

Holy Quran and Scientific Facts

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Abstract

A remarkable array of facts about the universe—spanning cosmology, biology, physics, geology, and other disciplines—are mentioned in the Holy Quran, a text revealed approximately fourteen centuries ago. Many of these statements have only been understood and confirmed with the advent of modern science and technology. This article explores the consonance between scientific discoveries and Quranic verses, addressing key topics such as the origin, eventual fate, and recycling of the universe; the formation of iron; the geological significance of mountains; the role of the frontal lobe in human behavior; and the mechanisms of pain perception. By examining these subjects, this study underscores the alignment between the Quranic descriptions and contemporary scientific knowledge, dispelling misconceptions that religious texts promote conservative thinking or hinder the understanding of the physical universe. The findings suggest that the Holy Quran complements scientific inquiry rather than contradicting it, fostering a deeper appreciation of both science and spirituality.

Keywords: Quranic insights, science, compatibility, exploration, creation, universe.

INTRODUCTION

An in-depth study of the history of Islam discloses that there was a dynamic period of followers of Islam and the Holy Quran in which a robust series of innovations and discoveries came into sight. The Holy Quran and its exegesis provided such inspiration for scientific advancements that are the basis of present technologies in almost all fields. Muslims greatly contributed to botany, geology, astronomy, medicine, mathematics, physics, metaphysics, politics, mineralogy, literature, and logic (Sullivan, 1984). The most important source of knowledge in Islam is the Holy Quran which clearly states that science and the Quran are in harmony with each other, not opposite to each other. All statements mentioned in the Holy Quran encourage science and research and are compatible with authentic scientific discoveries. The lack of research by Muslims and various other political factors gave an image of a contradiction between Islam and science. But in reality, the Holy Quran and Islam are in favor of research and the advancement of knowledge (Al-Hayani, 2005).

Once it was believed that the universe was infinite and had no beginning or end. After the emergence of the Big Bang theory with its strong evidence, it became clear that the universe is confined to finite properties. It is not infinite and has a specific beginning point (Ikpendu & Shinge, 2020). This universe started from the Big Bang and is expanding continuously. Moreover, its rate of expansion is increasing over time. At a specific point, due to its own specific properties universe will stop expanding and almost a reversal mechanism of the Big Bang will happen which is termed a big crunch. This is the only available option for the end of the universe. Such a big bang and big

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crunch is not happening the first time. A big rip is a pathway for the next big bang that will lead to the next big crunch and the cycle goes on (Khouri et al., 2002; Kripka & Kripka, 2008). Iron metal does not belong to our earth regarding its origin. A long time ago it came onto Earth through a meteorite and entangled inside Earth (Larsen, 2006). Regarding the stability of the earth, science states that mountains play a vital role in the earth's stability and channel the energy of earthquakes and tectonic plate movements (Wang et al., 2009). Regarding physiological mechanisms of life modern science revealed some breakthrough facts like the role of the frontal lobe in planning and the role of the skin in the pain perception mechanism (Dubin & Patapoutian, 2010; Niki et al., 2019).

Surprisingly, these extraordinary facts were described in the Holy Quran about fourteen centuries ago. Various researchers have tried to describe facts regarding cosmology, physiology, and geology with verses from the Holy Quran (Iqbal et al., 2022; Mostarhami, 2016; Qureshi, 2021). The Holy Quran is a book of guidance and provides the right pathway to seek knowledge. Muslims should work to gain an understanding of the Holy Quran because its comprehension in a scientific way can significantly boost the speed of advancement in knowledge as was in the early times of Islam. Islam and the Holy Quran are in favor of scientific advancement and research (Djamdjuri, 2021). Regarding the rational understanding of the Holy Quran for Muslims, a quotation by Sheikh Tantawi al-Jauhari (translated by author) mentioned here, "What is the reason for the presence of thousands of fiqh (a type of Islamic jurisprudence) scholars and countless books were written on fiqh even though total verses regarding fiqh are not more than 150? And why there are too few written books on scientific advancement, research, and contemplation even though every surah has many verses in which it is ordered to contemplate and research at universe and creation?" (Al-Najjar, 2007).

The main purpose of this study is to see whether there is any difference between the Holy Quran and Science regarding existing facts in the universe. Both of them reinforce each other's statements or have a different view. In this article, we will do a textual comparative analysis by mentioning verses of the Holy Quran and advanced scientific views to see whether they have the same or different points of view.

