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An Analysis of the Elements of the Scientific Illimitability in Surat Altalaq and their Correlation with its Objective

Dr.Fatmah Mohammad Abdurahman Almakawny¹

Abstract

This research seeks to provide evidence for the scientific miracles found in the Holy Qur'an, namely in Surat Al-Talaq. The expressions of scientific Illimitability can be classified into two categories: legislative and universal manifestations. The study utilizes the inductive analytical methodology for analyzing the aspects of scneitific miracles in the Holy Qur'an. The study reveals several significant discoveries regarding Surat Al-Talaq. It highlights the scientific miracles present in the Surah, such as accurately determining the waiting period for divorced women (iddah) to ensure the absence of any residual seminal fluid in their wombs, thus preparing them for potential remarriage. Additionally, the Surah emphasizes the importance of natural breastfeeding for infants, which contributes to their overall health and psychological well-being. The study also examined the elements of cosmic infinitude in the Quran, such as the presence of seven heavens and seven earths. The research proposes an examination of the many facets of the Quranic concept of illimitablity in each chapter of the Quran, and establishing connections between these features and the intended purposes of the divine revelation.

Keywords: iddah, waiting period, scientific miracles, divorce surah, Islamic sharia.

Introduction

Prophet Muhammad (peace and blessings of Allah be upon him) was sent by Allah to all of humanity. The Holy Qur'an, revealed to him, serves as an everlasting miracle. It provides guidance concerning the Creator, directs people towards the correct path and truth, and leads them to Paradise in the hereafter. The book has been characterized as a source of direction and enlightenment for individuals [Al-Baqarah: 185]. One of the ways in which this guidance is demonstrated is through the presence of scientific miracles that have been found prior to human advancements. The presence of scientific phenomena in the Holy Quran serves as evidence of its veracity as a literature. The Surat Al-Talaq, revealed in Medina after the establishment of the first Islamic state, presents scientific miracles in the form of signs and characteristics. It includes a comprehensive set of regulations and guidelines that are unique to this chapter and not found in other parts of the Quran. The primary focus of this chapter is to outline the specific requirements and regulations, which highlight the reasons for faith and guidance, such as the scientific miracles in the Quran and the indications they provide.

Through the manifestation of scientific marvels in the Divorce Chapter, the current study seeks to emphasize the Quranic teaching. This serves as unmistakable proof that the Quran is a divine book revealed by God, since it contains scientific signals warning people and contains miracles.

¹ Department of Islamic Studies, College of Education in Alkhari, Prince Sattam bin Abdulaziz University, Saudi Arabia, Email: £almakawny@psau.edu.sa

Almighty God said: Say (O Muhammad SAW): "What thing is the most great in witness?" Say: "Allah (the Most Great!) is Witness between me and you; this Quran has been revealed to me that I may therewith warn you and whomsoever it may reach. Can you verily bear witness that besides Allah there are other aliha (gods)?" Say "I bear no (such) witness!" Say: "But in truth He (Allah) is the only one Ilah (God). And truly I am innocent of what you join in worship with Him" (Al-An'ām, 19). The present study is also interested in offering a kind of reflection on the meanings of surah divorce and the rules it contains, by linking the references of the verses to the objective unity of the Quranic surah or the so-called objective, and thus achieves the purpose of the revelation of the Holy Qur'an as argued by Shatby (590 e): "Reflection is only for those who turned to the purposes" (383). In addition, the present study demonstrates how the Holy Qur'an cares for the family, which represents the first nucleus of society, by explaining the scientific miracles and their relationship to the purpose of the surah, which is a new and innovative way in Quranic studies. In a nutshell, the present study focuses on highlighting the manifestations of the scientific miracles in the surah of divorce. By the same token, it interprets the Quranic signals of the scientific miracles, revealing the latent connections between the objective of the surah of divorce and the aspects of scientific miracles in the surah. Indeed, science has brought about several clues and evidence affirming the truth of the scientific miracles in the surah, as many facts offered in the surah have been recently confirmed by science.

