

The Science Feature in Acehese Tafseer: a Comparative Study between As-Singkily's and As-Shiddiqie's Works

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Abstract. The development of modern science was followed by the development of scientific findings as well. Interestingly, many scientific facts are found in the Quran which existed even before modern science developed. In responding to the verses that contain scientific facts, several commentators have also included these scientific facts in their works. This article aims to further examine two interpretations of the Quran originating from Aceh, *Turjuman al-Mustafid* which belongs to As-Singkily, and *Tafseer al-Quran al-Majid an-Nur* by As-Siddiqie. By using qualitative methods and descriptive and content analysis approaches, this research found that both scholars As-Singkily and As-Siddiqie accepted the scientific facts contained in the Quran. These facts can be seen from their works which mentioned scientific facts along with their commentaries. A science feature was found more in As-Siddiqie's work which was written and published in the 20th century compared to as-Singkily's work which was published in the 18th century.

Keywords: scientific features on tafseer; *kawmniyyat* verses; sciences verses.

Introduction

Along with the development of the times, scientific interpretation is increasingly popular among the public¹ The development of modern science and research today is increasingly proving that the Qur'an is truly *Salib li kulli zaman wa makan* (not limited by space and time). Starting from the results of modern scientific research which has been proven and stated in the Qur'an, such as a few verses about human creation or embryo, which detailed mentioned. Then, the verses about sky objects rotate in their specific places. Also, verses about the phenomenon of non-mixing sweet and salty water in the sea. Scientific studies contained in the Qur'an can be said to be one form of *I'jaz al-Qur'an* today, in addition to other forms that are found in the beauty of the composition of language, *tasyri'I*, and *tarbawi*.

Several researchers have also contributed to this topic. Mohd Aiman Shazlishah Rosli et al, stated in their article that Islam has accepted science and technology since ancient times until now. The main purpose of the Quran as a means of knowing that God is making the Quran not only a book of wisdom but also a book that contains scientific information. This essay focuses on how Islam has long accepted science and technology and how the Quran contains stories about the development of human civilization in terms of science, technology, and scientific knowledge that may be understood. The Al-Quran should be examined and studied by humans since it contains a wealth of scientific knowledge. According to them, in the form of continuous practice and learning

¹ Ahmad Tha'qif Ismail and Aqdi Rofiq Asnawi, "Scientific Approach in Quranic Exegesis: The Emergence and Issues," *UiTM Press*, March 10, 2021, 59–83.

of science and technology guided by the Quran and Hadith in higher educational institutions, it is hoped that they will be able to achieve the main goal, which is the integration of Islamic education.²

Muhtadi then examined the implementation of the Quran Surah al-'Alaq 1-5 in learning Science and Technology. By using the content analysis method, the results of his research showed that the conception of learning in the Qur'an surah al-'Alaq 1-5 can be interpreted as intellectual enlightenment. The repetition of the word *Iqra* twice means that the learning process should be carried out continuously. According to the findings of this study, the concept of learning in Surah al-'Alaq 1-5 of the Quran can be construed as intellectual illumination. The word *Iqra* itself implies the application of *Iqra* in learning science and technology, which does not only mean reading a text but also understanding nature, situations, and conditions around it.³

Faizal examines the study of iron and its benefits for human life from the perspective of science and surah al-Hadid verse 25. This study aims to find out how the views of the Quran and science regarding iron and what are the uses and features of iron so that it can be utilized by humans. He quoted the opinion of scientists who said that the iron metal on earth turned out to come from extraterrestrial objects. This study concludes that the Quran and science talk about iron and its benefits for human life in detail combined with scholarly and scientific commentary.⁴

In a paper entitled a Study of the Qur'an and Science about Environmental Damage, the author explained that human responsibility as caliph on this earth means that humans should avoid actions that can trigger disasters. In the occurrence of the disaster itself, it is said it was caused by humans. Later, people need to pay attention to every step he takes. He also concluded that the occurrence of this calamity caused by human hands was a form of reward from Allah SWT to awaken them. Humans can modify their mindset in accordance with the verse's intentions by taking a textual and contextual approach to the Qur'an and learning about the verse's historical context. This is also related to the current situation in which science is evolving alongside religion. The implication of this textual and contextual approach is to connect sacred religious knowledge with scientific knowledge that is new and modern in character.⁵

The last is the study of biological miracles in the Qur'an from a scientific perspective which states that in the Qur'an several signs indirectly indicate the connection between several fields in these biological sciences. The discoveries of modern science have succeeded in revealing the uniqueness of some topics that have been described in the Qur'an from a scientific perspective. The results of this study indicate that many verses have been revealed by Allah SWT which gave a signal to the uniqueness of many fields in the biological sciences.⁶

The novelty of this article, as can be seen from the numerous articles about the integration of the Qur'an and science mentioned above, is clear evidence of this integration, as can be seen in the comments of scholars, particularly as-Sinkily and as-Siddiqie in their interpretation of several scientific verses found in the Qur'an. The two provide a comprehensive explanation of the relationship between Quranic passages and science. Such a good reception of the style of science in the Qur'an has attracted the attention of the author to further examine the scientific feature

² Mohd Aiman Shazlishah Rosli, Mohd Hafiez Abd Hamid, and Bushrah Basiron, "Integrasi Pendidikan Antara Islam Serta Sains Dan Teknologi," in *Prosiding Seminar Tamadun Islam 2018* (Seminar Tamadun Islam, UTM Malaysia, 2018), 95–110.

³ Muhtadi, "Implementasi al-Quran Surat al-'Alaq ayat 1-5 Dalam Pembelajaran Sains dan Teknologi," *Sumbula* 5, no. 1 (2020): 175–96.

⁴ Muhammad Ibnul Faizal bin Miskkin, "Kajian Tentang Besi dan Manfaatnya Bagi Kehidupan Manusia Dalam Perspektif Sains dan QS Al-Hadid 57:25" (Medan, UINSU, 2016).

⁵ Eko Prayetno, "Kajian al-Qur'an dan Sains Tentang Kerusakan Lingkungan," *Al-Dzikra* 12, no. 1 (2018): 1–20, <https://doi.org//dx.doi.org/10.24042/al-dzikra.v12il.2927>.

