



Astronomical Review of the Beginning of Prayer Times Before Isra' Mi'raj

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Abstract: Before Isra' Mi'raj, the Prophet Muhammad and his companions had already performed night prayer as well as prayers in the morning and evening, which had roots in the traditions of earlier prophets. However, studies on the determination of the beginning of prayer times prior to Isra' Mi'raj remain rarely examined, particularly from the perspective of Islamic astronomy (falak). This research aims to trace the historical and astronomical foundations of the beginning of prayer times before Isra' Mi'raj. The method used is library research employing historical-textual and astronomical approaches. The results of the study show that before the obligation of the five daily prayers, prayer had already been prescribed with cosmic signs such as the alternation of day and night, where the night prayer was associated with one-third to two-thirds of the night, the morning prayer coincided with the emergence of the true dawn (fajr *ṣādiq*) on the eastern horizon, and the evening prayer occurred before sunset. This study confirms that from the beginning, the prescription of prayer has been closely related to astronomical phenomena that can be directly observed.

Keywords: *Prayer, Isra' Mi'raj, Astronomy*

Abstrak: Sebelum Isra Mikraj, Nabi Muhammad dan para sahabat telah melaksanakan shalat malam, serta shalat pagi dan sore yang memiliki akar pada tradisi para nabi terdahulu. Namun, kajian tentang penetapan awal waktu shalat pra-Isra Mikraj masih jarang ditelaah, terutama dari perspektif falak. Penelitian ini bertujuan untuk menelusuri dasar historis dan astronomis awal waktu shalat sebelum Isra Mikraj. Metode yang digunakan adalah studi pustaka dengan pendekatan historis-teks dan astronomi. Hasil penelitian menunjukkan bahwa sebelum diwajibkan lima waktu, shalat telah disyariatkan dengan tanda-tanda kosmik seperti pergantian siang dan malam dimana shalat malam dikaitkan dengan sepertiga hingga dua pertiga malam, shalat pagi bertepatan dengan munculnya fajar *shadiq* di ufuk timur, dan shalat sore menjelang terbenamnya matahari. Kajian ini menegaskan bahwa sejak awal, syariat shalat sangat erat dengan fenomena astronomis yang dapat diamati secara langsung.

Kata kunci: *Shalat, Isra Mikraj, Astronomis*

A. Introduction

Prayer (*ṣalāh*) is an obligatory act of worship for Muslims, as it holds a high position as one of the pillars of religion. Prayer is one of the pillars of Islam and occupies a specific and fundamental place as established in the Qur'an and Hadith.¹ Prayer is an act of worship that had long been prescribed, even before the Prophet Muhammad was appointed as a messenger. Nevertheless, the practice of prayer was perfected during the event of Isra' Mi'raj of the Prophet Muhammad. Prayer had already been commanded during the time of earlier prophets; however, its procedures and regulations differed according to what Allah had ordained. In essence, every revealed message contained the obligation of prayer.²

This indicates that the command to perform prayer did not appear suddenly, but rather developed gradually. The command to practice prayer had been known since the time of

¹ Ahmad Izzuddin, *Ilmu Falak Praktis* (Semarang: Pustaka Rizki Putra, 2012).77

² Ahmad Sarwat, *Sejarah Shalat* (Jakarta Selatan: Rumah Fiqih Publishing, 2021).8



Prophet Adam, in which the Qur'an mentions that the descendants of Adam were commanded to prostrate (perform prayer). In addition, Prophet Ibrahim also received the command to perform prayer, as stated in Qur'an Surah Ibrahim verse 37. Not only Prophet Ibrahim, several prophets before the Prophet Muhammad were also commanded to perform prayer, including Prophet Musa, Prophet Zakaria, and Prophet Isa.³ Nevertheless, the command of prayer was perfected during the time of the Prophet Muhammad through the event of Isra' Mi'raj.

The event of Isra' Mi'raj was the journey of the Messenger of Allah from Masjid al-Haram to Masjid al-Aqsa and then to Sidrat al-Muntaha. During this event, the Prophet passed through the first heaven up to the seventh heaven, where he met the earlier prophets. In the first heaven, the Messenger of Allah met the first prophet, Prophet Adam. In the second heaven he met Prophet Yahya and Prophet Isa. In the fourth heaven he met Prophet Yunus. In the fifth heaven he met Prophet Harun, in the sixth heaven he met Prophet Musa, and finally he met Prophet Ibrahim.⁴ The event of Isra' Mi'raj marked the beginning of the command of the five daily prayers. Through this event, the practice of prayer was perfected and provided with specific regulations, including those related to the performance and the beginning of prayer times.