There are many studies addressing the issue of scientific miracles in Quran but there is a scarcity in the studies addressing the scientific miracles in the surah of divorce, Al-shahbi(2009) argued that the surah of divorce has only two types of miracles: rhetorical and legal miracles. Although it has addressed the rhetorical and legal miracles, it does not mention the scientific miracles. In Arabic literature, there are almost four studies highlighting the manifestations of the Quranic miracles in Quran. To illustrate, while alHilalat(2017) traced the scientific miracles in the surah of divorce Alhilalat et. al highlighted the scientific miracles generally in Quran, focusing on the objectives of the surah and the scientific references. However, Alonazi (2018) addressed the universal scientific signs in the surah of Mulak and their connection with the objectives of the surah. In a notable study, Al-hilalat (2018) discussed the consistency between the objectives of the surah of divorce and the verses of inner-self. Zakariya (2023) argued that the miracles of the Quran included various aspects the language, previous and future events, and the scientific ones which have been proved by the conformity of the Quran and the development of science. Kasma et all (2023) argued that the miracle of the Qur'an in this discussion is studied from the perspective of language, supernatural reporting and scientific evidence, where these three perspectives show nothing other than that the Qur'an is not man-made, but the Qur'an truly comes from Allah SWT. Bucaille (1991) argued that there are many manifestations of science have been recently asserted by the scientific evidence. Pamil et al. (2020) argued that his study aimed to explore the content of the Quran using exegesis and all of its components as the main tools to comprehend the Quran. This was a qualitative historic-factual study based on the notion of Tommy Dazwir Paja Putra regarding the scientific miracle of chapters and verses numbers of the Quran. The results show that the numbers of the chapters and verses regarding humans (the prophets and their followers, devout persons, and the ungodly) or things in nature indicate of object location or the object properties. In conclusion, the Quran has scientific signs related to the various branch of sciences such as geography, astronomy, biology, chemistry, archeology, history, paleontology, and other sciences. Ismail & Ansawi (2021) stated that that there have been numerous tafsīr that use scientific exegesis approaches that contain significant

methodological issues which need to be examined to shed better light on this problem. On the basis of making the Quran to be contemporarily understood, this study suggested that the integration of both sciences and revealed knowledge should be applied in a correct methodological way or it will lead to serious misunderstanding of the Ouran. Sana'a (2020) argued that the Holy Quran is a cyclopedia document that contains a huge volume of knowledge. Many modern scientific discoveries are much similar to some verses of the Quran, which the Islamic scientists call a scientific miracle in the Holy Ouran. However, representing knowledge of scientific miracles in the Holy Quran on the semantic web in a such way that enables sharing and reusing is still a research issue. This research suggests a general structure for these scientific facts mentioned in the Holy Quran and then represents this structure by creating Scientific Miracle Ontology (SMO) using METHONTOLOGY methodology. The results of SMO have been evaluated by competency questions and translated these competency questions into SPARQL queries and the results obtained emphasized that SMO was effective in retrieval relevant concepts and verses of scientific miracles in the Holy Quran. Djamdjuri (2021) argued that the Al-Quran is a light that appears in the hearts of Muslims, which breaks the flower of faith, appears in life so that it becomes light, rises to the heavens of mankind so that a plan of peace and guidance appears to humans to introduce their status and obligations, then lead to the straight path. This statement means that Al-Quran is guidance for humans. The function of Al-Quran globally is as a principle of the Islamic religion, in which there is the principle of every science in human language past and present and the future. Al-Quran is more than just a Holy Book, it is also a very useful book or a perfect reference.

The Methodology

The study utilizes an inductive analytical approach to gather the verses in Surat divorce, specifically focusing on the scientific miracles present in the verses. It then proceeds to interpret the verses by referencing the opinions of commentators and linguists. Additionally, a deductive approach is employed to examine the relationship between the scientific miracles and the overall purpose and central theme of the surah.

Procedures

- 1- Citing the verse that includes legislative and cosmic scientific phenomena, as told by Hafs from Asim
- 2- The passage is interpreted by considering the opinions of linguists and interpreters.
- 3- Scientific analysis of the verse based on scientific sources.
- 4- Examine the correlation between the objective of the surah and the occurrences of scientific marvels, together with their criteria:

Definitions and Terminology

Ibn Faris (1979) posited that the term "mu'ajza," which refers to a miracle, is derived from the root "ajaza," meaning to fail or be unable to accomplish something. Failure is the antithesis of success, indicating weakness and the inability to attain objectives. Al-shayia (2012) contended that a scientific miracle is defined as the demonstration that modern science has verified the reliability and validity of the facts mentioned in the Holy Qur'an, even though these facts were not confirmed during the time of the Prophet. The scientific interpretation aims to elucidate the meanings of the verses based on the likelihood of their alignment with the theories of cosmic science, thus highlighting the miraculous nature of the Qur'an.

