



Mechanisms of Useful Scientific Interpretation and Criticizing Its Extreme

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Abstract

The role of science in the development and progress of societies has been a factor to use scientific discoveries in the scientific interpretation of the Qur'an. The objective existence of scientific verses in the Qur'an is undeniable, but they need to be properly investigated, because on the one hand, there are issues related to the nature of empirical science and its relationship with the Qur'an, as well as the scope of the fields of science and the Qur'an, and conceptual and elementary conflicts in this case. And On the other hand, the interest of people and scientists in this topic and the different viewpoints of the commentators and finally many diverse examples, which include about thousand verses of the Qur'an, have caused a wide topic called scientific interpretation appeared in the methodology of interpretation. Although in the meantime, the commentators of scientific interpretation have pretended that the cores and foundations of social and scientific developments were present in the text of the religious book of Muslims. So, this group of commentators who were trying to understand the verses related to the realm of science, inevitably also took a look at the scientific achievements, but they have sometimes exaggerated in this field. This article aims to explain the mechanisms of useful scientific interpretation and criticize the extremist scientific interpretation based on the verses of the Qur'an in a new way that emphasizes the context of the verses.

Keywords: *Scientific Interpretation; Scientific Mechanisms; Criticism; Scientific Verses; Scientific Discoveries in the Qur'an*

Introduction

From the past to the present, Islamic commentators and scholars have commented on various dimensions of scientific interpretation and tried to interpret the Qur'anic verses with the help of scientific discoveries and findings. Today, scientific interpretation has attracted the mental concern of many thinkers and its enthusiasts are increasing day by day. This matter has been raised more in the last two decades, in the sense that there are verses in the Qur'an that express a scientific proposition discovered in the present age that mankind did not know about it at the time of the revelation of the Qur'an. And the meaning of science here is experimental sciences that are obtained based on observation and experience.

When the opinion was raised that the Qur'an confirms scientific laws, some claimed that all sciences are contained in the Qur'an and that the Qur'an is the comprehensive of all sciences, such as Seyyed Ahmad Khan Hendi and Ṭanṭāwī in *Al-Jawāhir fī Tafsīr al-Qur'an*. And some, considering the guiding aspect of the Qur'an disagreed with the scientific interpretation of the Qur'an, such as Shāṭibī in *al-Muwāfiqāt*. Of course, it is necessary to pay attention to the fact that scientific miracles and scientific interpretation are two separate categories. But those who have turned to scientific interpretation have considered the Qur'an's miracles in all fields and its scientific miracles as its basis. However, in this research, an attempt is made to avoid confusion between these two categories. Considering the importance of this topic in the present era and the existence of controversial challenges in its path, we first presented a comprehensive and acceptable definition of scientific interpretation and then answered the following questions:

What were the reasons for the tendency of commentators to this type of interpretation? Are all the scholars of the same opinion in accepting this kind of interpretation? What are the arguments for and against this interpretative tendency and which opinion is preferable to scientific evidence? Has there been an excess in this category? What is the source of this excess?

1. The Concept of Scientific Interpretation

The connection between scientific discoveries and laws with the teachings of revelation has been one of the important issues and of interest to scientists of experimental sciences and religious scholars. The effort of Muslim scientists and commentators of the Holy Qur'an to match the Qur'anic verses with new scientific phenomena has established a new way of interpreting the Qur'an, which is called the scientific interpretation of the Qur'an.

In the definition of scientific interpretation, various materials have been said that the origin of this difference goes back to the basis of supporters and opponents of this interpretative method; for example:

"Scientific interpretation is an interpretation whose followers try to use Qur'anic expressions to explain scientific theories and terms and try to extract different sciences from the Qur'anic verses" (Al-Muhtasab, 2013, p. 247). Dhahabi has also mentioned a similar definition (Dhahabi, nd, Vol. 2, p. 519)

Another definition states:

Scientific interpretation has been considered as an interpretation that has briefly referred to many secrets of nature, which have been discovered by the new science. (Ma'refat, 1418, (b), vol. 2, p. 443)

There are also other definitions in this field, including:

The scientific interpretation of the Qur'an is the interpretation according to which the fixed scientific facts in the world of creation and nature are related to the purpose of the divine verses through the implication of words on meanings. (Ayazi, 1414, p. 93)

"Scientific interpretation is an interpretation that talks about the scientific terms in the Qur'an and tries to extract different philosophical sciences and opinions from it." (Rafi'i Mohammadi, 2000, p. 23) and also Hafez Ibrahim in his book *Al-Ishārāt al-Ilmiyah fī al-Qur'an al-Karīm*, Mohammad Sabbagh in the book of *Lama'āt fī 'Ulūm Al-Qur'an*, Fahd Rumi in the book of *Ittijāhāt al-Tafsīr*, each of them gave definitions close to the same themes.

In most of these definitions, applying the results of sciences to the Qur'an and trying to extract sciences from the Qur'an is observed, while the meaning of all scientific interpretations is not such a comparison. In a relatively acceptable definition, it can be said: Scientific interpretation is a method based on which the commentator tries to discover and express the connection between the ontological verses of the Holy Qur'an and the definitive discoveries of experimental sciences in order to reveal an aspect of the

miracle of the Qur'an, without trying to impose a scientific theory on the verses or forget the guiding role of the Qur'an.

2. Historical Background of Scientific Interpretation

Due to the fact that the people of that time did not benefit from science and knowledge, especially natural and experimental sciences, and were immersed in superstitions, idolatry, polytheism, corruption, and disputes, there was no field for scientific explanation and interpretation of the verses. On the other hand, there was no development for experimental and natural sciences during that era, and there was very little information about it. So, the Qur'an's invitation to reflect and clarify the verses was answered at a very basic level by thinkers. After the martyrdom of the Prophet (PBUH), the situation was the same, and the companions of the Prophet were content with simple and basic interpretations. In this way, scientific interpretation was not popular during the time of the Messenger of God and his companions, and no trace of it can be found. Although some of them use the words of Abdullah ibn Mas'ud, who said, "Whoever wants the knowledge of the first and the last, should search in the Qur'an." Some have said: His statement refers to a scientific interpretation, but such a thing is not known.