⁶ Mohamed Akhiruddin Ibrahim, Mohd Yakub @ Zilkifli Mohd Yusoff, and Azniwati Abdul Aziz, "Kemujizatan Biologi Dalam Al-Quran dari Perspektif Sains: Satu Tinjauan," in *Proceedings of the 2nd Annual International Qur'anic Conference 2012 held on 22-23 February 2012 at University Malaya, Kuala Lumpur* (Kuala Lumpur: Centre of Quranic Research, University Malaya, 2012).

available in the book of *Tafseer*. In this study, the authors chose to examine two books of Tafseer Nusantara which have been known especially by many quranic and *Tafseer* researchers in Southeast Asia. The first Tafseer is *Turjuman al-Mustafid* by Abdul Rauf as-Singkily which is the first complete book of interpretation in the archipelago. This book which uses the Malay language also uses the Arabic script in its writing method. Whatever the case, Sheikh Abd al-Raouf al-Fansuri wrote his book, with the assistance of his student, Baba Daoud al-Jawi, and it was corrected by Sheikh Ahmed al-Fatani and his students, Sheikh Idris bin Hussein al-Kalantani and Sheikh Daoud bin Ismail al-Fatani, as Sheikh Ahmed al-Fatani sent a message to Sultan Abdul Hamid Khan II, the Sultan concurred, and in the year 1302 AH/1884 CE, *Turjuman Al-Mustafid* book was published in Turkey for the first time.⁷ This interpretation also tends to be called a global interpretation because of its straightforward presentation. While As-Singkily was a mufti of the Kingdom of Aceh, he composed his interpretation while under the authority of four sultanats in turn, however this political ideology did not pervade his interpretation.⁸ The second Tafseer is *Tafseer al-Quran al-Majid An-Nur* by Hasbi as-Siddiqie which consists of 4 volumes. Sheikh Al-Siddiqie put forth effort and composed his *Tafseer* in nine years between 1952 AD and 1961 AD while working as a teacher, lecturer, and dean in the college at a university in Indonesia. It was regarded as one of the greatest books of interpretation of his time.⁹ This interpretation looks very concerned about the social side with the many efforts of the author to solve polemics that occur in society. These two interpretations came from two different periods, where the author as-Singkily lived in the 18th century while as-Siddiqie was a modern commentator who lived in the 20th century. In his interpretation, al-Siddiqie employs the analytical and comparative method. Different interpretation features have emerged in this interpretation, the most important of which is the literary and social features.¹⁰ This interpretation is meant to provide practical, systematic, dynamic, and understandable responses to modernity's various issues. This interpretation exists as a result of the implementation of a government programme in response to the necessity for Indonesians to have access to books on Qur'anic interpretation.¹¹ However, both come from the same area, Aceh, one of the westernmost provinces in Sumatra, Indonesia. This research uses qualitative methods and content analysis approaches which data are presented in words and themes during a qualitative content analysis, allowing for some interpretation of the findings. The choice of analysis technique relies on how thoroughly the researcher wants to include the informants' views into the study. As a result, the number of informants required and the manner in which data will be obtained are affected. Either a manifest analysis or a latent analysis must be chosen by the researcher. In a manifest analysis, the researcher sticks closely to the text, uses the words themselves, and describes what is immediately clear and evident in the text. They also describe what the informants actually say. Latent analysis, on the other hand, is extended to an interpretive level in which the researcher strives to discover the underlying meaning of the text: what the text is talking about.¹² This study is a literature review that uses literature as a gathered datas, both classical and modern, as the sources. Later, the author will try to find answers to research questions such as how are the as-

⁷ Abd al-Rauf ibn Ali Al-Jawi Al-Fansuri, *Turjuman al-Mustafid* (Kuala Lumpur: Khazanah Fathaniyah, 2014).

⁸ Arivaie Rahman, "Tafsir Tarjuman al-Mustafid Karya Abd Al-Rauf Al-Fansuri: Diskursus Biografi, Kontestasi Politis-Teologis, dan Metodologi Tafsir," *MIQOT* XLII, no. 1 (2018): 1–22.

⁹ Muhammad Hasbi Ash-Shiddieqy, *Tafsir al-Quranul Majid An-Nur*, 1st ed. (Jakarta: Cakrawala Publishing, 2011).

¹⁰ M. Abdurrahman Wahid, "Corak dan Metodologi Tafsir Al-Quran Al-Majid An-Nur Karya Hasbi Ash-Shiddieqy," *Rausyan Fikir* 14, no. 2 (2018): 395–426.

¹¹ Asep Fuad and Masykur, "Manhaj Khash Tafsir An-Nur Karya Hasby Ash-Shiddieqy," *Jurnal Iman dan Spiritualitas* 2, no. 1 (2021): 35–40, <http://dx.doi.org/10.15575/jis.v2i1.15788>.

¹² Mariette Bengtsson, "How to Plan and Perform a Qualitative Study Using Content Analysis," *NursingPlus Open* 2 (2016): 8–14, <https://doi.org/10.1016/j.npls.2016.01.001>.

Singkily and as-siddiqie methods in explaining the interpretation of verses that have a scientific style? by examining the information gathered.

Result and Discussion

Sciences Feature in Tafseer

Scientific Tafseer is a modern term consisting of two sentences, Tafseer and science. In linguistic terms, Tafseer has the meaning of uncovering hidden things and explaining them. Meanwhile, according to the understanding of the term by Abu Hayyan al-Andalusi, Tafseer is the science that discusses the procedures for pronouncing and reciting the Qur'an, the meaning of the verses, its laws, and all the intentions contained in the verses of the Qur'an. Then, this Tafseer sentence was connected to the word science/scientific which has a similar meaning to knowledge in Arabic. When the word Tafseer is juxtaposed with science, this sentence has its meaning, as stated by Solah al-Khalidi that Tafseer ilmy or scientific Tafseer is the interpretation of the verses of the Qur'an using the scientific method following the principles of modern science.¹³

The scientific style in Tafseer was mentioned as a new style in this modern era. The word scientific Tafseer itself means the interpretation which uses cosmic sciences and modern scientific theories in explaining its intent and meaning. The cosmic sciences referred to here are natural science, astronomy, earth science, chemistry, biology, medicine, anatomy, physiology, mathematics, and others. Sometimes, human science and social science are also included. However, the scientific style intended by the scholars is more to cosmic science and natural science, not related to religious science or sharia science.¹⁴

Different Islamic scholars have different perspectives on how to react to the inclusion of a scientific element in the Qur'anic interpretation. Scholars generally held two positions: acknowledging and approving the existence of a scientific component in Qur'an interpretation, and denying the existence of a scientific feature in Qur'an interpretation.