The Principles of Scientific Miracles

- 1- The scientific marvels should not lead the Quran to deviate from its intended purpose, as it is a book of instruction. The allusions to experimental sciences are not the primary aims of the Quran's revelation, but rather they are utilized to support its teachings. (Al-tayyar, 1433 AH, p.171)
- 2- To avoid the pitfall of overinterpretation, it is advisable to only incorporate the permissible and logical elements of scientific interpretation.
- 3 The interpretation must align with the established teachings of reputable experts.
- 4- Analyzing the scientific symbols in the Quran based on the Arabic language and its contextual application.
- 5. Considering the importance of rhetorical and grammatical norms, particularly the rule that prohibits metaphorical interpretations of words without convincing proof;
- 6 Basing conclusions on established scientific facts, rather than on evolving ideas and unproven assumptions;
- 7-The final significance of the verse cannot be exclusively deduced in connection with a single scientific fact, as there exists the possibility of an alternative interpretation contingent upon undiscovered scientific facts.

Adopt the Quranic approach to obtain knowledge.

The Surah of Divorce Contains Legal Scientific Phenomena

1- The process of calculating the waiting period ('iddah) for a divorced woman is outlined in the following verse from the Quran: "O Prophet (SAW)! When you divorce women, divorce them at their prescribed periods, and accurately count their waiting periods. And fear Allah your Lord, and do not force them out of their homes, nor should they leave, unless they are guilty of open illegal sexual intercourse. These are the limits set by Allah. And whoever exceeds the limits set by Allah has wronged himself. You do not know, it may be that Allah will bring about a new situation (i.e. reconcile the couple) after the first or second divorce" (Divorce, 10).

The Verse can be Interperted as Follows

According to religious teachings, if a believer decides to divorce his wife, she is instructed to extend the divorce period to match the *iddah* period. This is a specific period of time during which the woman has no legal right to remarry. *The iddah* period is determined by factors such as menstruation or pregnancy. It is the husband's responsibility to keep track of this period, as he is held accountable for providing the life expense of the children, housing, and other provisions. The purpose of counting the *iddah* period is to ensure that the woman is not pregnant, in order to avoid any confusion regarding parentage. It is also seen as a way to show respect for the institution of marriage. Scientific interpretation refers to the process of analyzing and understanding data or information using scientific methods and principles.

Research has indicated that male seminal fluid contains 62 distinct proteins, which vary among individuals. Each man possesses a unique composition. If a woman remarries immediately after a divorce without a gap in between, she may be at risk of developing uterine cancer due to exposure to multiple seminal fluids in the womb. The first menstrual cycle after intercourse eliminates approximately 32% to 35% of the male seminal fluid. The second cycle eliminates around 67% to 72% of the seminal fluid. The third cycle removes 99.9% of the fluid. At this point, the uterus has been completely cleared of seminal fluid before receiving another deposit.

2- Menopause

Allah said: "And those who no longer expect menstruation among your women - if you doubt, then their period is three months, and [also for] those who have not menstruated. And for those who are pregnant, their term is until they give birth. And whoever fears Allah - He will make for him of his matter ease" (Divorce, 4).

Comprehensive Analysis

Al-tabri (1990) argued that the above-mentioned verse refers to the *iddah* of the aged divorced woman who lost hope in menstruating, known as menopause, as her iddah is estimated by 3 months. Ibn Ashur (1984) stated that Menopause has been fallen after its repetition or due to the unavailability of seminal fluid in the womb, not because of illness or breastfeeding. Scholars have not reached an agreement over Menopause as they were divided among classifying her age under 55 years old, 60 years old, and 70 years old, and the most valid opinion is the most common age among the women of the trip. The scholars were also in a disagreement over the reason why they are suspicious about the age of Menopause, as there are two opinions if people feel suspicious whether the blood leaking from a woman at an elder age is from menstruation or womb bleeding between periods, the iddha should be 3 months, which is articulated by Mujhid and Ibn Zayd(Altabri, 1990). However, the second opinion is that if people feel suspicious about the reason of iddha, it should be 3 month, as articulated by Saeed Ibn Jubair and supported by Ibn Jarir.