RESULTS AND DISCUSSION

Results

Creation and Expansion of the Universe

Regarding the creation of our universe, the most authentic explanation is provided by Big Bang Theory. According to this theory, about 13.7 billion years ago a big bang happened, as a result, a singularity having high density, temperature, pressure, and energy stretched and inflated at an unimaginable rate. At first, its size was very small compared to its present size. This universe is continuously expanding and increasing in size (Ikpendu & Shinge, 2020). Researchers also surprisingly revealed that the rate of expansion of the universe is greater than the estimated rate of expansion (Riess, 2020). The same fact was also described in the Holy Quran about fourteen centuries ago. Allah Almighty says in the Holy Quran:

"Didn't the unbelievers see that the heavens and the earth were a joined entity, then We separated them and We created every living thing from water? Then will they not believe?" (Quran 21:30)

"And We constructed the heaven with [our] hands, and indeed, We are [its] expander."
(Quran 51:47)

In these verses, it is mentioned that the universe was initially in highly condensed form and was one unit which later torn out by the Big Bang and is continuously expanding day by day. Before the arrival of Islam, the Arabs had a polytheistic belief system. According to their view, various deities having natural forces govern celestial bodies, having various mythological creation views, which describe the interference of a creator force rather than a pure logical theory. They had no full evidence-based metaphysical or scientific framework regarding the creation of the universe (Gadalla, 2016).

Then revelation of the Holy Quran ordered its followers to think and search about the universe and its creation by providing a philosophical view so that a thinker can find his path of research with its help and can get a new dimension of knowledge. As discussed above Holy Quran points out this fact. It is the negligence of Muslims that they did not give attention to the Holy Quran for knowledge advancement. They just passed on a fundamental view of getting a reward by just reading the holy text. No doubt, that by reading the holy Quran a person gets a reward and his mental capabilities are enhanced but the ultimate purpose of the Holy book is to use the enhanced mental and intuition abilities of a person for the exploration of knowledge and a better understanding of the creation of universe so that a person can have strong faith at his creator (Badri, 2018; Mutahhari & Campbell, 1985; Poya & Rizapoor, 2023).

End of Universe

Modern sciences state that the universe which was created as a result of the Big Bang will end as its consequence. Einstein's general relativity theory provides the basis for this hypothetical idea. According to this idea, a big crunch will happen and the universe will be rolled up. All of its happenings will be opposite to incidents of the initial big bang. Stephen Hawking, Thomas Gold, and Michael Berry also presented that time reversal can cause the contraction of the universe (Farooq et al., 2020). Evidence shows that not only universe is expanding but also its rate of expansion is accelerating and gravity works against this expansion. By considering a certain evaluative quantity of mass of the universe, under the effect of gravity motion of galaxies will slow down. As a result, a big crunch will happen. Although there may be many different causes of big crunch, in all possible cases big crunch is the only available option for the end of the existing universe (Bakry & Shafeek, 2021). In the Holy Quran, this fact is described in the following words:

"The Day when We will roll up the heaven like the scrolls are rolled up in a scroll. As We begin the creation the first time, We will repeat it. [This is] a promise binding upon Us. Indeed, We will do it." (Quran 21:104)

Recycling of Universe

Roger Penrose, a Nobel Prize winner in physics states that not a single big bang happened in history and this universe was not formed the first time. Multiple big bangs have been happening in the past and multiple times it will happen again. Every time a new universe exists as a result of the big bang that eventually ends up in a big crunch and again a big bang happens which leads to the next big crunch and goes on (Nurowski, 2021; Vaas, 2012). Allah Almighty says in the Holy Quran:

"And He is the one Who begins creation [in the first time] and then He repeats it [again and again], and that is easier for Him. To Him belongs the loftiest attribute in the heavens and the earth. And He is the Exalted in Might, the Wisest." (Quran 30:27)

"Say: Travel around the earth and see how He created [the creation] for the first time, and then Allah will create the later creation. Indeed, Allah has power over everything." (Quran 29:20)

Source of Iron

Science states that iron was not present on Earth initially. It is formed by the fusion of elements in stars. Billions of years ago, as a result of a huge stellar explosion of stars iron came onto Earth through a meteorite and stuck inside the earth. This iron is used again and again by humans (Bastian & Pfeffer, 2022). The Holy Quran states:

"And We sent down iron, which has awesome power and many other benefits for people" (Quran 57:25)