The first group is the scholars who accept the existence of a scientific style in the Qur'an. They believe that the Qur'an covers all knowledge without exception. This opinion is an old thought that was formed concurrently with the entry of Greek jurisprudence into Islamic thought, it was known as the alignment between wisdom and *sharia* in the discussions of Islamic philosophers such as Ibn Rushd and others. Abu Hamid al-Ghazali argued that the Qur'an is like a vast ocean full of knowledge. In his book *Ihya Ulumuddin*, he corroborated his opinion by saying that all knowledge is included in the nature and power of God and this kind of knowledge is unlimited. Jalaluddin al-Suyuti also agreed with al-Ghazali by saying that the book of Allah covers everything. Various branches of knowledge are also available in the Qur'an, including the wonders of the creation of creatures, the kingdom of heaven and earth, and all in between. Another scholar is Tantawi Jawhary who said in his Tafseer book that scholars and leaders of the *ummah* should teach all knowledge because all knowledge comes from Islam. According to him, the style of science in Tafseer has its specialties, one of which is to get people out of backwardness from the west in many fields like agriculture, medicine, mathematics, engineering, astronomy, and others. From this, it is concluded that those who agreed with the existence of a scientific style in the *Tafseer* said that, some of the essences of the Quran and its verses that were not understandable at the time the Quran was revealed, could be understood through modern science and the theories of

¹³ Adil ibn Ali Al-Shiddiy, *Al-Tafseer al-Ilmy al-Tajribiy li al-Quran al-Kareem Juz'urubn wa tatbiqatubn wa al-Mawqifi Minbu*, 1st ed. (Riyadh: Madar al- Watan li an-Nashr, 1421).

¹⁴ Yusuf Al-Qaradhawi, "Nazharat fi al-Tafseer al-'Ilmy li al-Qur'an," *Majallat Markaz Buhus al-Sunnah wa al-Sirah*, 1997 1413.

modern science are not contrary to the Quran. It can be understood that the development of modern sciences supports the understanding of the Quran.¹⁵

Among the scholars who rejected the existence of scientific features in the Quran is Abu Ishaq al-Shatiby. According to him, the Qur'an was originally revealed to the *ummi* people, so the Qur'an is not able to reveal something that the *ummi* did not understand. This became *masyaqqah* and *takleef* for the current Arabs because they did not have any scientific knowledge yet. As for the cosmic verses contained in the Qur'an, it does not at all reduce the sanctity of the Qur'an, because apart from this cosmic verse, the Qur'an contains other verses that were understood well by the current *ummah* for whom it was revealed. Another scholar, Muhammad Kamil Husayn, also rejected the existence of a scientific style in the Quran because according to him, the themes and methodologies in the Quran and science are not mutual. Also, modern science is not able to convey how religion does. Later, Muhammad Arkoun, discussed that the understanding of science in the Qur'an is different from the understanding of science in modern thought. Through the lexicology method, he discussed the notion of science in the Qur'an, which stated that the knowledge in the Qur'an does not rely directly on human reason, but is related directly to faith. According to him, this area of faith includes the area of conscience, perception, and metaphysics which are included in the scope of the power of imagination, not the power of reason/thinking. Next, Atif Ahmad added that the modern scientific meaning of the language structure and letters of the Qur'an which was interpreted by the language scholars and previous commentators was claimed to be inappropriate. Likewise, a collection of verses in one theme is not under the nature of modern science.¹⁶

This science pattern was born in modern times as a result of discussions from an association of Islamic scholars who tried to fight the challenges that came from the West. They want to prove that the Qur'an is capable to answer the challenge by all its miracles and is also strengthened by the understanding that the Qur'an is valid at all times and places. All of these reasons interpreted science feel burdensome and as if there is an attempt to convert the Quranic nature which absolutely cannot be done by others.¹⁷ In conclusion, the main reasons why these scholars rejected the existence of a scientific style in the Qur'an are: First, the Qur'an was revealed to all people, therefore, the Qur'an has a nature which usually easily understood by the simple mind, while science is only limited to certain circles. Second, the Quran is addressing all souls while science is addressing the mind. Then, the nature of the Qur'an is fixed and stable, while science is usually dynamic and developing. Also, this style of science did not exist in the *Salafi* era.

As-Sinkily and His Work

As-Sinkily is the famous *laqab* of Shaykh Abdul Rauf ibn Ali al-Jawi al-Fansuri al-Sinkily. He was born in the city of Singkil, on the west coast of the Aceh region, in 1024H/1615M. His grandfather was a Persian who came and visited the kingdom of Samudera Pasai in the 13th century. He and his family lived in the area of Fansur or Barus, West Sumatra. His father, Shaykh Ali al-Fansuri has Arab blood and was married to his mother who is a native of Aceh Singkil.¹⁸

Sheikh al-Sinkily was growing up and nurtured in the area of his motherland and received basic education directly from his father who was also a sheik and teacher in the Simpang Kanan

¹⁵ Hind Shalby, *Al-Tafseer al-Ilmy li al-Qur'an al-Kareem Bayn al-Nadzriyyat wa al-Tatbiq* (Tunisia: Al-Musahim, 1406).

¹⁶ Shalby.

¹⁷ Shalby.