Before the event of Isra' Mi'raj, prayer had certainly already been performed at certain times as indicated in several verses of the Qur'an. During the early period of the Prophet Muhammad's preaching, prayers were performed in the morning, evening, and night. However, after Isra' Mi'raj the times of prayer became different, as the five daily prayers were assigned specific times which are mentioned in the Qur'an and further explained by the Prophet Muhammad in several hadiths. Nevertheless, the determination of prayer times described in the Qur'an and hadith is indicated only through natural phenomena. Therefore, without the assistance of the science of Islamic astronomy (*'ilm al-falak*), it would be difficult to determine the beginning of prayer times accurately.⁵

From the perspective of Islamic astronomy (*'ilm al-falak*), the determination of the beginning of prayer times since the early period has been closely related to astronomical phenomena. The morning prayer is associated with the appearance of the true dawn (*fajr ṣādiq*) on the eastern horizon, the evening prayer is related to the position of the sun approaching sunset, while the night prayer is connected with the phase of darkness after the disappearance of the red twilight until the approach of dawn. These astronomical phenomena indicate that from the very beginning, prayer times were determined based on the regular movement of the sun and the changes of light in the sky. This confirms the direct relationship between the religious prescription of worship and the signs of the universe that can be observed by human beings. The study of the early history of the determination of prayer times before Isra' Mi'raj from the perspective of Islamic astronomy therefore becomes important, as it demonstrates the continuity between revelation and astronomical phenomena.

³ Sarwat.8-10

⁴ Yuyun Yunita, "Peristiwa Isra' Mi'raj Nabi Muhammad Saw Dan Pembelajarannya," *Dewantara XI* (2021).

⁵ Choibhan Sippah, "Membaca Ulang Relasi Sains Dan Agama Dalam Perspektif Nalar Ilmu Falak," *El-Falaky* 4, no. 2 (2020).228



Based on this background, this research is positioned as a historical study of Islamic astronomy, namely a study that traces the early history of the determination of prayer times by emphasizing the relationship between revelation and astronomical phenomena. This research does not aim to discuss the jurisprudential rulings of prayer, differences among schools of Islamic law, or the normative aspects of worship. Rather, it focuses on how prayer times in the early period of Islam were recognized and determined through natural phenomena. Thus, this research is expected to demonstrate the continuity between the teachings of revelation and cosmic order, as well as to affirm the role of Islamic astronomy (*'ilm al-falak*) in understanding the historical development of the determination of prayer times since the early period of Islam.

B. Method

This study employs a qualitative approach with a library research design. The study focuses on the identification and analysis of relevant primary and secondary sources to reconstruct the early history of the determination of prayer times before Isra' Mi'raj, which are then analyzed from the perspective of Islamic astronomy (*'ilm al-falak*). The approaches used in this research are historical-textual and astronomical. The historical-textual approach is conducted by examining verses of the Qur'an, hadith, and classical exegetical literature that explain the practice of prayer in the early period of Islam. Through this approach, the researcher seeks to understand the context of the revelation of the verses, the views of Qur'anic commentators, and the narrations related to the obligation of prayer before Isra' Mi'raj. Meanwhile, the astronomical approach, or Islamic astronomy (*'ilm al-falak*), used in this study is descriptive-qualitative in nature. The analysis is not directed toward mathematical calculations, but rather toward the description of natural phenomena as understood and observed in the historical context of early Islam based on textual sources. This approach aims to relate the explanations of the religious law concerning prayer times with the phenomena of the sun's movement, such as sunrise and sunset, the emergence of the true dawn (*fajr ṣādiq*), and the disappearance of the red twilight.

The research data sources consist of primary and secondary sources. The primary sources include verses of the Qur'an related to the obligation of prayer before Isra Mikraj. The secondary sources consist of classical works of Qur'anic exegesis as well as scholarly articles relevant to this research. Data collection was conducted through library research, namely by examining, recording, and classifying data from the various literatures mentioned above. The data obtained were then analyzed through three approaches. First, historical analysis, which reconstructs the chronology of the prescription of prayer before Isra Mikraj based on the texts of the Qur'an, hadith, and explanations of Qur'anic commentators. Second, thematic analysis, which groups verses and hadith that discuss prayer times during the pre-Isra Mikraj period. Third, falak or astronomical analysis, which relates the explanations found in the religious texts with the phenomena of the sun's movement and its astronomical position relative to the horizon.

C. Results and Discussion

1. Prayer Before Isra' Mi'raj and Its Initial Times



The prayer known today is the result of a long process; it was not revealed all at once but developed gradually. Although the practice of prayer had been known since the time of the prophets before the Prophet Muhammad, during the period of the Prophet Muhammad the development of prayer passed through two stages. The first stage occurred when Muslims were still in Mecca, namely before the event of Isra' Mi'raj. The second stage began after Isra' Mi'raj and continued until the period of migration to Medina. Several aspects related to the practice of prayer that were still incomplete during the Meccan period were perfected in the Medinan stage, and it was there that prayer was fully prescribed for Muslims. This is consistent with the process of prophethood, which did not reach completion until the Prophet was in Medina.⁶