Mountains as stabilizers

Modern geology reveals that mountains serve as natural barriers against the movement of tectonic plates and substantially reduce the chances and effects of earthquakes. When tectonic plates collide, a huge amount of pressure and energy is generated. This pressure uplifts the mountain and is absorbed along the boundaries of the mountain and its rocks. In this way, a huge pressure of earthquake is channelized and the earth becomes resistant to instability. Moreover, mountains also play a vital role in balancing the rotational motion of the earth (Li et al., 2019; Saad, 2023). Quran states:

"Have We not made the earth a floor? And the mountains as the nails?" (Quran 78:6-7)

"And We made firmly set mountains in the earth so that it could not shake with them [creatures], and We made wide paths in it so that they might be guided." (Quran 21:31)

Function of the frontal lobe

Science states that the frontal lobe performs a vital role in the body like consciousness and planning, self-monitoring of the body, and can organize, initiate, and control responses to achieve a specific goal. The frontal lobe is present behind the forehead. Research revealed that if a person has abnormal functioning of the frontal lobe, he will not be able to plan a specific goal (Chayer & Freedman, 2001; Malloy et al., 2006). A long time ago the same mechanism was described in the Holy Quran that Allah Almighty will punish the people by their forehead who did evil deeds because they did planning evil deeds by this part, as given below:

"Nay! If he does not stop, We shall catch (drag) him by the forehead. A lying, sinning forehead." (Quran 96:15-16)

Pain perception mechanism

The pleasant experience or the painful sensation is initiated by somatosensory neurons that innervate the skin of mammals. The peripheral terminals of such neurons change sensory stimuli into action potentials that transmit to the central nervous system. Cutaneous sensory neurons are diversified into A β -, A δ - or C-fibers, based on the degree of myelination and traveling speed of

action potential along these fibers (Kandel et al., 2000). Advance studies described that originally brain was not responsible for pain sensation. Pain receptors, also known as nociceptors are present in the skin. Under the action of a stimulus, pain is detected by pain receptors of the skin which send this message towards the spinal cord, brainstem, and finally up to the brain via nerve fibers. Pain is perceived here by the processing of that message. The brain itself has no pain receptors (Lewin & Moshourab, 2004). The fact that skin is responsible for pain sensation is mentioned in a verse of the Holy Quran:

"Indeed, those who disbelieved in Our verses - We will throw them into the Fire. Whenever their skins are roasted, We will replace their skins with other skins so they may taste the punishment. Indeed, Allah is the Exalted in Might, the Most Wise." (Quran 4:56)

In the above verse, it is pointed out that for severe punishment their skin will be replaced by another skin. Similarly in many other verses such facts are mentioned which will definitely hit a thinking and contemplative mind that either this is not a holy Book or if this statement will be true in every experiment by applying different methodologies then definitely this Holy book should be helpful in future for taking better research ideas (Gyekye, 2009; Taslaman & Doko, 2021).

Discussion

In the 1960s, systematic studies were raised to discuss the relationship between theology and science. Findings of some prominent scholars like Ian Barbour (1966) and Thomas F. Torrance (1969) strongly challenged the old myth that religion and science are not compatible with each other or both are opposite to each other and have no beneficial harmony for creating a better understanding of each other in society (Oppy, 2018). Since 1980, a contextual approach has been adopted to discuss the historical examinations that how science and religion relate. In the 1990s, a series of conferences was arranged to acknowledge the divine actions in the language of science (Barbour, 1997).

This article aims to discuss the textual harmony present in Islamic Holy text and science. Such concordance doesn't mean that there is no need to study science or that scientific methodology is useless along with its advancements and only religious text is sufficient to explore the universe. This harmony is beneficial in scientific advancement in the sense that a spiritual outlook provides insights into new dimensions of knowledge which can be calculated by using scientific knowledge and then a precise and beneficial implementation of that advancements should be applied in society within limits of moral values (McGrath, 2020).