¹⁸ Azyumardi Azra, *Jaringan Ulama Timur Tengah dan Kepulauan Nusantara abad XVII & XVIII Akar Pembaruan Islam Indonesia*, 2nd ed. (Jakarta: Prenada Media, 2005).

area moved to Banda Aceh which was included in the territory of the Aceh Sinkily-Then, As¹⁹ kingdom, and studied with Sheikh Shamsuddin al-Sumatrani. As-Sinkily was one of the living witnesses when there was a disagreement regarding the understanding of *Wihdat al-Wujud* between the followers of Hamzah al-Fansuri and Shamsuddin al-Sumatrani and the followers of Ar-Raniry in 1052H/1642M. The²⁰ more accepted opinion in that current time was from the side of Hamzah al-Fansuri and Shamsuddin al-Sumatrani. Meanwhile, Ar-Raniry and his followers were decreed to be sentenced. Sheikh as-Sinkily tried to get out of the chaos in a good way. He did not participate in expressing opinions to support or against one of the parties which were disagreeing.²¹

As-Singkily's educational journey to the Arab peninsula started in 1052H/1642M and it began from the city of Doha in Qatar. There, he studied with Sheikh Abdul Qadir al-Mawwir. Then, he moved to Yemen and studied at Bayt al-Faqih wa al-Zabid and got knowledge from the Jam'an family, such as Ibrahim ibn Muhammad ibn Jam'an, Ibrahim ibn Abdullah ibn Jam'an, and Qadi Ishaq ibn Muhammad ibn Jam'an. It was there that as-Singkily started to study various sciences such as fiqh, hadith, and others.²²

Then as-Singkily migrated to *Haramayn*. There he studied with Mufti Abdul Qadir al-Burkhali. In Mecca, he studied with Sheikh Badruddin al-Lahory, Sheikh Abdullah al-Lahory, and Ali ibn Abdul Qadir at Tabari. In Medina, he studied Sufism and all things related to Sufism from his sheik Ahmad al-Qusyasyi. He was an excellent student until his sheik chose as-Singkily as the successor to the teaching of the Syattariah and Qadiriyyah orders.²³

After approximately nineteen years of studying various sciences in the Arabian Peninsula, in 1661M he finally returned to his motherland, Aceh, and became a Faqih, Sufi, Qadi, and mufti there. The teaching of Syattariyah spread widely even outside the region of Aceh through his students Burhanuddin and Muhyiddin. In the year 1105H/1693M coinciding with Friday, Sheikh Abdul Rauf as-Singkily returned to Allah.²⁴

Turjuman Mustafid is the first complete Qur'anic commentary in the Malay language and civilization. This book was printed in one large volume of as many as several manuscripts in Cairo in 1951.²⁵ Then, this interpretation was reprinted in various places such as Singapore, Penang, Jakarta, Bombay, and the Middle East. This interpretation is very attractive to readers, especially from Southeast Asia because of the language used. Some discussions occurred among researchers who said that this interpretation of Turjuman Mustafid is a translation of Baydawi's Tafsir with the argument that on the cover of Turjuman Mustafid's Tafseer it is written that this interpretation is a translation of the Baidhawi interpretation. Another opinion says that this interpretation is a

¹⁹ Dicky Wirianto, "Meretas Konsep Tasawuf Syaikh Abdurrauf Al-Singkili," *Islamic Movement Journal* 1, no. 1 (2013): 103–16.

²⁰ *Wihdat al-Wujud* is a Sufi belief that means that God Almighty and the world are the same. The Sufis claimed that God Almighty has existence alone, while all other beings are eternally non-existent. However, this does not mean that they denied tangible and visible things such as seas, mountains, and trees, but rather they deny that these things are creation because they believe that all beings are God. This belief has been called *Wihdat al-Wujud* since the time of Ibn Arabi. The Sufis called it other names such as: *Tawbeed*, *al-Fardaniyyah*, *al-Mushabadab*, *Al-Shubud*, *Al-Fanaa*, *Al-Jam'u*, *Jam'u al-Jam'I*, etc. Among the most famous of its scholars are Al-Ghazali Al-Tusi, Ibn Al-Farid, Ibn Arabi, Ibn Sabeen, Al-Jaili and Al-Nabulsi. See: Ahmad in Abd al-Aziz al-Qusayr, *Aqidah al-Sufiyyah Wihdat al-Wujud al-Khafiyyah*, (Riyadh: Maktabah al-Rashd Nashirun, 1st ed, 1424H/2003M), Pp. 28, 30, 37, 39, 137.

²¹ Azra, *Jaringan Ulama Timur Tengah dan Kepulauan Nusantara abad XVII & XVIII Akar Pembaruan Islam Indonesia*.

²² Azra.

²³ Azra.

²⁴ Wirianto, "Meretas Konsep Tasawuf Syaikh Abdurrauf Al-Singkili."

²⁵ Muhammad Lukman Ibrahim and Ahmad Baha' Mokhtar, "Ikhtilaf Qirat Kitab Turjuman al-Mustafid Oleh Syaikh Abd Rauf Al-Fansuri: Satu Sorotan," in *Proceedings of the 2nd Annual International Qur'anic Conference 2012 held on 22-23 February 2012 at University Malaya, Kuala Lumpur* (Kuala Lumpur: Centre of Quranic Research, University Malaya, 2012).

translation of Jalalayn's Tafsir with a reduction in certain places. However, further study of the style of writing and citing sources in this commentary proves that this Tafseer is not a translation of the Baidhawi and Jalalayn Tafsir as argued above. Broadly speaking, the writing of this mustafid turjuman interpretation looks concise, solid, and not long-winded. This interpretation has a more global impression but is rich with various complementary interpretations such as aspects of *qiraat*, quotes from various other commentaries, *asbabun nuzul*, and stories of the past people. In general, the interpretive step taken by as-Singkily in his commentary is to state the number of ayah(s) and the period of the *nuzul*, then, he explained the virtue of the *surah* and several keywords such, *faidah*, *qisab*, *said Mufasssir*, *tanbih*, *adapun*, *dan adapun*, *bermula* and *yakni*.²⁶

As-Shiddiqie and His Work

As-Shiddiqie, whose full name is Hasbi as-Shiddiqie, was born in Lhokseumawe, which was then it still part of the North Aceh region on March 10, 1904M. He was born in a family who worked as Scholars, officers, and soldiers. His mother was the daughter of a *Qadhi* in Lhokseumawe, his father was also a *Qadhi* at that time and was a member of the Tengku Chik association in Lhokseumawe. As Mentioned, he has a lineage that continues to the twentieth grandson of the first Caliph Abu Bakr As-Siddiq.²⁷