Also, in the words of the Ahl al-Bayt and the Infallible Imams (AS) that have come down to us, there is no sign that those nobles have engaged in scientific interpretation, except very little. As an example, in the interpretation of the holy verse:

"But nay! I swear by the Lord of the rising-places and the setting-places of the planets that We verily are Able" (Ma'ārij: 40); Imam Ali (AS) says:

"Earth has 360 easts and 360 wests." (Ṣadūq, 1982, p. 221) »

Nevertheless, the beginning of scientific interpretation in the sense of discovering the connection of verses with the scientific laws of the day cannot be traced back to the time of the Messenger of God or the infallible imams (AS).

The first signs of scientific interpretation among Sunnis can be seen in the works of Abu Hamid Ghazali (505 AD). In his two books, *Ihyā' 'Ulūm al-Dīn* and *Jawāhir al-Qur'an*, he states the belief that the Qur'an is relevant to all sciences. However, the scientific interpretation of the verses has not been explained in detail. (Ghazali, 1419, (a), vol. 1, p. 341; Ibid, 1419, (b), p. 8) After him, Fakhr al-Dīn Rāzī (d. 606 AH) can be called the executor and implementer of Ghazali's style, although the invalidity of some of his scientific theories, such as the belief in the stillness of the earth, have been clarified today, he was undoubtedly one of the believers in the method of scientific interpretation in his time. Most of Rāzī's scientific opinions are mentioned in his two famous works called *Asrār al-Tanzīl wa Anwār al-Ta'wīl* and *Mafātīh al-Ghayb* (Tafsīr Kabīr). In the second work, various discussions about the universe and the sky, the creation of man and the formation of the fetus, the creation of animals and the wonders of their lives, the world of plants and vegetation, nutrition and the properties of food are presented. Of course, Fakhr Rāzī in all these cases seeks to prove God's infinite power and greatness.

After Rāzī, we can mention Ibn Abi al-Fazl Morsi (d. 655 AD). He has tried very hard to match the verses with different sciences. Another personality is Bayḍāwī (691 AH) who is the author of *Tafsīr Asrār al-Tanzīl wa Anwār al-Ta'wīl*, who wrote his commentary based on two commentaries of Zamakhsharī and Rāzī, he is strongly influenced by Fakhr Rāzī's views.

After Bayḍāwī, Nizam al-Dīn Nayshaburi (728 A.H.) is the author of *Tafsīr Gharā'ib al-Qur'an* and *Raghā'ib al-Furqān*, one of the believers in scientific interpretation, according to his statement, his *Tafsīr* is a summary of Rāzī's *Mafātīh al-Ghayb* (Nayshaburi, 1416, vol. 1, p. 3). Badr al-Dīn Zarkashī (794 AH), the author of the book *Al-Burhān fī Ulūm al-Qur'an*, and Jalal al-Dīn Suyūfī (911 AH), the

author of numerous works on the sciences of the Qur'an and interpretation, are also some of the people who have proposed the theory of the Qur'an's influence on modern sciences and scientific interpretation.

The comparison of verses containing scientific points with new scientific findings can also be seen in the works of ancient Shi'a commentators. It is among the *Tafsīr al-Tibyān* by Sheikh Ṭūsī (460 AD). He does not clearly mention his scientific orientation, however, some cases of scientific interpretation can be seen in his book: for example, at the end of the holy verse "Who hath appointed the earth a resting-place for you" (Al-Baqarah: 22), he has discussed the sphericity of the earth. But as will be seen from his interpretation of the following verse, it is not possible to infer his tendency towards scientific interpretation.

After Sheikh Ṭūsī, for centuries, no trace of scientific interpretation can be clearly seen in the works of Shi'a commentators and scholars, until the 11th century, when Mulla Sadra (1050 AD) in his *Tafsīr* called *Tafsīr al-Qur'an al-'Azim*, which includes some of the verses of the Qur'an, in some cases he has scientific references. He wrote at the end of the holy verse "And for the moon We have appointed mansions till she returns like an old shriveled palm-leaf." (Yā Sīn: 39):

"One of the secrets that man gets by observing the moon, sun and other planets is that the light of the moon is the same as the light of the sun that is reflected from the surface of the moon to the eyes of the people." By careful attention in the historical course in the commentators' approach to scientific interpretation, perhaps it is possible to invest in the assumption that due to the simple and primitive mind of the Arabs and the lack of scientific information, as well as the lack of scientific problems and religious conflicts that indicate the most perfect religion, the discussion of scientific interpretation has not been seriously raised. However, the influx of significant scientific theories and their imposition on the Qur'an in recent centuries, especially in the fourteenth century, has caused some commentators to approach scientific interpretation more.

3. Influential Factors in the Tendency to Scientific Interpretation

The 14th century is the leader of the previous centuries in terms of the writing of commentary and the evolution of the writing style and the expansion and diversity of the interpretation methods. Commentary in this period has a deep difference from the previous periods, and scientific interpretation in an extreme form was born in this century, which was created by several factors, the most important of which, in order of priority, are as follows:

- 1- The expansion of natural and experimental sciences and the ever-increasing progress of scientific discoveries have placed new expectations from the Qur'an on the current generation.
- 2- The increase of the conflict between science and religion in Europe.
- 3- The retreat of the Bible, due to its conflicts with new sciences.
- 4- The industrial superiority of the West.

These titles are the most important effective factors in a fundamental and significant change in the formation of commentators' interpretation methods. Of course, Sunni scientists and commentators, especially Egyptian scientists such as Ṭanṭāwī, Muhammad Abduh and Kawākibī, showed more reaction due to their direct dealing with the issue and their presence in the scientific atmosphere of this era. Some of these commentators and researchers of Qur'anic science, such as Seyyed Ahmad Khan Hendi, traveled to Europe and were greatly influenced by the scientific progress there, and with scientific bias, tried to introduce the Qur'an as a book in accordance with modern science.