Some skeptical scientists blame that the Holy Quran can be interpreted in any way. Why did Muslim scholars not highlight these scientific facts before being invented by science? When science finds out a fact and proves it, then religious people claim that such facts are already mentioned in our Holy Books. A few main reasons lie behind their valid and acceptable objection. One main reason for this issue is to neglect the fact that Holy books have their own language and way of description, which can satisfy people of all times (Ecklund, 2010). It means the language used in the Holy Quran definitely will be general, not specific to scientific theories of one era which can be neglected in later times. Moreover, the Holy Quran has the broader purpose of satisfying all fields of life other than the exploration of the universe, like ethics, morality, life hereafter, spirituality, etc. On the other hand, science has nothing to do with ethics, morality, and explanation of the reason for the physical world's existence and cosmic consciousness (Hassan, 2018; Kellert & Farnham, 2013). Its only purpose is to explore the physical world facts. Science is

growing day by day, so we need genius minds to explore the holy Quran and those genius minds should also be experts in scientific methodology. So that they may be able to participate in the advancement of science by elaborating on the facts in the language of science that were mentioned and highlighted by the Holy Quran (Andre, 2020; Taslaman & Doko, 2021).

Secondly, during the golden age of Islam Muslim religious scholars were at the forefront of scientific advancement in every field like Al-Khwarizmi (c. 780-850) in mathematics especially Algebra, Ibn Sina (980-1037) made great contributions in the field of anatomy, mental health and medicine, Al-Biruni (973-1048) in fields of astronomy, geography, physics, and mathematics, Al-razi (854-925) in clinical medicine, pediatrics, chemistry, and philosophy, Al- Farabi (872-950) advanced the fields of philosophy, logic, and political science, Ibn Al- Haytham (965-1040) optics, and physics. Ibn Al-Haytham was the person who first introduced scientific methods, also known as the first true scientist. Al-Jahiz (776-868) was the first Muslim biologist who gave the idea of evolution in creations in his book. Similarly, Jabir ibn Hayyan (c. 721-815) highly contributed to the field of chemistry, Ibn Khaldun (1332-1406) in sociology, history, and economics fields, Omar Khayyam (1048-1131) made a great contribution to astronomy, poetry, algebra and figure out cubic equations geometrically, Nasir al-Din Al-Tusi (1201-1274) contributed in planetary motion, complex mathematics, and philosophy, Al-Zahrawi (936-1013) highly developed techniques of surgery, Al-Kindi (c. 801-873) in philosophy, mathematics, and pharmacology, Al-Idrisi (1100-1165) gave many contributions in geography and cartography fields and many other great names (Karagözoğlu & Karagözoğlu, 2017; Rahman et al., 2008; Thawaqib, 2012). They all were highly inspired by their religious books (Al-Quran) and spirituality. They regarded science as a means to understand divine creation by taking inspiration and the main idea from the holy Quran. If the Holy Quran has nothing to do with scientific advancement then how all these brilliant minds, who critically contemplate at Holy Quran were possible in old times when science all over the world was far behind in such great discoveries (Guessoum & Bigliardi, 2023).

The downfall of Muslim societies in scientific advancement is not due to Islam and the Holy Quran but due to political destabilization, lack of investment in education, and poor socioeconomic conditions like internal strife, and colonization. One main reason was the misinterpretation of the Holy text due to the inefficiency of so-called religious scholars who strongly supported the implementation of negative agendas for their personal benefits knowingly and unknowingly. Moreover, some rulers highly discouraged freedom of thought and innovative thinking due to emerging extremist behavior due to a lack of deep understanding and purpose of Islam. These few main factors broke the voyage of scientific advancements over time and created a non-recoverable distance between science and religion. This difference between science and religion gave a negative message to the modern world that maybe being religious or having well-developed knowledge of Islam is somehow connected to scientific fundamentalism (Al-Andalusi, 2015; Deen, 2007; Shogar, n.d.). A simple question that arises is how can Holy Quran is not compatible directly or indirectly with scientific discoveries when Allah almighty Himself ordered in Holy Quran to its followers to contemplate at universe (Watts, 1997).

The gap between material progress and human well-being can be bridged by the intersection of science and religion which will shape a better version of society. Science explores the world for materialistic advancement in the form of digits and the Holy text gives a general idea about that fact in statement form and ultimately guides about the beneficial usage of that fact without violating the ethical laws. In short, religion speeds up scientific advancement by

addressing the *why* behind the *how*. In other words, we can say that religion provides an alternative hypothesis for empirical contemplation by science (Betz, 2024; Norgaard, 2002).

CONCLUSION

Many of the scientific facts revealed by modern sciences today were described in the Holy Quran about fourteen hundred years ago. As the Holy Quran was revealed from Allah Almighty to Prophet Muhammad (P.B.U.H), it should be compatible with scientific truths discovered by modern sciences. The concept that the Holy Quran and science are incompatible with one another is based on fake assumptions and has no true basis. No matter, whether Muslims act upon the teachings of the Quran or not but Quran itself tells about scientific facts in its language and orders to contemplate and research the creation and universe.