Several verses of the Qur'an explain that the earlier prophets had already been commanded to perform prayer, although the form of prayer during the time of the earlier prophets differed from the prayer practiced today. In Qur'an Surah Maryam verse 58 it is stated,

أُولَئِكَ الَّذِينَ أَنْعَمَ اللَّهُ عَلَيْهِمْ مِنَ النَّبِيِّينَ مِنْ ذُرِّيَةِ آدَمَ وَمِمَّنْ حَمَلْنَا مَعَ نُوحٍ وَمِنْ ذُرِّيَةِ إِبْرَاهِيمَ وَإِسْرَائِيلَ يُؤْمِنُ بِحَدِيثِ آلِهِنَا وَاجْتَبَيْنَاهُمْ إِذَا تُتْلَىٰ عَلَيْهِمْ آيَاتُ الرَّحْمَنِ خَرُّوا سُجَّدًا وَبُكِيًّا

*“Those are the ones upon whom Allah has bestowed favor among the prophets of the descendants of Adam, and of those whom We carried with Noah, and of the descendants of Abraham and Israel (Jacob), and of those whom We guided and chose. When the verses of the Most Merciful were recited to them, they fell down in prostration and weeping.”*⁷ (Qur'an 19:58)

The verse indicates that the descendants of Prophet Adam and the prophets were commanded to prostrate. In addition, Prophet Ibrahim ('alayhi al-salām), who is known as Abū al-Anbiyā' or the father of the prophets, also received the command within the divine law revealed to him to perform prayer. This is evident from his supplication in which he asked that his descendants be among those who establish prayer.⁸ Allah, Glorified and Exalted be He, says:

رَبَّنَا إِنِّي أَسْكَنْتُ مِنْ ذُرِّيَّتِي بِوَادٍ غَيْرِ ذِي زَرْعٍ عِنْدَ بَيْتِكَ الْمُحَرَّمِ رَبَّنَا لِيُقِيمُوا الصَّلَاةَ فَاجْعَلْ أَفْئِدَةً مِنَ النَّاسِ تَهْوِي إِلَيْهِمْ وَارْزُقْهُمْ مِنَ الثَّمَرَاتِ لَعَلَّهُمْ يَشْكُرُونَ

*“Our Lord, indeed I have settled some of my descendants in an uncultivated valley near Your Sacred House. Our Lord, that they may establish prayer. So make the hearts of some people incline toward them and provide them with fruits so that they may be grateful.”*⁹ (Qur'an 14:37)

⁶ Jawwad `Ali, *Sejarah Shalat (Asal Usul, Bilangan Dan Kedudukan Shalat Dan Islam)*, Terj. Irwan Masduki (Tangerang: Lentera Hati, 2010). 30

⁷ Kemenag, “Qur'an Kemenag,” 2022, <https://quran.kemenag.go.id/quran/per-ayat/surah/9?from=36&to=129>.

⁸ Sarwat, *Sejarah Shalat*.9

⁹ Kemenag, “Qur'an Kemenag.”



It is also narrated in the Qur'an that Prophet Musa and Prophet Harun were commanded to perform prayer when they were leading the Children of Israel in Egypt, as mentioned in Surah Yunus verse 87.

Allah, Glorified and Exalted be He, says:

وَأَوْحَيْنَا إِلَىٰ مُوسَىٰ وَأَخِيهِ أَنْ تَبَوِّأْ لِقَوْمِكَ مِمَّا مِصْرَ بِيُوتًا وَاجْعَلُوا بُيُوتَكُمْ قِبْلَةً وَأَقِيمُوا الصَّلَاةَ وَبَشِّرِ الْمُؤْمِنِينَ

*“And We inspired Musa and his brother, ‘Settle your people in houses in Egypt and make your houses places of worship and establish prayer, and give good tidings to the believers.’”*¹⁰ (Qur'an 10:87)

In Surah Āli ‘Imrān verse 39, it is narrated that Prophet Zakaria received a revelation concerning prayer for the Children of Israel in the future.

Allah, Glorified and Exalted be He, says:

فَنَادَتْهُ الْمَلَائِكَةُ وَهُوَ قَائِمٌ يُصَلِّي فِي الْمِحْرَابِ أَنَّ اللَّهَ يُبَشِّرُكَ بِيحْيَىٰ مُصَدِّقًا بِكَلِمَةٍ مِّنَ اللَّهِ وَسَيِّدًا وَحَصُورًا وَنَبِيًّا مِّنَ الصَّالِحِينَ

*“Then the angels called him while he was standing in prayer in the sanctuary, ‘Indeed, Allah gives you good tidings of Yahya, confirming a word from Allah, noble, restraining himself, and a prophet from among the righteous.’”*¹¹ (Qur'an 3:39)

In addition to the Children of Israel, the Christian community was also commanded to perform prayer through Prophet Isa, as stated in the Qur'an in Surah Maryam verse 31.