The Scientific Interpretation

Ali (2009) asserted that it is important to note that women experience a multitude of changes during the transition from fertility to menopause, including the loss of ovarian estrogen. These changes can result in a variety of symptoms such as sadness, depression, and psychological instability. The iddah (waiting time) for both the desperate divorced lady and the young divorced woman is three months. In the Quran, Allah states that if there is uncertainty about whether a woman has stopped menstruating, the waiting period is three months. This also applies to women who have not yet started menstruating. For pregnant women, the waiting period lasts until they give birth. Allah promises that those who fear Him will be granted ease in their affairs (Divorce, 4).

Comprehensive Analysis

The iddah period for an older woman and a young woman who has not yet started menstruating is estimated to be three months. However, since the young woman has not experienced regular menstruation, her waiting period is counted on a monthly basis. If she experiences any bleeding during this time, the provisions will be adjusted accordingly, as the original situation must be replaced by the substitute condition.

Scientific Explanation

The concept of counting menstruation by month is based on the Quran's scientific understanding that the waiting period is connected to a woman's biological condition. This period is estimated to be three months for both young and old women. The purpose is to inform older women, who have irregular monthly cycles that their ovaries are no longer capable of fertilization. It also serves to alert younger women that there is a possibility of fertilization occurring in their ovaries. (Alkareem, 2010, p.300)

Infant Breastfeeding

The divorced husband must pay breastfeeding expenses to the wife after giving birth until weaning it, whether her divorce is irrevocable or not, so that she can nourish her fetus, because the availability of milk depends on her nutrition. Accordingly, if the breastfeeding mother accepts the equivalent wage for breastfeeding, the husband does not have the right to breastfeed anyone else, and this indicates that the mother is more deserving of custody of the infant than others, and that the wage is due upon completion of breastfeeding and not merely through the contract. If there is no agreement between the spouses in determining the wage of breastfeeding, or she asks for an increase, then he is not entitled to force her to breastfeed the child if she refuses, but he should hire a wet nurse for breastfeeding the boy. The mother is forced to breastfeed the child if he does not find a wet nurse other than the mother, or is unable to provide the rent if the infant does not accept any other wet nurse.

Scientific Explanation

Breastfeeding offers numerous advantages due to the high concentration of proteins, calories, salts, and antibodies found in breast milk. It is consistently sterile and released at an appropriate temperature for the infant regardless of the season. The composition of the milk undergoes changes starting from birth. The initial milk produced in the first three days, known as Colostrum, contains a substantial amount of proteins and antibiotics that are essential for the newborn at this early stage. As the breastfeeding period progresses, the milk's composition adapts to meet the infant's nutritional needs and ability to digest food. The hormone prolactin, secreted by the breastfeeding mother, aids in the restoration of the uterus to its normal state. This secretion, also referred to as the process of breastfeeding milk, safeguards the mother against the development of chronic abscesses caused by milk accumulation in the breast, which could potentially increase the risk of breast tumors.

Scientific evidence has demonstrated that the mother's bodily structure is well-suited to meet the needs of the growing tissues in the infant. Furthermore, the mother's structure contains albuminous substances that are similar in composition to those found in the infant's body. These substances do not have the same impact on the infant as the substances found in cow's milk, as they differ in composition from the substances present in the baby's body. Recent research has confirmed that breastfeeding with natural breast milk can lower the occurrence of leukemia in infants (Metwali, 2005, 506).

The Aspects of Cosmic Illimitability in the Surah of Divorce

The Creation of Seven Heavens

Allah says: "is Allah Who has created seven heavens and of the earth the like thereof (i.e. seven). His Command descends between them (heavens and earth), that you may know that Allah has power over all things, and that Allah surrounds (comprehends) all things in (His) Knowledge" (Divorce, 12).