A great variety of phenomena like the Big Bang, the big crunch, the recycling of the universe, the origin of iron metal, the role of mountains in the stability of the earth, the function of the frontal lobe in the body, and the importance of skin in pain perception, etc. as indicated in Holy Quran is in complete harmony with observations and discoveries made by modern sciences.

Still, a variety of facts are undiscovered which are pointed out by the Holy Quran like reincarnation, relative time speed, end of time, emergence of material from nothingness, metaphysical realities that affect the physical world, and many more. These phenomena belong to a variety of subjects like cosmology, physics, biology, geology, etc. One can take his idea from this Holy book and can investigate by scientific method rather than blind belief. Hence, the Holy Quran is not only a book of spiritual guidance but also orders its followers to reveal scientific facts about this universe by providing an outlook towards new realities.

REFERENCES

- Al-Andalusi, A. A. (2015). The rise and decline of scientific productivity in the Muslim world: A preliminary analysis. *ICR Journal*, 6(2), 229-246.
- Al-Hayani, F. A. (2005). Islam and science: Contradiction or concordance. *Zygon*, 40(3).
- Al-Najjar, Z. (2007). *Tafsir al-Ayat al-Kawniyyat fi al-Quran al-Karim*. Cairo: Maktabat Al-Shuruq Al-Dawliyyat.
- Andre, S. (2020). Science and religion: An alternative view of an ancient rivalry. *Open Journal of Philosophy*, 10(4), 494-510.
- Badri, M. (2018). *Contemplation: An Islamic psychospiritual study* (New edition). International Institute of Islamic Thought (IIIT).
- Bakry, M. A., & Shafeek, A. T. (2021). Big rip and big crunch cosmological models in a gravitational field with torsion. *Gravitation and Cosmology*, 27, 89-104.
- Barbour, I. G. (1997). *Religion and science: Historical and contemporary issues*. HarperOne.
- Bastian, N., & Pfeffer, J. (2022). Star cluster ecology: Revisiting the origin of iron and age complex clusters. *Monthly Notices of the Royal Astronomical Society*, 509(1), 614-618.
- Betz, U. A. K. (2024). *Science and religion united: The salvation machine*. Springer Nature.
- Chayer, C., & Freedman, M. (2001). Frontal lobe functions. *Current Neurology and Neuroscience Reports*, 1(6), 547-552.