Allah, Glorified and Exalted be He, says:

وَجَعَلَنِي مُبْرَكًا أَيْنَ مَا كُنْتُ وَأَوْصَانِي بِالصَّلَاةِ وَالزَّكَاةِ مَا دُمْتُ حَيًّا

*“And He has made me blessed wherever I may be and has enjoined upon me prayer and zakat as long as I live.”*¹² (Qur'an 19:31)

Indications of the command to perform prayer are also found in the scriptures of other religions. According to the Bible, the forms of worship practiced by earlier prophets among the Children of Israel included standing, kneeling, prostrating, worshipping, raising the hands, and praying in praise of the greatness of God while seeking His help.¹³ Historical records also indicate that long before the event of Isra' Mi'raj, even before the advent of Islam, the people of Mecca already practiced acts of worship around the Ka'bah that resembled prayer, complete with certain procedures and traditions. The verses of the Qur'an also explain that before Isra' Mi'raj the Prophet and his companions had already performed prayer while they were still in

¹⁰ Kemenag.

¹¹ Kemenag.

¹² Kemenag.

¹³ Sarwat, *Sejarah Shalat*.13



Mecca. Several Qur’anic chapters indicate the command to perform prayer before Isra' Mi'raj, namely;

a. Surah Al-Kautsar verse 2

Allah, Glorified and Exalted be He, says:

فَصَلِّ لِرَبِّكَ وَأَنْحَرْ

“So pray to your Lord and sacrifice.”¹⁴ (Qur’an 108:2)

b. Surah AL-Muzzamil verse 1-2

Allah, Glorified and Exalted be He, says:

يَا أَيُّهَا الْمُرْسَلُ قُمْ اللَّيْلَ إِلَّا قَلِيلًا

“O you who are wrapped up, stand [to pray] at night, except for a little.”¹⁵ (Qur’an 73:1–2)

c. Surah Al-Hud verse 114

Allah, Glorified and Exalted be He, says:

وَأَقِمِ الصَّلَاةَ طَرَفَيِ النَّهَارِ وَزُلْفًا مِّنَ اللَّيْلِ إِنَّ الْحَسَنَاتِ يُذْهِبْنَ السَّيِّئَاتِ ذَلِكَ ذِكْرَى لِلذَّكِّرِينَ

“Establish prayer at the two ends of the day and at the approaches of the night. Indeed, good deeds remove misdeeds. That is a reminder for those who remember (Allah).”¹⁶ (Qur’an 11:114)

d. Surah Al-Alaq verses 9-10

Allah, Glorified and Exalted be He, says:

أَرَأَيْتَ الَّذِي يَنْهَى عَبْدًا إِذَا صَلَّى

“Have you seen the one who forbids a servant when he prays?”¹⁷ (Qur’an 96:9–10)

e. Surah Gafir verse 55

Allah, Glorified and Exalted be He, says:

فَاصْبِرْ إِنَّ وَعْدَ اللَّهِ حَقٌّ وَاسْتَغْفِرْ لِذَنْبِكَ وَسَبِّحْ بِحَمْدِ رَبِّكَ بِالْعَشِيِّ وَالْإِبْكَارِ

¹⁴ Kemenag, “Qur’an Kemenag.”

¹⁵ Kemenag.

¹⁶ Kemenag.

¹⁷ Kemenag.



*“So be patient. Indeed, the promise of Allah is true. Seek forgiveness for your sin and glorify the praise of your Lord in the evening and the morning.”*¹⁸ (Qur’an 40:55)

Some scholars hold differing opinions regarding the times at which prayer was commanded before Isra' Mi'raj; however, the most widely known are the night prayer, the morning prayer, and the evening prayer.

1) Prayer at night

The command for the Prophet to perform the night prayer is mentioned in Surah Al-Muzzamil verses 1–2: “O you who are wrapped in garments, stand (to pray) during the night, except for a little.” This verse was revealed as a command to the Prophet Muhammad to perform the night prayer. According to the footnotes of the Qur’an published by the Ministry of Religious Affairs, the night prayer was obligatory; however, after verse 20 of Surah Al-Muzzamil was revealed, its ruling became recommended (sunnah).¹⁹

In the translation of Tafsir Al-Munir, the night prayer referred to is the tahajjud prayer performed for about half of the night, with a little addition or a little reduction. According to some scholars, the command to perform the night prayer was a specific command from Allah to the Prophet Muhammad. However, there is also an opinion that the night prayer was an obligation for the Prophet and his community, and that this obligation was later replaced by the five daily prayers at the time of Isra' Mi'raj.²⁰ In a hadith, Aisyah mentioned that the command of the night prayer was carried out by the Prophet and his companions as an obligation. The concession that made the night prayer sunnah occurred after this obligation had lasted for at least one year.²¹

2) Prayer in the morning and evening

The time of the morning prayer before Isra' Mi'raj is mentioned in several narrations, one of which refers to the book Fath al-Bari with an explanation by Ibn Rajab,

لكن قد قيل: إنه كان قد فرض عليه ركعتان في أول النهار وركعتان في آخره فقط... وقال قتادة: كان بدء الصلاة ركعتين بالغداة وركعتين بالعشي

*“However, it is said that the prayer initially made obligatory upon the Messenger was two units (rak'ahs) at dawn and two units at night... Qatadah said, ‘The first prayer consisted of two units at dawn and two units at the night prayer (‘isha).’*²²

The command for the performance of prayer in the morning and evening is mentioned in Surah Ghafir verse 55: “So be patient. Indeed, the promise of Allah is true. Seek forgiveness

¹⁸ Kemenag.