Little Hasbi learned from one *halaqah* of knowledge to another. He also learned directly from his father and saw how his father issued fatwas and took legal advice. After his father died, a teenage Hasbi began to actively study and also do works of *da'wah*. He participated in scientific discussions held in Aceh. He is known as *Tengku Muda* (Young Scholar) or *Tengku in Lhokseumawe* (a scholar from Lhokseumawe).²⁸ As-Shiddiqie has started studying the Quran since he was young. He began studying at his own father's Madrasa, then moved to other madrasas and studied with the famous scholars in Aceh at that time. One of them was Tengku chik in Piyung who taught him nahwu, sharf and Arabic. In 1916, as-Shiddiqie moved to the Samalanga region and studied with his teacher named Idris or better known as Tengku Chik Tunjungan Barat, where he specifically studied fiqh. After spending two years there, he moved to the Krueng Kale *madrasah* and studied with Tengku Krueng Kale some knowledge of fiqh and hadith sciences. In 1920 he got the certificate of completion and returned to his hometown in Lhokseumawe. In 1926, he left for Surabaya and began to focus on studying Arabic there. Then in 1928, he returned to Lhokseumawe and founded an educational institution called Madrasah al-Irsyad, but soon the *madrasah* was closed due to socio-political problems.²⁹

From 1936 to 1937, As-Shiddiqie moved to Kuta Raja, Banda Aceh. He learned various sciences from various madrasas there. In 1939, he studied at Ma'had Iman al-Mukhlis. Then, in 1940 he re-founded a madrasa which he named Dar al-Irfan. However, not long after that, the madrasa was again closed due to the Japanese occupation of Indonesia.³⁰ He returned to his birthplace in Lhokseumawe and built ma'had and also taught how to worship properly according to the sunnah of the Prophet. In 1948, he was asked by the Regent of North Aceh to become Mudir of the Religious Madrasah Aliyah in Lhokseumawe. ³¹ In December 1948, he joined the Indonesian Muslim Mu'tamar and the Indonesian Minister of Religion, KH. Wahid Hasyim called

²⁶ Rahman, "Tafsir Tarjuman al-Mustafid Karya Abd Al-Rauf Al-Fansuri: Diskursus Biografi, Kontestasi Politis-Teologis, dan Metodologi Tafsir."

²⁷ Nourouzzaman Shiddiqi, *Lima Tokoh LAIN Sunan Kalijaga Yogyakarta* (Yogtakarta: IAIN Sunan Kali Jaga, 2000).

²⁸ Shiddiqi.

²⁹ Shiddiqi, *Lima Tokoh LAIN Sunan Kalijaga Yogyakarta*.

³⁰ Moh. Damami, *Lima Tokoh Pengembangan LAIN Sunan Kalijaga Yogyakarta* (Yogyakarta: Pusat Penelitian IAIN Sunan Kalijaga, 1998).

³¹ Damami.

him to Yogyakarta to teach at the Sunan Kali Jaga Islamic University. In 1950, as-Shiddiqie officially settled in Jogjakarta. Since then, he has been reluctant to express his thoughts on Fiqh which are following Indonesian culture. According to him, to solve problems in Indonesia, it is not enough just to rely on the Syafi'e madhab, even though this school is the largest in Indonesia today. It must be resolved by including the four schools of thought that are following the local culture in Indonesia.³² From 1960 to 1972, As-Shiddiqie served as dean at the sharia faculty of UIN Sunan Kali Jaga. He is very fond of reading and studying various disciplines through self-taught. Then in 1975, he was awarded the title of Professor Honoris Causa from two Universities and became a professor at both.³³

Tafseer al-Quran al-Majid an-Nur is a book of interpretation of the Quran which includes up to 30 chapters arranged in 4 volumes. As-Shiddiqie wrote this book of Tafseer for 9 years, starting from 1952 to 1961. In the process of writing this commentary, as-Shiddiqie used several tafseer books as main references, such as the Kitab 'Umdat al-Tafsir by Ibn Kathir, Tafsir al-Manar by Rashid Rida, Tafsir al-Maraghi and Tafsir al-Wadhih. To translate Arabic words into Indonesian, As-Shiddiqie referred to Tafsir Abu Sa'ud, Tafsir Shiddiqie Hasan Khan and Tafsir al-Qasimi.³⁴ In compiling his book of Tafsir, As-Siddiqie used a mixed method between bil Ra'yi and bil Ma'tsur. For the scope of the interpretation style, many consider that this interpretation has an adabi ijtimai style in which As-Siddiqie tries to answer social problems that occur in Indonesia in various aspects. Another visible pattern is the fiqh style that is seen when as-Siddiqi tends to widely discuss verses related to legal issues, inheritance, marriage, *muamalat*, and others.³⁵

Science Appearances in As-Sinkily and As-Shiddiqie's Works

Many verses found in the Quran might be the sources of science and have been proven today. Among those verses are the verses about the creation of the heavens, sky objects, earth, oceans, and living things such as humans, animals, plants, and others. This section will be mentioned how these two scholars, As-Sinkily and As-Siddiqie interpret these related to sciences verses.

Sciences plays a role in As-Sinkily's interpretation of ayat kawniyyat (Al-Anbiya: 30, Al-Hajj: 5, Ar-Rahman: 19-22).

As classified by scholars, Turjuman al-Mustafid is included in the type of global quranic exegesis which only provides interpretations of its verses in a general form. even As-Sinkily's style of interpretation in several places in his work tends to the form of *tafsiriyyah* translation as found in his style while interpreting science verses as follows, First, the verse about the creation of the sky, earth, day, night, and sky objects in Surah al-Anbiya: 30. As-Sinkily said that God created the skies and the earth in seven layers. The rain pours are mentioned as a source of life on earth. Then, As-Sinkily mentioned that God also created mountains as earth pegs which made it firm. In the creation of skies, it was made as a roof of a house that will not fall except at its time. Likewise, the day and night are determined by the circulation of the sun and moon which have their respective orbits. All those sky objects are rotating and revolving in their orbits like a person swimming in water.³⁶ In the interpretation of Surah al-Hajj: 5, as-Sinkily mentioned that the dry soil on earth could be softened by rain pouring and it will fertilize the soil and produce.³⁷

³² Rahmi Hidayati, "Paradigma Fiqh Indonesia dalam Bingkai Reformasi Hukum Islam," *Al-Risalah; Jurnal Kajian Hukum Islam* 12, no. 2 (2012): 210.