4. Number of Scientific Verses

Yusuf Marwa counts the number of scientific verses of the Qur'an as 675 verses (Marwa, 2008, pp. 76-77.) Muhammad Jamil al-Habbal and Meqdad Mar'i al-Jawari count their number as 1322 verses

including repetitions, which includes about 20% of all the verses of the Qur'an. (Mohammad Jamil Al-Habbal and Meqdad Mar'i Al-Jawari, nd, pp. 35-36)

Some authors have divided the scientific verses of the Qur'an in relation to different sciences, Yusuf Marwa is of the opinion that there are verses in the Qur'an about medical science/61, physics/63, cosmology/100, geology/20, agriculture/21, biology (animals)/12, creation and life/36, geography/73, meteorology/20, chemistry/9 and... . (Marwa, 2008, pp. 76-77)

However, Mohammad Jamil Al-Habbal and Meqdad Mar'i Al-Jawari reported the same numbers differently. For example, they have reported 138 verses on physics, 11 verses on chemistry, and 69 verses on geology (Mohammed Jamil Al-Habbal and Meqdad Mar'i Al-Jawari, *ibid*, pp. 35-36). Of course, it seems that the different numbers of verses in this topic are based on different views about the basics of scientific interpretation and the definition of scientific verses, as it depends on the commenter's opinion about the meaning of the verse and its compatibility with the findings of experimental sciences. Although many of these comparisons and meanings have been disputed (Rafi'i Mohammadi, 2000, pp. 33-44), in addition, the type of meaning of these verses is not the same.

5. Types of Scientific Verses

The scientific verses of the Qur'an are the verses that refer to natural issues, but these references have different meanings. Therefore, the scientific verses of the Qur'an can be divided into four parts:

First: The scientific miracles of the Qur'an, i.e. the scientific mysteries of the Qur'an which are clearly stated in the verses and no one knew about them at the time of the revelation of the verse, but long after the revelation of the verse, its scientific content was discovered by scientists (Rezaei Isfahani, 2002, p. 85)

Like the Qur'an's practical reference to the force of gravity, (Ra'd: 2 and Luqmān: 10), the movements of the sun (Yā Sīn: 38 and Ra'd: 2), the fertilization of clouds (Hijr: 12) and the general marriage of creatures (Ra'd: 2 and Yā Sīn: 36 and Shu'arā: 7), The stages of human creation, (Mu'minūn/12-14, Hajj/5, Ghāfir/67, and Qiyāmat/37-39.) Human beings achieved these scientific materials centuries after the revelation of the Qur'an.

Second: The surprising scientific references of the Qur'an: Some verses of the Qur'an refer to scientific content and laws of the world, which surprise every reader. But since these materials were presented as unpopular views in scientific centers by some scientists, it is not considered a scientific miracle of the Qur'an. Rather, it is a kind of opposition to the famous views and theories in the sciences of that era, which is surprising and indicates the scientific greatness of the Qur'an.

Among them, the references of the Qur'an to the movement of the earth (Naml: 89) and the creation of life from water (Nūr: 45 and Anbiyā': 30) and the prohibition of sexual intercourse with women in the state of menstruation (Baqarah/222 and Tafsīr Nimūnah, vol. 2, p. 93-94 and medicine in the Qur'an, pp. 50-51) prohibition of drinking alcohol (Mā'idah: 90-91 and Baqarah: 219) and...

Third: The scientific references of the Qur'an: the verses that refer to the sky, earth, man, animals and nature and invite man to think about them and sometimes consider them as signs of God and resurrection. But the amazing or miraculous content cannot be understood from the verses; but they attract people's attention to the manifestations of God's beautiful creation and provide the foundation for human scientific development, especially in experimental sciences.

Example: "And don't they look at the camel, how it was created?!" (Ghāshīyah: 17) And also in verses 5-6-7-10-11-13-14 of Surah Naḥl, God points out the benefits of animals, the rain falling, the

growth of colorful plants, the seas and sailing in them and the benefits of food and ornaments that can be obtained from them as signs for the thinkers who realize and give thanks to the creator of the world.

Fourth: Verses that encourage scholars to knowledge: Sometimes the verses of the Qur'an that refer to science and scholars and encourage the increase of knowledge and scientists (Zumar/9, Mujādilah/11, Ṭalāq/12) are mentioned as the scientific verses of the Qur'an. Marwa, 2008, pp. 76-77) But it seems that although these verses are in line with the introduction of the scientific verses of the Qur'an and have been effective in the development of human sciences, especially among Muslims, they are not considered scientific verses because they don't contain Scientific references to natural issues.

6. The Effect of Experimental Sciences on the Understanding of Qur'anic Verses

Since, according to recent studies, more than a thousand verses of the Qur'an refer to natural issues (Jamil al-Habbal and Mar'i al-Jawari, nd, p. 35-36), their understanding and interpretation has an inseparable connection with experimental sciences, as well as we need to be familiar with the theories of experimental sciences for solving the challenges of the Qur'an and science. And it is from this angle that the method of scientific interpretation of the Qur'an has been formed, and the commentators of the Qur'an, especially in the last century, have more or less used experimental sciences as a basis for understanding and interpreting the verses, and sometimes they have proved the scientific miracles of the Qur'an. Of course, this matter requires a special methodology of scientific interpretation and compliance with standards and avoiding the inappropriate imposition and adaptations of unproven scientific theories on the Qur'an that lead to eisegesis i.e. Eisegesis.

7. The Arguments of the Supporters of Scientific Miracles

A group of Qur'an commentators, philosophers, thinkers and many specialists of experimental sciences are in favor of scientific interpretation and have used experimental sciences in interpreting the verses of the Qur'an. Examples of matching the Qur'an with some scientific materials can be seen in the works of these scientists. The main reason for most of these people is that all sciences are found in the Qur'an, so they can be extracted from the verses carefully and with special methods and with the help of scientific data. In general, the evidence of this group can be examined in the following axes:

A. Qur'anic Reason

This group has cited verses from the Qur'an, which, according to them, prove the comprehensiveness of the Qur'an:

And We reveal the Scripture unto thee as an exposition of all things, and a guidance and a mercy and good tidings for those who have surrendered (to Allah). (Naḥl/89)

Not a grain amid the darkness of the earth, naught of wet or dry but (it is noted) in a clear record. (An'ām/59)

We have neglected nothing in the Book (of Our decrees). Then unto their Lord they will be gathered. (An'ām/38)

In this section, 3 theories appear:

- 1- The absolute comprehensiveness that some scholars consider it such as Suyūṭī in Itqān, Ṭanṭāwī in Tafsīr al-Jawāhir fī Tafsīr al-Qur'an, Ghazali in Ihyā Ulūm al-Dīn and Jawāhir al-Qur'an.
- 2- The relative comprehensiveness of the Qur'an is comprehensive, but within the scope of the responsibility of the Qur'an and the expected scope. Most scholars are in this category.