¹⁹ Kemenag.

²⁰ Dr. Wahbah Al-Zuhaili, *Terjemah Tafsir Al-Munir*, Jilid 15 (Jakarta: Gema Insani diterjemahkan oleh Abdul Hayyie, dkk, 2013).201-205

²¹ Sarwat, *Sejarah Shalat*.15

²² Zunus Muhammad, “Bagaimana Shalat Nabi Sebelum Isra' Mi'raj?,” Nu Online, 2018, <https://nu.or.id/syariah/bagaimana-shalat-nabi-sebelum-isra-miraj-cyG3N#:~:text=Artinya%2C%20Maksudnya%2C%20shalat%20tahiyatul,%20atnya%20dua%20raka%27at.>



for your sin and glorify the praise of your Lord in the evening and the morning.” In Tafsir Al-Munir, it is stated that the phrase “glorify the praise of your Lord in the evening and the morning” is understood by some scholars as referring to the Asr prayer and the Fajr prayer, or even to the five daily prayers. There is also an opinion that the Fajr and Asr prayers were forms of prayer performed in Mecca before the obligation of the five daily prayers was established.²³

In addition, the command is also found in Surah Hud verse 114: “*Establish prayer at the two ends of the day and in the early parts of the night. Indeed, good deeds remove misdeeds. That is a reminder for those who remember.*” This verse indicates the obligation to establish prayer at the two ends of the day, which are understood as the first part when the sun rises and the second part when the sun sets, namely the Fajr prayer and the Asr prayer. However, there is also an opinion that this verse refers to the command to perform the five daily prayers, in which the phrase “the ends of the day” refers to the Fajr, Dhuhr, and Asr prayers, while “the early parts of the night” refers to the command to perform the Maghrib and Isha prayers. The term *az-zulaf* carries the meaning of times that are close to one another, while *zulaf al-layl* refers to the times of Maghrib and Isha.²⁴

However, when these chapters are viewed from the historical chronology of the arrangement of the Makkiyah chapters in the Qur’an, the positions of Surah Hud and Surah Ghafir appear after Surah Al-Isra’, which in its interpretation contains the command for the five daily prayers. Meanwhile, other verses indicating the command to perform prayer in the morning and evening were all revealed during the Madinah period, that is, after the Prophet migrated and certainly after the event of Isra’ Mi’raj. The morning and evening prayers performed by the Prophet Muhammad may have been influenced by earlier communities who practiced acts of worship around the Ka’bah.

Several historical records also state that the Prophet Muhammad had already performed prayer at the beginning of his prophethood. Shafiyyurahman al-Mubarakfuri explains that two rak’ahs in the morning and two rak’ahs in the evening were the first forms of prayer commanded by Allah. Another narration also supports this view: when the Prophet openly performed prayer in front of the Ka’bah, he and Khadijah had previously performed prayer secretly. Later, Surah Al-Muddathir was revealed, which contains the command to proclaim the message openly; therefore, the Prophet Muhammad then performed prayer in front of the Ka’bah.²⁵

2. Astronomical Review of the Beginning of Prayer Times before Isra’ Mi’raj

The Prophet Muhammad did not bring the religion of Islam easily; there were many obstacles and challenges from the Quraysh, so the development of Islam at that time was mainly focused on the teaching of monotheism and worship of Allah. Its culmination occurred during Isra’

²³ Dr. Wahbah Al-Zuhaili, *Terjemah Tafsir Al-Munir*, Jilid 12 (Jakarta: Gema Insani diterjemahkan oleh Abdul Hayyie, dkk, 2013).361-363

²⁴ Dr. Wahbah Al-Zuhaili, *Terjemah Tafsir Al-Munir*, Jilid 6 (Jakarta: Gema Insani diterjemahkan oleh Abdul Hayyie, dkk, 2013). 419-423

²⁵ oktari Kanus, “Tafsir Ayat-Ayat Shalat Di Dalam Ibnu Katsir (Rekonstruksi Sejarah Shalat Sebagai Lembaga Keagamaan Islam)” (UIN Sunan Kalijaga Yogyakarta, 2017).99



Mi'raj, when the command for the five daily prayers was established.²⁶ Before the event of Isra' Mi'raj, the Prophet Muhammad and his companions had already performed prayer, although the number of rak'ahs and the division of the prayer times were not yet the same as the five daily prayers known today. As previously explained, the Qur'an and hadith provide indications that prayer during the early period of prophethood was performed at certain times marked by the movement of the Sun and changes in the light of the sky.

