another space outside this universe. The first stars appeared about 400 million years after creation. Nebula or giant molecular cloud where stars are formed. The largest composition of the material which is the main ingredient of the nebula is hydrogen. The greater the metal content means that the star belongs to the final generation. Some stars end their lives by exploding which then enriches the interstellar cloud content with heavy elements including iron.

3. Third Periode

QS. An-Naziat verse 29 reveals that Allah SWT shows the light of the sun, and makes it easy for the sun because the sun is a light for him (life in the solar system). It is also explained in Al-Maraghi's Tafsi, the change of night and day and the differences in seasons are influenced by the circulation of the stars and planets. This verse also refers to the formation of the solar system. Astronomically the explanation of this verse is included in Period-VIII: (1000 Million – 15,000 Million Years). It started when the age of the Universe reached 1000 million years. Matter clusters form quasars, stars, and proto-galaxies. The stars begin to synthesize heavy matter. Continuing Period IX: Starting when the age of the universe reaches 15,000 million years. New galaxies began to form solar systems - solar systems. Dependent atoms form complex molecules,

the start of life. Based on astronomical research, the solar system was formed about 4.5 billion years ago. Based on the nebula hypothesis (giant molecular cloud) proposed by Emanuel Swedenborg in 1734, then perfected by Immanuel Kant in 1775. The same thing was also done by Pierre Marquis de Laplace in 1796 . Then, the hypothesis is known as the Kant-Laplace Nebula Hypothesis. The hypothesis states that the solar system in its early stages was still in the form of a giant fog consisting of dust, ice and gas. The gravitational force causes the fog to shrink and rotate in a certain direction, the temperature heats up, the sun becomes a giant star, and the gases condense to form planets. Laplace provides a final scientific interpretation that this nebula begins as a slowly rotating cloud of dust forming a ball. He also argued that the nearly circular orbits of planets were a consequence of their rotating process of formation.

The sun and its dust disk then entered the formation period of the planets. One theory is that the early proto-planetary nebula was about 20 AU (Astronomical Unit, a measure of the Earth-sun distance of 150,000,000 km) in diameter at the time of invlation. stop, not as wide as the solar system as it is today. The proto-planetary nebula expanded so that its diameter became about 40 AU which, accompanied by a cooling process, caused the clumping of gas and dust. Earth and other terrestrial planets (Mercury, Venus and Mars) are only formed from condensed matter in the form of iron and silicates. Meanwhile, Jupiter and other giant planets were formed from large planetesimals, partly due to the condensation of water ice, so that they were able to capture gases, especially hydrogen and helium. The planets formed in the solar system rotate so that night and day occur. The part facing the sun becomes day and the part facing away becomes night. Astronomical analysis reveals that the sun

in our solar system is still a "teenager" star that is 4.5 billion years old.

4. Fourth Periode

On QS. An-Naziat verse 30 meaning And after that He spread the earth out, that is, He made it stretched out, in fact the creation of the earth was before the creation of the heavens, but it was not yet spread out. Allah SWT fixed the earth and spread it so that it became suitable for habitation and made a place to walk for creatures on earth. The fourth period is focused on evolutive processes on earth. From a scientific point of view, the condition of the continents on the earth's surface is not correct. Parts of the continents may have been lost early in Earth's history when a huge celestial body hit the earth. This incident occurred when the earth was not yet inhabited, when the remaining rock from the formation of the solar system was still relatively dense so that the potential for planetary collisions with small planets was very likely to occur. Based on the physical properties of the moon, the study of the origins of the theory, which has the strongest evidence, is that the proto-earth experienced a collision with another proto-planet whose mass is about 1/10 of the mass of the earth. This causes matter to eject out of the earth and form the moon.

The state of the earth after the collision has evolved shifts are called plate shifts. Previously, the remaining crust was in the form of continental plates and then separated to form 5 continents and Antarctica. The India-Australia plate is moving north and colliding with the Euro-Asian plate. The Indo-Australian Plate intruding under Sumatra and Java often causes earthquakes when energy is released due to shifting of these plates. South America and Africa are also separated, where you can still see the pattern of the separation lines.