Comprehensive Analysis:

The verse suggests the existence of seven heavens, which were created at a time when there were no advanced tools for space exploration. This is supported by another verse that states, "And indeed We created above you seven paths, and We were not heedless of creation." (17)

[Al-Mulk: 3]. This reference is made in relation to the Night Journey, specifically the journey of the Prophet Muhammad (peace be upon him), as narrated by Kalbi (d. 204 AH) on the authority of Abu Salih (d. 110 AH) on the authority of Ibn Abbas, although this evidence is considered weak and insignificant. According to Abadi (817 AH), God created seven heavens, some of which are positioned above others like a dome. The Prophet then ascended to the seven planets, where he observed their unique characteristics, surpassing those found on Earth.

Scientific Explanation:

Astronomers assert that the seven celestial realms are enumerated as follows:

The Earth's atmosphere refers to the layer of gases surrounding the Earth. The moon orbits within this space. The planets in our solar system revolve around the sun within the space of the solar system. The sun and its groups of celestial bodies move within our galaxy. Our galaxy, the Milky Way, moves within a vast expanse of space. The visible universe contains galaxies and their structures. Galaxies, which are separated by great distances, continue to expand, in accordance with the will of a higher power. (Metwali, p.19)

Some individuals contended that the seven heavens correspond to the various tiers of the atmosphere, each distinguished by its arrangement and temperature. The first layer, known as the troposphere, encompasses the space above us, followed by the stratosphere and the mesosphere. The subsequent layers are referred to as the therosphere, ionosphere, and exosphere, respectively (Metwali, p.19). Whether the reference is to the atmosphere and its strata or the expanse of the sky, this detail affirms the accuracy of the Qur'an, which describes the creation of seven heavens in distinct layers.

According to Allah, there are Seven Heavens and Seven Earths that were Created by God. This is Mentioned in The Verse (Divorce, 12)

The verse suggests that God created seven earths. This verse is the only indication we have that there are seven earths created by God. Another piece of evidence supporting the existence of seven earths is mentioned in the following hadith: Whoever unjustly takes a small portion of the earth will be surrounded by seven earths on the Day of Resurrection. This belief in the existence of seven earths is widely accepted, with each earth stacked on top of the other and containing its own world. This information is based on the authority of Mujahid, who heard it from Ibn Abbas.

According to modern scientific findings, the Earth is composed of seven distinct layers: the solid inner core, the outer core, the lower mantle, the middle mantle, the upper mantle, the lower lithosphere, and the upper lithosphere. These layers are made up of Earth's rock.

The Purpose of the Divorce Surah and Its Relationship to the Concept of the Quranic Infinite Nature

The Surah primarily centers around the topic of divorce, encompassing various related aspects such as the waiting period (iddaha), breastfeeding, financial support, and housing. Additionally, the study examines the cautionary tales of past nations and the consequences they faced (Ibn Ashur, 293).

These aspects are connected to the purpose of the Surah, which is to reveal the wisdom of God Almighty in the law of divorce. God has established organized procedures for divorce. The divorce is considered complete when the divorced woman has completed her waiting period. The responsibility of counting and recording the waiting period lies with the divorced husband. The waiting period is typically estimated to be three menstrual periods, three months,

or until the delivery of the pregnancy. God has established legislation that ensures the interests of the people, and anyone who exceeds these limits will bear the consequences and become an oppressor and transgressor. This may lead to a possibility of reconciliation with the wife and rectifying the situation.

Those who have a deep reverence for the Almighty by faithfully following His commands, refraining from His prohibitions, and fulfilling their obligations and responsibilities will find it straightforward to reconcile with their wife during her waiting period. If the waiting period has ended, they may propose to her. Additionally, provisions have been established for financial support for pregnant women, including compensation for breastfeeding the child. In cases of incompatibility, it is advised to hire a wet nurse for the child instead of the mother. All of these matters are relevant to the subject matter addressed in the surah.