3- The lack of comprehensiveness of the Qur'an: The supporters of this theory believe that the Qur'an is not comprehensive of the teachings required by the Arabs at the Age of Revelation, let alone that it expresses a scientific doctrine. People like Soroush believe this. (Soroush, 1996, p. 107) Criticizing this theory, it should be said: All those who are familiar with the Qur'an and its teachings and rulings, know that in the Holy Qur'an, all the religious sciences and rulings, have not been explained in a clear and comprehensible manner for the general public. According to this external evidence, we realize that the application or the generality of this holy verse "Qur'an explains everything" is not intended and it doesn't mean that the Holy Qur'an expresses everything or all religious sciences for all commentators, and when this meaning was not intended, there are three possibilities in the meaning of the verse:

1. This verse means the Qur'an explains everything and all the teachings and rules of religion for the Holy Prophet (PBUH) and his precious guardians. That is, this book has explained everything not in the outward language that is understandable to everyone, but in the outward and inward language that only the most knowledgeable in science (the Holy Prophet and his successors) are aware of.
2. It means that Qur'an has either stated everything itself or referred to a person who is the true interpreter of it. In other words, the explanation of anything by Qur'an means that, whether it expresses that thing or it shows the right way to be aware of that thing.
3. "Everything" does not mean the all objects and even the all religious knowledge and rules, but rather the principles of religion and the totality of religious rules. A group of commentators have chosen the second possibility (Tūsī, nd, vol. 6, p. 418) and some have chosen the third possibility (Ibn Kathīr, 1407, vol. 2, p. 603) (Babaei, 2007, vol. 2, pp. 147-148) and another reason is the many verses that consider the Qur'an as a book of guidance, but they have no indication that the Qur'an is comprehensive in all sciences. Of course, the phrase "Explaining the all things" does not mean that the Qur'an is comprehensive in everything. Paying attention to the context of such verses confirms this: it is stated in some verses that everything was detailed in the tablets of Prophet Moses. This is despite the fact that it is never possible that everything is mentioned in a few specific tablets.

And We wrote for him, upon the tablets, the lesson to be drawn from all things and the explanation of all things, then (bade him): Hold it fast; and command thy people (saying): Take the better (course made clear) therein. I shall show thee the abode of evil-livers. (A'rāf/145)

Again, we gave the Scripture unto Moses, complete for him who would do good, an explanation of all things, a guidance and a mercy, that they might believe in the meeting with their Lord. (An'am/154)

And We appoint the night and the day two portents. Then We make dark the portent of the night, and We make the portent of the day sight-giving, that ye may seek bounty from your Lord, and that ye may know the computation of the years, and the reckoning; and everything have We expounded with a clear expounding. (Isrā'/12)

The phrase mentioned in these verses clearly expresses the things that were necessary for the guidance of Moses' people in his time, and it doesn't mean the comprehensiveness of the Qur'an. As other verses confirm it:

And We appoint the night and the day two portents. Then We make dark the portent of the night, and We make the portent of the day sight-giving, that ye may seek bounty from your Lord, and that ye may know the computation of the years, and the reckoning; and everything have We expounded with a clear expounding. (Isrā'/12)

And this Qur'an is not such as could ever be invented in despite of Allah; but it is a confirmation of that which was before it and an exposition of that which is decreed for mankind - Therein is no doubt - from the Lord of the Worlds. (Yūnus/37)

In their history verily there is a lesson for men of understanding. It is no invented story but a confirmation of the existing (Scripture) and a detailed explanation of everything, and guidance and a mercy for folk who believe. (Yūsuf/111)

As it turns out, the desired phrase is found in some verses of Makkī Surahs, and this indicates that many of Makkī and Madanī Surahs have not yet been revealed, so how can these verses refer to the comprehensiveness of the Qur'an when the Qur'an has not yet been revealed completely. As a result, these verses are only trying to answer the doubts that the Arabs at the Age of Revelation were dealing with until the time of the mentioned verses.

The above-mentioned contents confirm the fact that the general basis of the supporters of scientific interpretation goes back to the point that the Qur'an contains various sciences. And in addition to the above verses, to prove this matter, they have cited to the verse "We have neglected nothing in the Book (of Our decrees). Then unto their Lord they will be gathered." (An'ām: 38) as a strong document, and in order to make their claim stronger, they strengthen it with the hadith of Ibn Mas'ud: "He has revealed in this Qur'an all knowledge, but our knowledge is insufficient to understand it completely." As some commentators are also of the opinion that this reason actually expresses the comprehensiveness of the Qur'an with respect to all the truths that exist in the world. Some of these facts are things that are discovered and identified by science. (Ālūsī, 1415, vol. 2, p. 471) while there is a difference in the interpretation of the word "Book" among the commentators, whether the book means Qur'an or the preserved tablets (Tabataba'i, 1417, vol. 7, p. 81; Ṭabrisī, 1993, vol. 4, p. 461), the world of existence (Makaram Shirazi, 1995, vol. 5, p. 223) (this case cannot be verified by the context of the verses), and if book is meant to refer to the Qur'an, it definitely contains the details of the laws that are necessary for his happiness and guidance and it doesn't mean everything, even scientific laws. So we can say:

- 1- The comprehensiveness of the Qur'an does not necessarily mean that the Qur'an contains everything, but it means that the Qur'an contains guiding elements, and it is clear that every seemingly scientific point of view does not necessarily lead to the guidance of man.
- 2- All empirical findings are not certain facts, but sometimes they are mixed with doubt and possibility, and sometimes they are refuted.

According to this assumption, if we accept the comprehensiveness of the Qur'an with the same broad meaning, this article will never prescribe the interpretation of revelation to science. Relying on scientific theories to interpret religious texts requires permission. As a result, these verses do not indicate the existence of sciences in the Qur'an, but the meaning of the verses is that what is related to the guidance and perfection of man is mentioned in detail or in brief in the Qur'an.