From the beginning, the determination of the prayer times was closely related to astronomical phenomena that could be directly observed without instruments. Astronomical studies of prayer times show that Islamic law has a strong foundation in cosmic regularity. The daily change in the position of the Sun occurs in a regular pattern and can be calculated with precision, allowing prayer times to be determined with high accuracy. In the early period of Islam, the determination of time was carried out through direct observation (rukyat), whereas in the modern era mathematical calculation (hisab) is used. Nevertheless, both methods are based on the same phenomenon: the regular motion of the Sun.

The determination of the beginning of prayer times is closely related to celestial bodies, one of which is the position of the Sun. The position of the Sun plays a crucial role in Islamic astronomy (ilm al-falak), where it can be determined through the altitude angle or the angle of incidence of sunlight. The angle of incidence is the angle between the direction of the Sun's rays and the normal line to a surface. Based on this angle of incidence, the beginning of prayer times can be calculated.²⁷ Prayer in the earlier period had not yet reached the form it has today. As explained previously, before the event of Isra' Mi'raj the Prophet had already performed prayer. The following is an astronomical review of the prayer times performed by the Prophet Muhammad and his companions before Isra' Mi'raj;

a. Night Prayer

In Surah Al-Muzzammil verses 1–2, the Prophet Muhammad is commanded to perform the night prayer. This command is also emphasized in several hadiths, one of which states

حَدَّثَنَا أَحْمَدُ بْنُ مُحَمَّدٍ الْمُرَوَّزِيُّ ابْنُ شَبُّوَيْهِ، حَدَّثَنِي عَلِيُّ بْنُ حُسَيْنٍ، عَنْ أَبِيهِ، عَنْ يَزِيدَ النَّحْوِيِّ، عَنْ عِكْرِمَةَ، عَنْ ابْنِ عَبَّاسٍ قَالَ «بِئْسَ الْقَوْلُ {قُمْ اللَّيْلَ إِلَّا قَلِيلًا * نِصْفَهُ} : نَسَخَتْهَا آيَةٌ الَّتِي فِيهَا {عَلِمَ أَنَّ لَنْ نُحْصُوهُ فَتَابَ عَلَيْكُمْ فَأَفْرَءُوا مَا تَيْسَّرَ مِنَ الْقُرْآنِ} وَنَاشِئَةُ اللَّيْلِ أَوَّلُهُ، وَكَانَتْ صَلَاتُهُمْ لِأَوَّلِ اللَّيْلِ، يَقُولُ: هُوَ أَجْدَرُ أَنْ تُحْصُوا مَا فَرَضَ اللَّهُ عَلَيْكُمْ مِنْ قِيَامِ اللَّيْلِ، وَذَلِكَ أَنَّ الْإِنْسَانَ إِذَا نَامَ لَمْ يَدْرِ مَتَى يَسْتَيْقِظُ، وَقَوْلُهُ: أَقْوَمُ قِيَالًا هُوَ أَجْدَرُ أَنْ يَفْقَهُ فِي الْقُرْآنِ، وَقَوْلُهُ: {إِنَّ لَكَ فِي النَّهَارِ سَبْحًا طَوِيلًا}، يَقُولُ: فَرَاغًا طَوِيلًا

“Muhammad al-Marwazi bin Shabbuwayh narrated to us, Ali bin Husain narrated to me, from his father, from Yazid al-Nahwi, from Ikrimah, from Ibnu Abbas, who said: ‘In Al-Muzzammil {Stand [to pray] at night, except a little, half of it}: this was later abrogated by the verse which

²⁶ Oktari Kanus.94-98

²⁷ Arino Bemi Sado, *Arah Kiblat: Suatu Kajian Syariah Dan Sains* (Mataram: Sanabil, 2020).75



*states: {He knows that you will not be able to keep count of it, so He has turned to you in mercy. Therefore, recite what is easy for you of the Qur'an}, and the beginning of the night, while their prayer was at the beginning of the night. Allah says: It is more appropriate for you to observe what Allah has made obligatory for you, namely the night prayer. He said: It is more appropriate for you to observe what Allah has made obligatory for you in the form of the night prayer, because when a person sleeps he does not know when he will awaken. His statement: "The most correct speech is more suitable for understanding the Qur'an." His statement: "Indeed, for you during the day is prolonged occupation." That is, a long period of free time."*²⁸ (H.R Abu Dawud)

Night prayer during the time of the Prophet Muhammad, when implemented in the context of present-day prayer practice, corresponds to the tahajjud prayer, which is performed around half of the night with a little addition or a little reduction. This refers to the options of one-third, one-half, or two-thirds of the night.²⁹ The term "night" refers to the period from sunset until the appearance of dawn. This indicates that the maximum duration considered obligatory was two-thirds of the night. In Islamic practice, the tahajjud prayer is performed after sleeping at night until just before the Fajr prayer. In Tafsir Al-Munir, it is explained that the time for the night prayer may be one-third, one-half, or two-thirds of the night. From an astronomical perspective, the beginning of the tahajjud prayer is commonly calculated during the last third of the night.