- Deen, S. M. (2007). *Science under Islam: Rise, decline and revival*. Lulu.com.
- Djamdjuri, D. S. (2021). The miracles of Al-Quran: Al-Quran as a grace and guidance of Muslims. *Asatiza: Jurnal Pendidikan*, 2(2), 89-97.
- Dubin, A. E., & Patapoutian, A. (2010). Nociceptors: The sensors of the pain pathway. *The Journal of Clinical Investigation*, 120(11), 3760-3772.
- Ecklund, E. H. (2010). *Science vs. religion: What scientists really think*. Oxford University Press.
- Farooq, M. U., Munir, S., & Aziz, T. (2020). Physical phenomena: A perspective of Quran and modern physics. *Al-Qamar*, 103-114.
- Gadalla, M. (2016). *Egyptian cosmology: The animated universe*. Moustafa Gadalla.
- Guessoum, N., & Bigliardi, S. (2023). Islam and science: Past, present, and future debates.
- Gyekye, K. (2009). Relationship between religion and science: An overview. *Legon Journal of the Humanities*, 20, 1-22.
- Hassan, M. K. (2018). The necessity of understanding the cosmos, nature and man, as well as the unity of knowledge, faith and ethics from the worldview of the Qur'an: Implications on an international Islamic university. *Revelation and Science*, 8(2), 1-12.
- Ikpendu, E. L., & Shinge, D. A. (2020). An overview of the cosmological Big Bang theory of the universe. *International Journal*, 18(1), 105-124.
- Iqbal, Z., Jadoon, A., Anwer, N., Idrees, H. M., Aleem, A., & Mahmood, N. (2022). Exegetical analysis of Big Bang theory in the light of Quranic explorations & scientific theory. *Central European Management Journal*, 30(4), 2388-2392.
- Kandel, E. R., Schwartz, J. H., Jessell, T. M., Siegelbaum, S., Hudspeth, A. J., & Mack, S. (2000). *Principles of neural science* (Vol. 4). McGraw-Hill New York.
- Karagözoğlu, B., & Karagözoğlu, B. (2017). Contribution of Muslim scholars to science and technology. *Science and Technology from Global and Historical Perspectives*, 137-184.
- Kellert, S. R., & Farnham, T. (2013). *The good in nature and humanity: Connecting science, religion, and spirituality with the natural world*. Island Press.
- Khoury, J., Ovrut, B. A., Seiberg, N., Steinhardt, P. J., & Turok, N. (2002). From big crunch to big bang. *Physical Review D*, 65(8), 86007.
- Kripka, M., & Kripka, R. M. L. (2008). Big crunch optimization method. *International Conference on Engineering Optimization, Brazil*, 1-5.
- Larsen, K. (2006). Swords and sky stones: Meteoric iron in *The Silmarillion*. *Mallorn: The Journal of the Tolkien Society*, 44, 22-26.
- Lewin, G. R., & Moshourab, R. (2004). Mechanosensation and pain. *Journal of Neurobiology*, 61(1), 30-44.
- Li, G., West, A. J., & Qiu, H. (2019). Competing effects of mountain uplift and landslide erosion over earthquake cycles. *Journal of Geophysical Research: Solid Earth*, 124(5), 5101-5133.
- Malloy, P. F., Cohen, R. A., Jenkins, M. A., & Paul, R. H. (2006). Frontal lobe function and dysfunction.
- McGrath, A. E. (2020). *Science & religion: A new introduction*. John Wiley & Sons.
- Mostarhami, S. I. (2016). The physical element of the creation of the world from Quranic and cosmological viewpoints. *Journal of the Holy Quran and Islamic Texts*, 6(24), 141-156.
- Mutahhari, M., & Campbell, R. (1985). *Fundamentals of Islamic thought: God, man and the universe*. Mizan Press.
- Niki, C., Kumada, T., Maruyama, T., Tamura, M., & Muragaki, Y. (2019). Role of frontal functions in executing routine sequential tasks. *Frontiers in Psychology*, 10, 169.

- Norgaard, R. B. (2002). Can science and religion better save nature together? *BioScience*, 52(9), 842-846.
- Nurowski, P. (2021). Poincare-Einstein approach to Penrose's conformal cyclic cosmology. *Classical and Quantum Gravity*, 38(14), 145004.
- Oppy, G. (2018). *Naturalism and religion: A contemporary philosophical investigation*. Routledge.
- Poya, A., & Rizapoor, H. (2023). Al-Ghazali's theory of real knowledge: An exploration of knowledge integration in Islamic epistemology through contemporary perspectives. *International Journal of Humanities Education and Social Sciences*, 3(2).
- Qureshi, F. (2021). Comparison of ayats of the Quran with astrophysics, quantum physics, and cosmology. *Journal of Quranic Sciences and Research*, 2(1), 47-53.
- Rahman, S., Street, T., & Tahiri, H. (2008). The unity of science in the Arabic tradition: Science, logic, epistemology, and their interactions. *Springer*.
- Riess, A. G. (2020). The expansion of the universe is faster than expected. *Nature Reviews Physics*, 2(1), 10-12.
- Saad, B. (2023). Mountains gravitational pegs stabilize the Earth's rotation motion. *Emirati Journal of Space Science*, 1(1), 4-25.
- Shogar, I. A. (n.d.). The scientific thinking in Islam: Factors of flourishing and decline.
- Sullivan, A. T. (1984). The genius of Arab civilization. *American-Arab Affairs*, 10, 129.
- Taslaman, C., & Doko, E. (2021). *The Quran and the construction of the scientific mind*. Templeton Foundation, Kalam Research and Media Journal.
- Thawaqib, J. (2012). The contribution of Islamic civilization to the scientific and technical advancement of the world. *Message of Thaqalayn*, 13(2).
- Vaas, R. (2012). Time after time—Big Bang cosmology and the arrows of time. *The Arrows of Time: A Debate in Cosmology*, 5-42.
- Wang, Z., Gao, B., Jiang, Y., & Yuan, S. (2009). Investigation and assessment on mountain tunnels and geotechnical damage after the Wenchuan earthquake. *Science in China Series E: Technological Sciences*, 52, 546-558.
- Watts, F. (1997). Are science and religion in conflict? *Zygon*, 32(1), 125-138.

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