5. Fifth Periode

On QS. An-Naziat verse 31 meaning "الخرج" . He emits means he brings out of it

(springs) by flowing from its sources. And grows its vegetation, namely trees and grasses which are fodder for livestock, and fruits are food for humans. This verse refers to the fifth age regarding the next evolutionary stage for the preparation of life on earth. The first element needed for life on earth is water. This verse indicates that water was brought by Allah SWT from the earth itself. But until now there is still no scientific evidence that explains the origin of water from within the earth. The existing theory states that the water on earth comes from outside the earth, from comets that are very incentive to hit the earth in the early days of its formation. Comets with the largest composition are water ice (20% of their mass), thought to be a source of water for the earth because the ratio of deuterium/hydrogen (D/H) in this comet is almost the same as that on earth, around 0.0002. 18 mentions support for the theory that earthly water comes from outside the earth. The process of heating by solar radiation causes evaporation and the formation of clouds and then rain which causes the hydrologic cycle. The heating of the sun also causes various weather phenomena on earth such as clouds and lightning. With the help of electrical energy from lightning, the ancient atmosphere is rich in methane gas, ammonia, and does not contain free oxygen, becoming the beginning of the birth of organic compounds. Organic compounds that follow the flow of water eventually accumulate in the sea. Scientists estimate the start of life on earth from warm seas around 3.5 billion years ago based on the oldest fossils found. The next evolution is the presence of plants and the process of photosynthesis about 2 billion years ago. It is this process of photosynthesis that causes the atmosphere to begin to fill with free oxygen. The presence of oxygen is needed by most living things, animals and humans.

6. Sixth Periode

On QS. An-Naziat verses 32-33 meaning to fix a mountain above the earth so that it is stable and does not shake. Everything is deliberately created to be enjoyed by all humans and livestock, be it camels, cattle, goats or others. Shihab explained that about the creation of a very solid and harmonious sky. He exalted his buildings as the roof of the sky for the earth, and also raised the clusters of stars. Then refine it and the distance is also very appropriate in such a way as to comfort creatures on earth. And He, the Almighty, made his night pitch black with the setting of the sun and gave rise to light, that is, made his day bright through the appearance of the sun.

"And the mountains He firmly stakes (all of them) for your pleasure and your livestock [Q.S An-Naziat verses 32-33]. The sixth period tells of the birth of animals and humans after the main prerequisites of life (the presence of water and oxygen) are fulfilled. Through the results of scientific findings, an evolutionary genealogy has been compiled starting from a type of single-celled bacteria that lived around 3.5 billion years ago. In the sense of the beginning of life. From a type of bacteria evolved into a generation of algae that still live in the air. Green algae around 1 - 2 billion years ago evolved and gave birth to generations of land plants. From the path of green algae, about 630 million years ago, also born a generation of invertebrates. In primates, around 34 million years ago, the tailed ape family split from the hominoid family.

Through the same path as the birth of Echinodermata (starfish) then came the generation of fish about 500 million years ago. This type of osteolepiform fish with its fins had bones around 400 million years later continued to evolve and gave birth to generations of quadrupeds, amphibians and reptiles, including dinosaurs. From the dinosaur family during the Jurassic period (208 - 144 million years ago), a generation of

birds was born. Mammal-like reptiles (Synapsida) gave birth to the mammalian generation about 200 million years ago. One of the generations of mammals is the primates, whose original meaning is “first rank”. In this hominoid family there are gibbons and hominids which include orangutans, gorillas and chimpanzees. Hominids split from gibbons about 17 million years ago. In this hominid evolutionary lineage, human-like creatures (hominins) are grouped on the same line of origin as gorillas and chimpanzees. The genetic similarity between humans and gorillas and chimpanzees is so great, 98.6% and 98.8% respectively, that it is thought to originate from an evolutionary path that began to separate about 5 million years ago.

Placement of humans in the evolutionary lineage like this is what triggers the rejection of some societies on the theory of evolution. According to some experts, this problem is easy to solve without rejecting a priori theories that try to trace the gaps in the evolution of life. Experts view that the theory of evolution is not contrary to the creed if it is accompanied by the belief that the process of evolution occurs according to sunatullāh, not a coincidental process that negates Allah's role as Rabbul-'ālamīn (Creator and Sustainer of nature). In the end, this six-day process of creating the universe is basically an evolutionary process that He has planned as a sunnatullāh in the universe.

Conclusions

- a. Interpretation of QS. An-Naziat Verses 27-33 by several classic commentary books, scholars agree that QS. An-Naziat explained about the Kauniyah verses which contain scientific events in the universe which in the end are for the pleasure of creatures.
- b. The Concept of the Six Periods of Creation of the Universe in QS. An-Naziat Verses 27-33 in Tafsir Ilmi explains that these 7 verses are

described into six periods or six periods of the creation of the universe which are explained scientifically:

- 1) QS An Naziat verse 27 describes the event at the beginning of the universe.
- 2) QS An Naziat verse 28 explains about the universe experiencing expansion.
- 3) QS An Naziat verse 29 explains about the formation of galaxies, solar systems and planets.
- 4) QS An Naziat verse 30 explains the shift of the continents and the earth's plates.
- 5) QS An Naziat verse 31 describes the preparation of life on earth.
- 6) QS An Naziat verses 32-33 describes the birth of animals and humans on earth

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