B. Rational Reason

Some of the arguments of the supporters can be considered rational, such as: The Holy Qur'an is a divine miracle, and the understanding of this miracle is not only limited to Arab eloquent people, but all humans are the audience of divine words. On the other hand, the miracle of the Qur'an is not only a rhetorical aspect, but also has other aspects, one of which is the scientific aspect of the miracle of the Qur'an. It is not possible to receive this Qur'anic miracle except with the knowledge of sciences. Some writers have considered discussing the scientific miracles of the Qur'an as a way to propagate the Islamic call to non-Arabs. And of course, they have pointed out that publishing these facts and proving the scientific miracles of the Qur'an has a special effect in the fight against atheism and establishing faith in hearts. (Nawfal, 1406, p. 9) Another aspect of the rational reasons for proving scientific interpretation is

that the Qur'an contains many verses, which are called "Āyāt al-Kawnīya". Understanding this group of verses is possible only by paying attention to the scientific data of the day. According to the above reason, some researchers have pointed to the role of scientific interpretation in better understanding of the Qur'an. (Previous) This reason is also due to the reflection that we must prove the certainty and irrefutability of scientific data and make sure of the correctness of the verses on them. Of course, we must remember that the commentator of the Qur'an in the age of science cannot completely turn away from scientific findings. The explanation that some scientific findings can organize or correct some of the opinions quoted in the interpretations of the proverbs, for example, in the interpretation of following verse by Qurtūbī:

Or like a rainstorm from the sky, wherein is darkness, thunder and the flash of lightning. They thrust their fingers in their ears by reason of the thunder-claps, for fear of death; Allah encompassed the disbelievers (in His guidance, His omniscience and His omnipotence). (Baqarah/19)

We read that: Thunder is the name of the angel, who drives the clouds, and the sound that is heard from him is the sound of driving the clouds, and lightning is the effect of the whip with which the clouds are driven. (Qurtūbī, 1985, vol. 1, p. 217) while the word (Ṣayyib) means heavy rain, and the meaning of the word (Barq) is lightning, and the word (Ra'd) means the sound that comes from the cloud when lightning strikes, and the word Ṣā'iqah means a piece of lightning from the sky, which falls to the ground. And this verse is the second parable with which God depicts the state of the hypocrites, who profess faith, but are disbelievers in their hearts, by saying that they remain like someone who has been subjected to a barrage of darkness, the darkness that he doesn't see his feet, and he doesn't separate anything from other things. The intensity of the barrage inevitably forces him to run away, but the darkness doesn't let him run. on the other hand, he is surrounded by terrifying thunder and lightning from all sides. Terrified, he cannot find a shelter, except to use the sky's electricity, but the sky's electricity is only for a moment, it does not last and survive, as soon as he takes a step, the electricity is turned off, and he plunges into darkness again. (Tabataba'i, 1417, vol.1, p.56)

The context of verses 16-17 of Surah Al-Baqarah is actually the expression of the hypocrite, who does not like faith, but pretends to believe it out of necessity, but because his heart is not the same as his tongue, and his heart is not illuminated by the light of faith, therefore, the way of his life is not as clear as it should be. It is clear that the one, who wants to pretend to be something he does not have, always makes mistakes. Also, in the discussion related to the verse "though it is but the weight of a grain of mustard-seed, and though it is in a rock, or in the heavens, or in the earth, Allah will bring it forth. Lo! Allah is Subtle, Aware." (Luqmān: 16), we read that the earth is supported on the back of a fish. (Baghdadi, 1415, vol. 3, p. 484) Although it is clear from the context, the meaning of its being in the rock, its hidden place and its location in the belly of the rock is certain, either in the hollow of the heavens or in the heart of the earth, and the meaning "to bring it" is to present it for reckoning and punishment. (Tabataba'i, previous, vol. 16, p. 218) In addition, the context of the related verses is about the resurrection and the reckoning of deeds, and the meaning is that, O my son! If the behavior that you have done, whether it is good or bad, is as small as a mustard seed, and the same small action is in the belly of a rock, or in any place in the heavens and the earth, God will present it for reward or punishment, so that he will be punished accordingly. This shows that scientific interpretation can at least be effective in criticizing and refuting such opinions.

8. Exaggeration in Considering All the Verses of the Qur'an as Being Scientific

The excessive bias of some Qur'an scholars and commentators such as Ṭantāwī in the number of scientific verses in the Qur'an has led to damage in this type of interpretative tendency. Clear examples of this kind of interpretation can be seen in many verses that can be criticized and refuted.

1- "Ḥāfiẓ" in the holy verse: "The whole soul is protected" (Tāriq: 4) referred to the body's defense system. (Diab, 1408, vol. 1, p. 236) Does the context of the verse support such an interpretation? What does the verse have to do with the body's defense system? In the context of the verse, it is about the

Day of Resurrection, and the meaning of having a protector is that the actions of man are under observation (Tabataba'i, 1417, vol. 20, p. 429), not that man himself is protected from calamities. And none of the commentators have mentioned such a matter.