The beginning of the night, or the initial time of night, starts when the sun sets. In astronomical terms, night begins when the sun has set or has disappeared below the western horizon. The end of the night occurs when the time of sunrise arrives, that is when the sun appears on the eastern horizon.³⁰ Technically, in astronomy, the night is divided into three parts: the beginning, the middle, and the end. The beginning of the night occurs when the Sun has set but the red twilight is still visible, with the Sun's altitude estimated at about -1 degree, while the end of the night occurs when the night is nearly over and dawn has not yet appeared. In Tafsir Al-Munir, the time of the night prayer during the period of the Prophet before Isra' Mi'raj could be chosen between one-third, one-half, and two-thirds of the night, which astronomically can be described as follows;

- 1) One-third of the night means dividing the time of the night from Maghrib until Fajr into three equal parts. The tahajjud prayer is usually performed in the last third of the night, which means it is performed close to the time of sunrise.
- 2) Half of the night means dividing the night into two equal parts. The tahajjud prayer is generally performed in the last part of these two divisions.
- 3) Two-thirds of the night means dividing the night into three parts and taking the last two parts. This indicates a longer period devoted to worship.

²⁸ Abu Daud, *Sunan Abi Daud Ma'a Syarhihi 'Aunil Ma'bud*, Juz 1 (India: Ak-Mathba'ah Al-Anshoriyyah, 1905).503

²⁹ Al-Zuhaili, *Terjemah Tafsir Al-Munir*, 2013.

³⁰ Wahyudi, "Analisis Perhitungan Waktu Afdal Pelaksanaan Salat Tahajjud Perspektif Malam Syar'i Dan Malam Astronomi" (UIN Walisongo Semarang, 2023). 56



b. Morning and Evening Prayers

In Surah Al-Hud verse 114 and Surah Al-Ghafir verse 55, morning and evening prayers are commanded. However, several opinions regarding these surahs, when viewed from the historical arrangement of the chronology of the Qur'anic surahs that compile the chronology of the Makkan surahs, place Surah Hud and Surah Ghafir after the order of Surah Al-Isra', whose interpretation contains the command of the five daily prayers. This raises the question of whether before the event of Isra' Mi'raj the Prophet performed morning and evening prayers.

This is further reinforced by several statements of the Companions which indicate that before the event of Isra' Mi'raj, the Prophet performed morning and evening prayers. Among them are the following narrations

حدثنا بشر قال، حدثنا يزيد قال، حدثنا سعيد، عن قتادة: "علم الله أنكم كنتم تختانون أنفسكم" وكان بدء الصيام أمروا بثلاثة أيام من كل شهر، وركعتين غداة، وركعتين عشية

*"Bishr narrated to us, Yazid narrated to us, Sa'id narrated to us, from Qatadah: 'Allah knows that you used to deceive yourselves.' At the beginning of fasting, they were commanded to fast three days in every month and to perform prayer consisting of two rak'ahs in the morning and two rak'ahs in the evening."*³¹

In *Tafsir al-Munir*, the morning and evening prayers are explained as follows: the morning prayer refers to the Fajr prayer, while the evening prayer includes the time between Zuhur, ghurub (sunset), and the times thereafter.³² Some scholars argue that this command refers specifically to these two times, because the prayer that was prescribed in Mecca consisted of two rak'ahs in the morning and two rak'ahs in the evening. Other scholars interpret that the command encompasses the five daily prayers, since the term morning refers to the Fajr prayer (dawn), while the term evening refers to the time after the sun inclines toward the west, which includes the other four prayers.³³

Although there are differing opinions regarding the morning and evening prayers, the statement of the Companion mentioned above indicates that before the event of Isra' Mi'raj, the Prophet performed two rak'ahs of prayer in the morning and in the evening. From an astronomical perspective, the timing referred to in the hadith can be described as follows;

1) Morning Prayer

Astronomically, the morning prayer performed by the Prophet Muhammad occurred before the sun had fully risen, meaning when the sun was still below the horizon. The celestial phenomenon that appears at this time is the emergence of *fajr sadiq*, which is a horizontal white light visible on the eastern horizon.

³¹ Muhammad bin Jarir Ath-Thobari, *Tafsir Ath-Thobari Jaami'ul Bayaan*, Juz 3 (Makkah: Daarut Tarbiyah Wa at-Turats, n.d.), 501

³² Dr. Wahbah Al-Zuhaili, *Terjemah Tafsir Al-Munir*.

³³ Al-Zuhaili, *Terjemah Tafsir Al-Munir*, 2013.