³³ Shiddiqi, *Lima Tokoh LAIN Sunan Kalijaga Yogyakarta*.

³⁴ Ash-Shiddieqy, *Tafsir al-Quranul Majid An-Nur*.

³⁵ Fiddian Khairuddin and Syafril, "Tafsir Al-Nur Karya Hasbi Ash-Shiddiqie," *Jurnal Syabadah* III, no. 2 (2015): 83–96.

³⁶ Al-Fansuri, *Turjuman al-Mustafid*.

³⁷ Al-Fansuri.

In the verses above, there are scientific facts that are real, easy to understand, and have been proven today. Call it the verse about the creation of the heavens and the earth which has seven layers. which has been proven by modern scientists. Anderson said that Earth's interior might be known very well from seismology. Not only about its structure, but seismology also provides information about Earth's composition, Crystal Structure (mineralogy), and physical state. He also said that conventionally, Earth is divided into crust, mantle, and core. Each of these has subdivisions.³⁸ Jawaid stated in his paper that the Quran used the term 'sama' in singular and 'samawat' in the plural for space or heaven. He mentioned that the first horizon (sama) is called the event horizon. Beyond this horizon, there could be six more horizons (samawat).³⁹ Likewise, the role of rainwater fertilizes barren land, so that it can grow plants that are a source of life for other living things. JS Kanwar stated in his paper that the management of rainwater is the key to success in dryland agriculture. He also stated that an integrated approach like the management of rainwater, moisture storage augmentation in the soil, irrigation, cropping system, and harvesting will enhance the productivity of rainwater.⁴⁰ The next scientific fact is about the purpose of the creation of mountains that become earth pegs, Ibrahim mentioned in his paper that as the Quran mentioned mountains as the nail and stake of the earth which strengthen the ground and enable life to exist, it's scientifically proven that when two continents collide, stronger plates will slip beneath the other plate and creating a peg that restricts the continent movement to avoid shaking while the upper plate folds and formed a mountain plateau, without the mountains, the lithospheric place movements will be shaking faster.⁴¹

In his commentary of ar-Rahman 19-22, as-Singkily mentioned that two different kinds of water meeting (fresh and sweet seas) could not merge and change the taste of each other. This sea also produces pearls and corals.⁴² Abad reviewed in his thesis that the word Bahrain in this verse is in line with the modern scientific findings that have existed since 1873 by oceanographers. This finding said that the meeting of these two seas occurred on the surface and the Mediterranean and Atlantic seabed, as well as a river on the seabed in Cenote Angelita, Mexican. Not only that, at the confluence of these two oceans there are abundant natural resources such as natural gas, oil, pearls, Marjan, and also fish.⁴³

It can be seen from his interpretation of several scientific verses above that As-Singkily interprets the verse globally, accordingly to the contents of the verse without adding modern scientific facts. But, in another part it, in Surah Yusuf verses 5 and 6, it was found that As-Singkily added a little scientific fact in his commentary. He mentioned how the sun shines during the day and the moon shines at night. He mentioned in his commentary that the source of the moonlight is the reflection of the sun's light. And from the circulation of the sun and the moon can be

³⁸ Don L. Anderson, *Theory of the Earth*, Nachdr. (Boston: Blackwell Scientific Publ, 1991).

³⁹ Mahmood Jawaid, "The Seven Heavens - A Scientific Explanation," March 19, 2021, https://www.academia.edu/45582984/The_Seven_Heavens_A_Scientific_Explanation.

⁴⁰ JS Kanwar, "Rainwater and Dryland Agriculture-An Overview," in *Symposium on Rainwater and Dryland Agriculture* (International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), New Delhi, 1982), 1-9.

⁴¹ Mohamed Akhiruddin Ibrahim, "The Mountain as Stabilizers for The Earth From The Quranic Perspective," in *Proceedings of SOCIOINT 2019* (6th International Conference on education, Social Sciences and Humanities, Istanbul, Turkey, 2019), 1231-37.

⁴² Al-Fansuri, *Turjuman al-Mustafid*.

⁴³ Mamad Muhamad Fauzil Abad, "Penafsiran Makna Bahrain Dalam Al-Quran (Pendekatan Tafsir Ilmiah)" (Semarang, Universitas Islam Negeri Walisongo, 2017).

determined the number of days in a year,⁴⁴ which is in line with simple science that mentioned that the moon reflects sunlight like a huge mirror hanging in the sky at night.⁴⁵

As-Siddiqie's interpretation of sciences related verses (Al-Fatihah: 7, Al-Baqarah: 22, Al-Baqarah: 29-30).

Different facts are found in the interpretation style of as-Siddiqie who lived in the 20th century. Several verses related to science are interpreted with some scientific facts included in them. For example, the science feature contained in Tafseer an-Nur is when As-siddiqie interprets al-Fatihah verse 7 "*Show us the straight path*". According to him, the straight path is direction or guidance given by God. Hidayah itself has several forms. Among what he mentioned was guidance in the form of inspiration (*Ilham*), the five senses, mind, then, religion, and the Shari'a. Guidance can be in the form of inspiration; Like the cry of a baby when he needs food, crying is a way that Allah inspired the baby to obtain food. Then, guidance is also in the form of the five senses. These five senses are a form of guidance that God has given to humans and animals, even according to him, animals had it better than humans, because once they are born, animals immediately get the guidance of *Ilham* and the five senses at once, compared to humans who get it gradually. The next guidance is the mind. This guidance is considered higher than inspiration and the five senses. Humans who live in society need a reason to correct and correct mistakes made by the five senses. Like a round and straight piece of wood when put in a container of water it will look bent when viewed from the outside. Also, a portion of tasty food will taste different when eaten by a sick person.⁴⁶

There are several points of science found in as-Siddiqie's Tafseer in the verse above. First is when a baby cries in need of food. In his view, it was a form of God's inspiration or guidance to babies as an attempt to get the food they need. This is in line with what Dito Anurogo said in his article on the management of crying in infants. He stated that crying is one part of physiological neurodevelopment to ensure survival and social interaction. Crying is a normal response to various nonverbal stimuli in infants, such as hunger, pain, discomfort, seeking attention, to other serious illnesses.⁴⁷