- 2- The verse "That ye shall journey on from plane to plane." (Inshiqāq: 19) has been interpreted as new space stations. While the context of the verses shows the preparations for the resurrection, so the other signs that are mentioned, whether in this surah or in other surahs of the Qur'an, such as: Takvīr, Shams... are the signs and symptoms of the Resurrection. This verse is the answer to all the previous oaths, and it is addressed to the people, and the word "Ṭabaq" means something or a situation that is in accordance with another thing or another situation, whether one is placed above the other or not. In any case, it means the stages of life that a person goes through in his effort to reach his Lord, the stage of life in this world and then the stage of death and then the stage of life in purgatory, (and then death in purgatory and when blowing the trumpet) and finally transfer to the afterlife and calculating the deeds and punishment. (Tabataba'i, 1417, vol. 20, p. 407)
- 3- The verse "O company of jinn and men, if ye have power to penetrate (all) regions of the heavens and the earth, then penetrate (them)! Ye will never penetrate them save with (Our) sanction." (Raḥmān/33) has been interpreted as war satellites in the Qur'an (Marwa, 2008, vol. 1, p. 168) in this holy verse, as its context shows; it is one of the addresses of the Day of Resurrection, in the sense that you can do nothing on the Day of Resurrection. It means the ability, power, and what is meant by influence is to escape from the narrow banks, "It means you will not be able to influence, except with some kind of authority that you lack." Sultan means existential power, and Sultan means proof or absolute proof (Tabataba'i, 1417, vol. 19, p. 178). Some commentators have said: The meaning of the influence that is denied in this verse is scientific influence in the heavens and the earth, and attaining the dimensions of both of them. (And they have concluded that the holy verse is a prediction of the future that one day mankind will gain the power of scientific influence and reach the height of the heavens) (Ālūsī, 1415, vol. 17, p. 112) But as it was observed: the context of the verse is not compatible with this meaning because in these verses the conversation is about the resurrection, and in the middle of such a conversation, it does not seem right to suddenly address a worldly issue.
- 4- The verse "And send against them swarms of flying creatures" (Fīl: 3) has been interpreted as the insects that carry the disease (Abduh, 1985, p. 161). And the word "Abābīl" as they said (Ṭabrasī, 1993, Vol. 10, p. 531) means scattered congregations and groups, and the meaning of the verse is: God sent diverse congregations of the chickens on top of their heads. And this verse and the next verse is the inflection of the interpretation of the verse: "Did He bring their stratagem to naught? Which pelted them with stones of baked clay?" (Tabataba'i, 1417, Vol. 20, p. 631) "Sijjīl" is a petrified mud, that is, a mud that has hardened and turned into stone. That is those birds used Sijjīl to shoot the companions of the elephant (Najafi, 2018, Vol. 18, p. 386).
- 5- The interpretation of "Athqāl" in the verse "And Earth yieldeth up her burdens..." (Zilzāl: 2) as the extraction of oil and gas from mines (Abu Ḥijr, 2000, p. 446) Commentators have two opinions about the word "Athqāl". One is that the meaning of "Athqāl" is: treasure and the like that are buried in the belly of the earth, but this word does not agree with the context and content of this surah. Because the simile of position is used: this surah is intended to explain the reckoning the deeds of mankind and the resurrection. The second saying is that it means human corpses. (Ālūsī, 1415, vol. 30, p. 211) This meaning is more compatible with the appearance of the verse, it is noteworthy that the sentence (mankind will issue forth) that appears in verse 6, "That day mankind will issue forth in scattered groups to be shown their deeds" that is, people leave the earth and are exported, it confirms the second meaning. (Previous)

6- The interpretation of ḥurūf muqatta‘āt in religious, mathematical, natural and astronomical sciences and all existing sciences (Ṭaṭṭāwī, 1412, vol. 10, pp. 65-66). There have been various interpretations about these letters, none of which have been proven correct.

It is clear that this type of scientific interpretation leads to many interpretations in the Qur'anic verses without observing the literary rules, appearances and their literal meanings. This is why many opponents have considered scientific interpretation to be a kind of allegory. And in the shadow of the criticism of such materials, they have opposed scientific interpretation, which is given under their arguments along with the criticism.

9. Arguments of Opponents of Scientific Interpretation

Some believe that the scientific interpretation of the Qur'anic verses is completely wrong and is nothing more than a kind of futile speculation. They came to the position of defending the mission of guidance of the Qur'an and called the result of such a move as Eisegesis and subordination of the Qur'an to other sciences. Abu Ishāq Shāṭibī (d. 790 AD), Muhammad Shaltūt (d. 1964 AD), Amin Khouli (d. 1956 AD), Abbas Aqqad (d. 1964 AD), Mohammad Hossein Dhahabi, Seyyed Quṭb, Sobhi Saleh, Muhammad ‘Izzat Darwaza, Mohammad Abdul-Azim Zarqānī, Aisha Bint al-Shaṭī are some of the most famous figures in the field of opposition to scientific interpretation. Among their sayings: "If we want to interpret the verses of the Qur'an with the science of astrology, astronomy, geometry, natural science, and philosophy, it is mannerism, and the illiterate Arabs to whom the Qur'an was revealed did not know anything about these sciences, and Islam is an easy and permissive religion." (Shāṭibī, 1417, vol. 2, pp. 69-76) and it is also stated as follows:

"This theory is undoubtedly wrong; because God did not reveal the Qur'an to be a book of scientific theories and the details of techniques and all kinds of human knowledge. Another reason is that he forces his followers to interpret the Qur'an along with mannerism. An interpretation that contradicts the miracles of the Qur'an and healthy taste does not like it. So this theory is wrong; because it exposes the Qur'an to movement and synchronism with the sciences in every age and time, while the sciences have no stability. (ibid., p. 13)

The arguments of the opponents can be mentioned in the following areas:

1. The goals of the revelation of the Qur'an are guidance and education, not the expression of scientific topics of the day;
2. Scientific findings are changeable;
3. The audience of the Qur'an in the age of revelation did not have scientific information;
4. Scientific interpretation is the factor of using Ta'wīl and Eisegesis;
5. Scientific interpretation makes the Qur'an subject to science

Of course, it must be accepted that sometimes some of these people have imposed scientific theories on the Qur'an. For example, Abdul Razzaq Nawfal says about the verse "He is the one who created you as one soul and created for you a couple from yourself": The meaning of single soul is the proton and the pair is the electron, and these are the two elements that make up the atom. He considered this matter as the reason for the scientific miracles of the Qur'an. (Nawfal, 1406, p. 156) While the verse does not intend to express this matter at all, but the existence of such extremisms should not lead to the denial of scientific verses in the Qur'an, rather we should correct and adjust their opinions and views.