Conclusion and Recommendations

Surat Al-Talaq has Four Legislative Facets of Scientific Miracles

- The purpose of counting the waiting period for a divorced woman is to prepare her uterus for a subsequent marriage by eliminating the man's seminal fluid, as described scientifically.
- The waiting period, known as iddha, is connected to the biological aspects of an older woman and a young woman. This waiting period lasts for three months and is meant to ensure that the older woman, who has an irregular menstrual cycle, does not ovulate. It also serves to alert the young woman about the possibility of ovulation occurring, which could result in fertilization.
- The woman experiencing menopause is susceptible to sadness and despair, which is scientifically identified as a cluster of alterations resulting in psychological consequences, sometimes referred to as despondency.
- Breastfeeding has several advantages and is rich in proteins and calories.

2- Surat Al-Talaq Encompasses Two Fundamental Elements of Scientific Miracles

- The verse suggests that there are precisely seven heavens, aligning with the scientific
 discovery of seven distinct layers in the atmosphere that are isolated from one another.
 These layers vary in their arrangement and temperature.
- The passage in the Surah suggests the existence of seven earths, which contemporary science refers to as seven levels.

Surat Al-Talaq serves as a means to establish regulations for family relationships following the separation of a man and his wife. The Surah contains scientific references that are directly related to this purpose. These references include explaining the rationale behind certain legislations, such as the waiting period for a divorced woman and the breastfeeding of a young child. It emphasizes that God possesses superior knowledge regarding the well-being of individuals and the consequences of their actions. Furthermore, it highlights the greatness of God's creation, exemplified by the existence of seven heavens and seven earths. Consequently, it discourages any form of aggression from either the husband or the wife, ensuring that the rights of both parties are respected.

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References

- Abadi, F.(817 AH). Scale Enlightenment in the exegesis of Ibn Abbas. Dar Al-kutab Al-ilmyah Publishing House.
- Alkareem, S. (2010). The biological addah(waiting period of woman). League of the Islamic World.
- Ali, S. (2009). Rhetorical and Legal Inimitability in Divorce Verses. Unpublished M.A Dissertation in the Jordanian University.
- Alzubaidi, A., Ragb, A. & Alatoum, M. Methodological Conventions for studying the aspects of scientific miracles in Quran. Majma Almadinah Al-almyiah Journal, vol.1(2), 150-174.
- Al-tayyar, M. (1433 AH). Scientific Miracle, to where? Dar Ibn Aljawzi.
- Al-shayia. M. (2012). The Dictionary of Quranic Sciences Terminology. Dar Altadmaryiah,
- Al-tabri, A. (1990). Quranic interpretation rhetorical collection. Dar Hajar Publishing House, Bucaille, M. (1991). The Qu'ran and Modern Science. Kingdom of Saudi Arabia, Foreigners
- Bucaille, M. (1991). The Qu'ran and Modern Science. Kingdom of Saudi Arabia, Foreigners Guidance Center.
- 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.
- Ibn Al-arbi, M.(2003). The Rules of Quran. Dar AlKutb Alilmyiah.
- Ibn Ashur, T. (1984). Emancipation of Meaning and Enlightenment. Tunisian Publication House.
- Ibn Faris, A. (1979). Language Measures Dictionary. Dar Alfikr.
- Ismail, A. T., & Asnawi, A. R. (2021). Scientific approach in quranic exegesis: the emergence and issues. Journal of Contemporary Islamic Studies (JCIS), 7(1), 59-83.
- Kasma, D. A., Andy, S., Pasaribu, A., & Padilah, N. (2023). Various Perspectives on the Miracles of the Qur'an: Linguistics, Scientific Signs and Reports of the Unseen.
- Metwali, A. (2005). The Golden Encyclopedia in the illimitability of Quran and Sunah. Dar Ibn Aljazwzi.
- Pamil, J., Munir, A., & Vebrianto, R. (2020). Synchronization and Scientific Miracle of Chapters and Verses Numbers of The Quran. Al-Dzikra: Jurnal Studi Ilmu al-Qur'an dan al-Hadits, 13(2), 157-170.
- Sana'a, A. Y. (2020)/An Ontological Model for Scientific Miracle in the Holy Quran.
- Zakariya, D. M., & Shafwan, M. H. (2023, May). The Miracles of the Qur'an According to Classical and Modern Islamic Scientists and the Conformity of the Qur'an and Science and Technology. In 1st UMSurabaya Multidisciplinary International Conference 2021 (MICon 2021) (pp. 155-162). Atlantis Press.