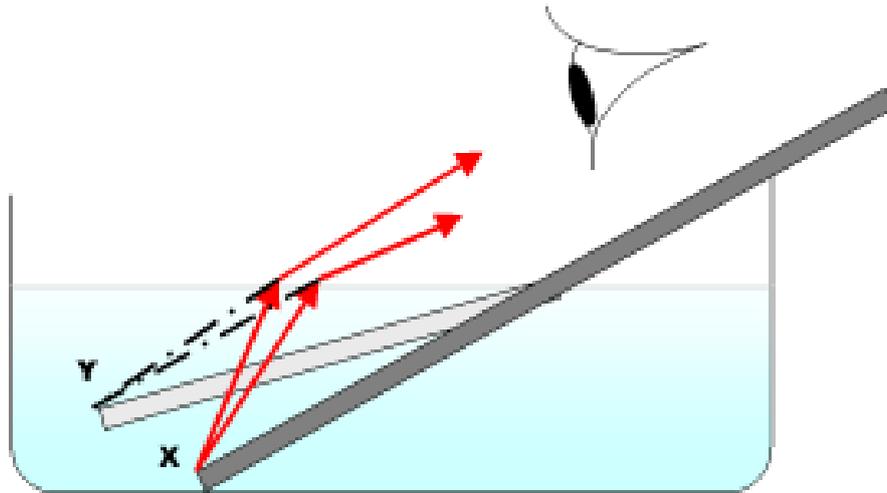
Next, the theory of refraction has named the refraction of light in geometric optics which is defined as a change in the direction of propagation of light particles due to acceleration.

⁴⁴ Al-Fansuri, *Turjuman al-Mustafid*.

⁴⁵ Min Min et al., "An Investigation of the Implications of Lunar Illumination Spectral Changes for Day/Night Band-based Cloud Property Retrieval Due to Lunar Phase Transition," *Journal of Geophysical Research: Atmospheres* 122, no. 17 (September 16, 2017): 9233–44, <https://doi.org/10.1002/2017JD027117>.

⁴⁶ Ash-Shiddieqy, *Tafsir al-Quranul Majid An-Nur*.

⁴⁷ Dito Anurogo, "Manajemen Menangis pada Bayi," *CDK Edisi Suplemen-1*, 2019.



Picture 1. theory of the refraction

The picture above is an illustration of the theory of the refraction of light waves in water. The dark square shows the actual position of a wooden stick placed in a bowl of water. The bright rectangle shows the visible position of the pencil. The end of the X seems to be on the Y which is a decidedly shallower position.⁴⁸

The last is about the bitter tastebuds occurred in sick people caused by homeostatic changes in the body such as fever which can cause inflammation. This inflammation will cause a bitter taste on the tongue. A study conducted by Jenny Sunariani stated that homeostatic changes in the body can cause inflammation that will cause a bitter taste on the tongue. This bitter taste in the tastebuds can cause a lack of appetite which lead to a weaker body condition due to lack of food intake. This will slow down the healing process and also reduce work productivity.⁴⁹

Then, in Surat al-Baqarah 22 “[He] who made for you the earth a bed [spread out] and the sky a ceiling and sent down from the sky, rain and brought forth thereby fruits as provision for you. So do not attribute to Allah equals while you know [that there is nothing similar to Him]” As-Siddiqie said that God had created the earth as a habitable place. He said that the earth is spread out, but it’s not spreading out like a mat. According to him, this does not indicate that the earth is round as well because the condition of the earth is spread out like a mat or round, both can be used as a place to live. Then he also mentions that the sky created by God is a structure that is composed, solid and unchanging. This gives an understanding that God made the skies interconnected with one another. With the law of attraction, God holds the sky from falling to earth until the hereafter. Then he quoted the opinion that said that the sky mentioned in this verse is a cluster of stars. This cluster is a system or building that is interdependent and related to one another.⁵⁰

In this section, as-Siddiqie briefly mentioned the shape of the earth that might be spread out or rounded. There is now a debate about the theory of the shape of the earth, the spherical earth theory is a theory that was previously believed by several scientists such as Aristotle, Ptolemy,

⁴⁸ “Pembiasan,” in *Wikipedia free encyclopedia*, accessed December 8, 2022, <https://id.wikipedia.org/wiki/Refraksi>.

⁴⁹ Jenny Sunariani, “Perubahan Konsentrasi IL-1 Dan Gustducin Terhadap Rasa Pengecap Pahit Pada Demam,” *J. Penelit. Med. eksakta* 8, no. 3 (2009): 159–67.

⁵⁰ Ash-Shiddieqy, *Tafsir al-Quranul Majid An-Nur*.

Erasthoteles, and Columbus. A British scientist, Samuel Rowbotham opposed the theory that the earth is spherical, Rowbotham believes that the earth is flat and is centered at the North Pole and surrounded by a wall of Antarctic ice, while the sun and moon are about 3000 miles apart and the cosmos is 3100 miles away. over the earth.⁵¹ However, as-Siddiqie did not sink further into discussing these two theories, he just concluded that whatever the shape of the earth, both of them are possible to be inhabited.

The next theory he mentioned is about the formation of a neatly arranged sky which is similar to the nebula hypothesis. In cosmogony, the nebula hypothesis is the most widely accepted model of theory explaining the formation and evolution of the solar system. This theory was first proposed in 1734 by Emanuel Swedenborg. According to the nebula hypothesis, stars formed in large and dense clouds of giant molecular clouds of hydrogen molecules. It also mentioned that the cloud's gravity is unstable. Then the material coalesced into smaller, denser clumps that eventually collapsed and formed stars. Star formation is a complex process, which always produces a gaseous protoplanetary around a young star. This event may cause the creation of planets under certain conditions that until now process is not well known. Thus, the formation of planetary systems is considered a natural result of star formation. Sun-like stars usually take about 100 million years to form.⁵²

Then as-Siddiqie mentioned a collection of stars or in other words called a galaxy. In the theory of the structure of the universe, on a large scale, the structure of the universe consists of cavities and filaments that can be decomposed into superclusters, clusters, galaxy groups, and finally galaxies. On a smaller scale, it is known that galaxies consist of stars and their constituents, of which our solar system is one of the constituents.⁵³