10. Detailed Reasons for Opponents of Scientific Interpretation and Its Criticism

A. Whether Tahaddī of the Qur'an is related to the claimed verses: scientific miracles are not related to all verses and surahs, but include some. But "Tahaddī" belongs to all the Qur'an and all the surahs of the Qur'an are miracles. And if the Qur'an is miracle due to scientific indications scattered in it,

it is necessary that many surahs should not be miracles since they have no such references. (Hossein Mehran, 1992, p. 54; Ma'refat, (b) 1418, vol. 2, p. 491-494)

This argument of opponents of scientific interpretation is similar to a fallacy; because the scientific miracle of the Qur'an is still standing from the beginning of Islam, when people did not have scientific progress, to today, when people are at the peak of scientific progress, and the Qur'an still challenges, but no one can bring a surah like it. In addition to the fact that people are ignorant of certain scientific facts, does not invalidate the scientific miracles of the Qur'an, but this itself is the reason for the miracles of the Qur'an. And that the Qur'an has known about the certainties of science and scientists do not have enough knowledge even at the present time and as science progresses, the scientific content of the Qur'an becomes clearer.

B. The lack of familiarity of the audience of the Qur'an to Tahaddī: Another point is that if we consider the scientific miracle as one of the aspects, it is a problem that can make the miracle of the Qur'an wrong, because the challenged Arabs were ignorant and illiterate people. And basically, they did not know anything about science, and this causes the impression that the Qur'an challenged people who were incapable of scientific understanding, and this challenge is invalid in this situation. (Abu Hġjr, 2000, p. 112)

In response to this reason, it can be said: The Qur'an was not revealed for a specific generation. And the fact that new meanings and examples of the verses of the Qur'an are understood or discovered during time, and new interpretations and explanations of them are presented, is the reason for the greatness of the Qur'an. And this is the height of eloquence when someone speaks in such a way that everyone and every generation can understand it according to their understanding and knowledge. Of course, the meanings of the words of the Qur'an are understood based on the same word of Islam, and other meanings of the words are not intended, but did the Arabs of the beginning of Islam understand all the verses of the Qur'an and their long meanings? Isn't it narrated about the first verses of Surah Al-Ĥadīd and Surah Tawĥīd, that the people of the end of time will understand the high teachings of Qur'an? Didn't some of the Companions face problems with the words and interpretation of the verses, and asked about them from the Prophet (PBUH) and Ali (AS) and Ibn Abbas?

C. Absence of semantic expansion in the words of the Qur'an: To understand the words of the Qur'an accurately, it is necessary to know the meanings of those words and the limits of their use at the time of revelation, and this problem prevents the expansion of words in their understanding and translate and interpret them in a non-conventional sense at the time of revelation. The knowledge of Qur'anic expressions should be according to what the original Arabs understood and we should not exceed the limits of their knowledge in understanding the verses of the Qur'an, because the requirement of Qur'anic eloquence is to match the present, that is, the present audience. (Ma'refat, 1418, (b), vol. 2, pp. 491-494)

It is true about some types of scientific interpretation such as extracting and imposing and applying scientific theories to the Qur'an. For example, when Abdul Razzaq Nawfal interprets "Single soul" as Proton, the literal and idiomatic meaning of the verse has been removed, and this method is not correct. However, this is not the case in scientific interpretation in the form of employing sciences in understanding the Qur'an. For example, when we interpret the verse "Allah it is Who raised up the heavens without visible supports" (Ra'd: 2), the visible support is the same as the pillar, but the force of gravity is one of its examples that has been discovered by modern science. Or, Qur'anic words (such as couples) are in complete agreement with scientific findings, and it is not necessary to interpret the words figuratively.

D. The Qur'an is not a scientific book but rather it is a book of human guidance, and the ontological verses in the Qur'an are meant to encourage and motivate minds to think about the greatness of the creator, not to confirm a specific scientific hypothesis and theory. (Abu Hġjr, 2000, p. 321) As a result, the Qur'an was revealed to express the rules and issues of worship and what is related to the

hereafter, and it was not revealed to express knowledge, and some verses that appear in this matter are such as:

"And We reveal the Scripture unto thee as an exposition of all things, and a guidance and a mercy and good tidings for those who have surrendered (to Allah)." (Nahl: 89) and also: "We have neglected nothing in the Book (of Our decrees)." (Al-An'ām: 38) is related to worship and duty, (Shāṭibī, 1417, vol. 72, p. 69-76; Dhahabi, nd, vol. 2, p. 485). And if all the sciences are contained in the Qur'an, the companions of the Holy Prophet (PBUH) and his followers would mention it, while none of them claimed this. It is not possible to prove the existence of all sciences in the Qur'an. (Dhahabi, nd, Vol. 2, p. 489) In addition, experimental sciences are not certain and theories are shaky and are changed after a while, and it is not correct to interpret the Qur'an with shaky and uncertain sciences; because after a while those theories are changed, people doubt about Qur'anic statements and they lose their faith. And more importantly, scientific interpretation leads to Eisegesis in many cases. Because the people who are trying to interpret the Qur'an scientifically, for many reasons, have this problem, which include:

A) Some people do not have enough expertise in the Qur'an and interpretation, and without having the qualifications of an interpreter, they try to interpret the Qur'an scientifically, and this is one of the cases in which people fall into the trap of Eisegesis.

B) Some biased people may want to prove their theories by using the scientific verses of the Qur'an, and sometimes these theories are deviant and even atheistic, but they do this by using scientific interpretation, which is a clear example of Eisegesis. The fact that the Qur'an is a book of guidance and not a scientific book does not seem to be enough to reject scientific interpretation; because the Qur'an is a light, guidance and an expression and getting help from various sciences, such as syntax, grammar, meanings of expression, principles and definite contents of sciences does not have any contradictions with the point that is used to interpret a verse, or to clarify the contents of its sentences (which are not clear to us). And it does not mean that the Qur'an is not light and guidance; because the Qur'an is a guide, but our understanding is incomplete, and we benefit from the excellent contents of the Qur'an through these sciences. So, in reality, we need the help of science to understand the Qur'an, and the Qur'an does not need anything.

From all the arguments that were given to reject scientific interpretation, we conclude that most of them were to reject a certain type of scientific interpretation (such as extracting all sciences from the Qur'an or applying sciences to the Qur'an). Another thing is that many of the problems regarding the abuse of scientific interpretation, to prove deviant thoughts or Eisegesis, have been that this problem is for people, not for a specific interpretative method! And this problem is more or less included in all interpretative methods; because anyone may abuse any interpretative method.