2) Evening Prayer

The Prophet Muhammad performed the evening prayer consisting of two rak'ahs before the event of Isrā' Mi'rāj. Astronomically, this time occurs shortly before sunset, when the position of the sun is still above the western horizon. This period is characterized by the sunlight beginning to fade, the color of the sky changing to orange or red, and shadows becoming longer.

According to another opinion, the command to perform the morning and evening prayers is understood as encompassing the five daily prayers, because the term morning refers to the Fajr prayer (dawn), while the term evening refers to the time when the sun begins to incline toward the west, which includes the other four prayers.³⁴ The five daily prayers, from an astronomical perspective, can be explained as follows;

1) Zuhur

Astronomically, the time of Zuhur begins when the sun starts to decline, that is when the sun begins to leave the solar meridian. In other words, it occurs when the position of the sun has shifted from its culmination (moving away from the meridian).³⁵

2) 'Aṣr

The beginning of the time for the 'Aṣr prayer in astronomy occurs when the altitude of the sun equals the zenith distance of the center of the sun, plus the length of the shadow that appears when the sun is at its culmination.³⁶

3) Maghrib

Astronomically, the beginning of the Maghrib prayer occurs when the sun sets while the red twilight has not yet disappeared, or when the solar disk is at an altitude of -1° or at a zenith distance of 91° . Sunset occurs when, to the observer's eye, the upper limb of the sun's disk touches the horizon.³⁷

4) 'Ishā'

The beginning of the time for 'Ishā' starts when the red twilight has disappeared and continues until midnight. In astronomy, the red twilight is related to the scattering of particles in the atmosphere. The beginning of the 'Ishā' prayer time occurs when the position of the sun is about 16° to 18° below the horizon.³⁸

5) Fajr (Subuh)

The beginning of the Fajr prayer time is understood from the appearance of *fajr ṣādiq*. In astronomy there are three types of dawn; however, according to several scholars, the

³⁴ Oktari Kanus, "Tafsir Ayat-Ayat Shalat Di Dalam Ibnu Katsir (Rekonstruksi Sejarah Shalat Sebagai Lembaga Keagamaan Islam)." 57-59

³⁵ Lutfi Nur Fadhilah, "Akurasi Awal Waktu Zuhur Perspektif Hisab Dan Rukyat," *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan* 6, no. 1 (2020).66

³⁶ Abdi Wijaya Istigfar Nuvegar, Rahmatiah HL, "Analisis Ilmu Falak Tentang Pelarangan Waktu Salat," *HISABUNA* 4, no. 2 (2023).147

³⁷ Nur Qomariyah, "Penentuan Awal Waktu Salat (Awal Waktu Salat Asar, Magrib, Dan Isya Berdasarkan Hadis Nabi)," *AL - AFAQ: Jurnal Ilmu Falak Dan Astronomi* 2, no. 2 (2021), <https://doi.org/10.20414/afaq.v2i2.2918.23>

³⁸ Marataon Ritonga, "Problematika Syafak Dan Fajar Dalam Menentukan Waktu Salat Isyak Dan Subuh," *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan* 7, no. 2 (2021).175



beginning of the Fajr time is marked by astronomical twilight. This light begins to appear on the eastern horizon before sunrise. The time of Fajr continues until the sun is about to rise, when the position of the sun is approximately 18° to 12° below the horizon.³⁹

An astronomical review of the historical origins of prayer times shows a continuity between revelation, natural phenomena, and the development of scientific knowledge. In the past, natural phenomena could only be observed with the naked eye. In contrast, in the present era, technological advancements have enabled these natural phenomena to be explained through mathematical formulas and astronomical calculations (*ilm al-falak*), without diminishing the spiritual meaning of the prayer itself.

D. Conclusion

Before the event of Isrā' Mi'rāj, the practice of prayer was already known to the Prophet Muhammad and his Companions, although it had not yet taken the fixed form of the five daily prayers. During this period, prayer was performed in three main moments: night prayer, morning prayer, and evening prayer. The determination of these times was closely related to astronomical phenomena that could be directly observed, such as the darkness of the night, the appearance of *fajr ṣādiq* on the eastern horizon, and the setting of the sun on the western horizon. The night prayer (*qiyām al-layl*) was performed after sunset until just before dawn, while the morning prayer coincided with the emergence of *fajr ṣādiq*, and the evening prayer was performed shortly before sunset. These three times were consistently based on simple and easily observable cosmic signs, namely the transition from night, the appearance of dawn light, and the setting of the sun. This indicates that from the very beginning of the Islamic law, the determination of prayer times has been based on universal astronomical phenomena, making them clearly understandable for the Arab community before the event of Isrā' and Mi'rāj as well as for later generations.

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³⁹ Unggul Suryo Ardi, “AL-AFAQ Jurnal Ilmu Falak Dan Astronomi Fakultas Syariah Universitas Islam Negeri (UIN) Mataram Problematika Awal Waktu Shubuh Antara Fiqih Dan Astronomi” 2, no. 2 (2020).92



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