When interpreting al-baqarah: 29 "*It is He Who hath created for you all things that are on earth; Moreover, His design comprehended the heavens, for He gave order and perfection to the seven firmaments; and of all things, He hath perfect knowledge*" as-Siddiqie said that God created everything on earth for the benefit of mankind. Among the benefits that can be taken by humans are physical food to sustain life and soul food such as doing tafakkur and tadabbur to take lessons for all things that cannot be achieved by the five senses. He mentioned that the seven heavens created by God had been perfectly arranged. According to him, this verse gives an implied message that God first created the earth and everything in it and then created the seven-layered sky. He mentioned the different opinions among scholars who said that the meaning of the seven skies is seven big planets, even though the Quran does not limit it to only seven planets, but more than that. Another opinion that he mentioned is that the seven layers of the sky mean the sky is not more than seven, the sky that is meant here is the sky in the solar system. The sun is not included because the sun is seen as the center, and the moon is not included as well because the moon is considered a satellite of the earth.⁵⁴

When as-Siddiqie explains about humans as caliphs on earth in the interpretation of al-Baqarah verse 30 "'Remember' when your Lord said to the angels, 'I am going to place a successive human' authority on earth.' They asked Allah', 'Will You place in it someone who will spread corruption there and shed blood while we glorify Your praises and proclaim Your holiness?'" Allah responded, "I know what you do not know." He mentioned the opinion of some commentators who said that this verse gave an understanding that other creatures inhabited the earth before the creation of Adam. But because they disobeyed God, they were then destroyed and replaced by

⁵¹ Didit Ardianto and Harry Firman, "Apakah 'Teori Bumi Datar' Dapat Dipandang Sebagai Realita?," *Journal of Science Education and Practice* 1, no. 1 (2017): 67–78.

⁵² "Hipotesis nebula," in *Wikipedia free encyclopedia*, accessed February 13, 2022, https://id.wikipedia.org/wiki/Hipotesis_nebula.

⁵³ Yaziz Hasan, "MENGENAL STRUKTUR ALAM SEMESTA," 2019, <https://doi.org/10.13140/RG.2.2.14234.18887>.

⁵⁴ Ash-Shiddieqy, *Tafsir al-Quranul Majid An-Nur*.

humans. According to him, humans with their mind power have unlimited abilities (intelligence) and knowledge. Humans can cultivate and manage nature, excavate deposits in the bowels of the earth, and create various goods. Humans are also able to change the condition of the earth, from barren dry land to fertile land, to cultivate hilly land of shrubs into flat land that can be planted. Humans know to improve the quality of plants and livestock. Humans can control the sea, land, and air so that all of them can provide greater benefits to fulfill their lives.⁵⁵

In the interpretation of this verse, several scientific facts were raised by as-Siddiqie. The first to be mentioned is the theory of the existence of humans before Adam on earth. Lubenov mentions in his article several theories about pre-Adamite humans on earth. From ancient human fossils, it could be proven that there were several events in the form of sins, violence, trauma, hardship, and premature physical death. He mentioned a brief history of this pre-Adamite theory. The first theory emerged in 1655, by a Jew who converted to Catholicism named Isaac de la Peyrere. Peyrere published a book entitled *Systema Theologicum ex Prae-Adamitarum Hypothesi*. In his book, Peyrere argued that the Adam mentioned in the Bible is a pre-Adamite stock and is the ancestor of the Jews. Then, in the 18th century, pre-Adamism theory became a mainstream science. Although the theory of evolution was well known at that time, the biggest scientific paradigm at that time was the theory of creation. However, this pre-Adamism theory has multiple sources and diverse creations for the human race. Some opinions state that non-Caucasians were created by God as an inferior race who were usually made slaves or pets. Even some opinions have questioned whether this inferior race has a soul. From here, pre-Adamism became the scientific and rational basis for slavery and racism. In the 19th century, Alexander Winchell had a major study entitled *Pre-Adamites; or a Demonstration of the Existence of Men before Adam*, published in 1880. Winchell is a Professor of Geology and Palaeontology at the University of Michigan. He was a famous scientist at that time. Although his research can be considered racist, he claims that his research is supported by the Bible and the latest scientific findings.⁵⁶

Based on the scientific pattern contained in these two interpretations, it can be determined that these two scholars belong to the group that accepts and includes scientific style in their interpretations. The distinction between the two presentations regarding science, among other things, is that the style of science in As-Singkily's interpretation is largely contained in his interpretation of the *kawmiyyaat* verses. whereas, in As-Siddiqie's view, the scientific style is more varied, including social sciences, medical science, biology, and paleoanthropology in addition to the scientific style of the *kawmiyyaat* verses.

Conclusion

A method of interpretation known as scientific exegesis uses contemporary scientific findings to understand the Qur'an verses that deal with science. This method of interpretation has drawn both praise and criticism from academics; it is used in both other *tafseer* literatures as well as archipelagic interpretations (*Nusantara Tafseer*). However, this feature of sciences can be found even if a little in some Quranic commentaries. For example, in the book of *Turjuman al-Mustafid* by Abdul Raof as-Singkily which has existed since the 18th century. As the first interpretation that covers all chapters in the archipelago, it still uses a global approach in its interpretation. However, as can be seen from his interpretation of the *ayat kawmiyyaat* (Al-Anbiya: 30, Al-Hajj: 5, Ar-Rahman: 19–22), it also contains some mild scientific truths. It can be concluded that As-Singkily does not reject the scientific facts contained in the Quran. Later, after 2 century, Quranic exegesis developed and other commentaries have written. In the 20th century, As-Siddiqie was found to have more

⁵⁵ Ash-Shiddieqy.

⁵⁶ Marvin L Lubenov, "Pre-Adamites, Sin, Death and the Human Fossils," *CEN Tech. J.* 12, no. 2 (1998): 222–32.

interest in science than as-Singkily. Verse interpretations by As-Siddiqie dealing with science (Al-Fatihah: 7, Al-Baqarah: 22, Al-Baqarah: 29-30) discovered that the scientific style is more varied, encompassing social sciences, medical science, biology, and paleoanthropology in addition to the scientific language of the kawnyaat verses. It could be because as-Siddiqie lived in a modern era so he was more exposed to today's scientific findings. This can be seen from the style of interpretation of as-Siddiqie who always associates his interpretation of the verses of the Quran with many sciences.

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