Conclusion

According to what has been said, the Qur'an is a book of guidance, preaching and education, and it has used all the useful ways to achieve this goal. In discussing ideological and moral issues, Qur'an sometimes mentioned a series of natural and ontological issues, with the intention of explaining scientific and experimental issues or explaining human laws, as well as in order to understand the greatness, mercy, wisdom and power of God and finally surrender and submission and thanks to the creator of existence. Therefore, one of the principles that the commentators should keep in mind is to pay attention to this high position of the Qur'an. Although the main purpose of the Qur'an is not to express the natural sciences and to mention the formulas of physics, chemistry and the like, it can be said that the Qur'an has scientific references that it has used in line with its guiding and educational goals. If the Qur'an has only come to explain the rules of the means of worship that are related to the hereafter, then the scientific examples of the Qur'an and their contents have been stated in vain?! While God Almighty is absolutely purified to say

nonsense; as a result, everything that is mentioned in the Qur'an is based on a precise purpose and plan, and this makes it different from other books of other religions and is a sign of its miraculous nature.

References

- Abduh, Muhammad, 1985 AD, Tafsir Juz' A'am, np: Dar al-Maktab al-Hilal.
- Abu H̄ijr, Ahmad Umar, 2000 AD, Al-Tafsir al-Ilmi lil Qur'an fi al-Mizan, Beirut: Dar al-Madar al-Islami, Kamel.
- Ālūsī, Mahmud, 1415 AH, Ruḥ al-Ma'ānī, Beirut, Dar al-Kitab al-Ilmiyah.
- Ayazi, Muhammad Ali, 1414 A.H, Al-Mufasssirun Hayatuhum wa Manhajuhum, Tehran: Ministry of Guidance.
- Babaei, Ali Akbar, 2007 AD, Tafsiri Schools, Tehran: Samt / University Research School.
- Baghdadi, Aladdin Ali ibn Muhammad, 1415 AH, Tafsir Khazan, Beirut: Dar al-Kitab al-Islamiya.
- Dhahabi, Muhammad Hossein, nd, Al-Tafsir wa al-Mufasssirun, Beirut: Dar Ihyā al-Turāth al-Arabī.
- Diyab, Mahmud, 1408 AH, Medical Miracles in the Holy Qur'an, Cairo: Publications, Dar Al-Shu'ab.
- Ghazali, Abu Hamed, 1419 A.H, Ihyā Ulūm al-Din, Cairo: Dar al-Hadith.
- Golshani, Mehdi, 2000 AD, Qur'an and Natural Sciences, Tehran: Motahar Publishing House.
- Habbal, Mohammad Hamil; Meqdad Mar'i al-Jawari, nd, Al-Ulūm fi al-Qur'an, Beirut, Dar al-Fikr.
- Hossein Mehran, Dr. Jamal al-Din, 1992 AD, Verses from the Scientific Miracles in the Holy Qur'an, Cairo: Anglo-Egyptian Library.
- Ibn Kathīr, 1407 AH, Tafsir al-Qur'an al-Azim (Tafsir Ibn Kathīr), Beirut: Dar al-Fikr.
- Jawādī Āmulī, Abdullah, 1999 AD, Tansim, Qom, Isra Publishing Center.
- Makarem Shirazi, Nasser, 1995 AD, Tafsir Nemooneh, Tehran: Dar al-Kutub al-Islamiyya.
- Ma'refat, Mohammad Hadi, 1415 A.H, Al-Tamhīd fi Ulūm al-Qur'an, Qom: Al-Nashr al-Islami Foundation.
- Marwa, Yusuf, 2008 AD, Natural Sciences in the Qur'an, Beirut: Al-Marwa al-Ilmiyya.
- Muhtasab, Abd al-Hamid Abd al-Salam, 2013 AD, Ittijāhāt al-Tafsir fi al-Aṣr al-hadith, Beirut: Dar al-Fikr.
- Najafi Khomeini, Mohammad Jawad, 2018 AD, Tafsir Āsān, Tehran, Islamiyah Publications.
- Nawfal, Abd al-Razzaq, 1406 AH, Al-Qur'an and the Science of Hadith, Lebanon: Dar Al-Kitab Al-Arabi.
- Nayshaburi, Nizam al-Din ibn Muhammad, 1416 AH, Gharaib al-Qur'an and Raghaib al-Furqan, Beirut: Dar al-Kitab al-Islamiya.
- Qurṭubī, Muhammad ibn Ahmad, 1985 AD, Al-Jāmi' Li Aḥkām al-Qur'an, Tehran, Nasser Khosrow Publications.

- Rafi'i Mohammadi, Nasser, 2000 AD, Scientific interpretation of the Qur'an, Qom: Farhang Gostar.
- Reza'i Esfahani, Muhammad Ali, 2013 AD, a study on the scientific miracles of the Qur'an, Rasht: Kitab Mobin.
- Şadūq, Muhammad ibn Ali ibn Hossein, 1982 AD, Ma'ānī al-Akhbār, Qom: Publications of Jamia Modaresin Qom.
- Shāṭibī, Ibrahim Musa ibn Muhammad al-Gharnati, 1417 AH, al-Muwāfiqāt, scholar: Abu Ubaidah Mashoor ibn Al Salman, np, Dar ibn Affan.
- Soroush, Abdul Karim, 1996 AD, Expansion of Prophetic Experience, Tehran: nn.
- Tabataba'i, Mohammad Hossein, 1417 AH, Tafsir al-Mizan, Qom, Publications of Qom Seminary Society of Teachers.
- Ṭabrarī, Hassan bin Faḍl, 1993 AD, Majma' al-Bayān Tafsir al-Qur'an, Tehran, Nasser Khosrow Publications.
- Ṭanṭāwī, Jawhari, 1412 AH, Al-Jawāhir fi Tafsir al-Qur'an al-Karim, Beirut: Dar Ihyā Al-Turāth al-Arabi.
- Ṭūsī, Muhammad ibn Ja'far, nd, Al-Tibyān fi Tafsir al-Qur'an, Beirut, Dar Ihyā al-Turāth al-Arabi.
 , 1419 AH, Jawāhir al-Qur'an, Beirut: Dar al-Āfāq Al-Jadīdah.
 , 1418 A.H, Al-Tafsir wa al-Mufasssirun, Mashhad: Razavi University of Islamic Sciences.

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