PROBLEMS WITH THE LAW ON PRAYING AN INVISIBLE ECLIPSE FROM THE PERSPECTIVE OF ISLAMIC ASTRONOMY

Novi Arisafitri^{1*}, Rizal Ramadhan², Bahrul Alam³

¹²Universitas Islam Negeri Walisongo Semarang, ³International Islamic Call Collage Tripoli Libya noviarisafitri25@gmail.com, rizalramadhan294@gmail.com, alamgomer09@gmail.com

*Corresponding Author

Received: 07-06-2023	Revised: 05-03-2024	Accepted: 19-04-2024
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Abstract

Solar and lunar eclipses are natural phenomena that occur two to three times each year. All Muslims are advised to perform the sunnah eclipse prayer when an eclipse occurs. However, the eclipse phenomenon cannot always be seen directly from Earth due to weather conditions that prevent the eclipse phenomenon of the Sun or Moon from being seen. The purpose of this study is to determine the law of eclipse prayer when it is not visible. The research methodology employed is qualitative library research, which involved the extraction of data from the Nash Al-Qur'an and Hadith, as well as the analysis of the opinions of scholars. The findings indicate that if an eclipse occurs and is subsequently obscured by clouds, dust, or other obstructions, the eclipse prayer should be performed upon the knowledge that an eclipse has occurred. This condition is still considered an eclipse as long as the individual believes that the eclipse will be completed at a specific time. In the event that the eclipse is visible with thin clouds or a clear or cloudy sky and then hesitates, it is advisable to wait until the eclipse is confirmed to have occurred before commencing the prayer. Conversely, if the eclipse is not visible due to cloud cover or otherwise, despite the existence of information indicating the occurrence of an eclipse, the recommendation to pray the eclipse remains invalid.

Keywords: Eclipse Prayer, Madhab Hisab-Madhab Rukyat, Islamic Astronomy

Abstract

Peristiwa gerhana Matahari maupun Bulan merupakan fenomena alam yang terjadi dua higga tiga kali di setiap tahunnya. Seluruh umat islam di anjurkan untuk melaksanakan salat sunnah gerhana ketika sedang terjadi gerhana. Namun, fenomena gerhana tidak selalu dapat dilihat langsung dari Bumi karena kondisi cuaca yang menghalangi sehingga fenomena gerhana Matahari atau Bulan menjadi tidak terlihat. Tujuan penelitian ini adalah untuk mengetahui hukum salat gerhana ketika tidak tampak. Jenis penelitian yang digunakan adalah Library Research bersifat kualitatif dengan penggalian data dari Nash Al-Qur'an dan Hadis serta pendapat ulama yang dianalisis dengan pendekatan hukum islam dan komparatif. Hasilnya menunjukkan bahwa apabila terjadi gerhana kemudian gerhana tersebut tertutup oleh awan atau debu atau penghalang lainnya, maka hendaknya melaksanakan salat gerhana saat mengetahui telah terjadi gerhana, karena kondisi tersebut masih dalam gerhana selama meyakini kapan akan selesainya waktu gerhana. Ketika terlihat gerhana dengan kondisi awan tipis atau langit cerah atau berawan kemudian ragu maka hendaklah menunggu melaksanakan salat hingga memang yakin telah terjadi gerhana. Jika gerhana tidak terlihat karena tertutup oleh mendung, atau lainnya, meskipun ada informasi adanya gerhana, maka anjuran melaksanakan salat gerhana tetap menjadi gugur.

Kata kunci: Salat Gerhana, Mazhab Hisab-Mazhab Rukyat, Ilmu Falak

INTRODUCTION

Astronomical phenomena typically occur for much longer than the age of human civilization. The Moon's orbit and the Sun's orbit cause various events, including lunar and solar eclipses. A solar eclipse happens during *ijtima'* (conjunction) when the Sun, Moon and Earth align in a straight line. A lunar eclipse occurs during *istiqbal* (opposition) when the Sun, Earth and Moon align in a straight line, with the Sun being at an astronomical longitude distance of 180 degrees from the position of the Moon.¹ When the Moon is between the Earth and the Sun, they are not necessarily aligned in a straight line. The Moon may be above or below the line between the Sun and Earth, due to the inclination of the Moon's circular orbit and the ecliptic, which are inclined by about -5° .²

During a solar eclipse, the Moon blocks the Sun's light from reaching certain areas on Earth that fall within its shadow. It is important to note that not all areas on Earth will experience an eclipse, only those covered by the Moon's shadow. A lunar eclipse occurs when the Earth is between the Sun and the Moon, causing the Moon to appear in its full phase. When the Earth is in perfect alignment with the Sun and the Moon, the Earth's shadow will gradually cover the Moon, resulting in a lunar eclipse.³ In astronomy, an eclipse occurs when a celestial body is obscured by another celestial body that is closer to the observer. Although in everyday language, the term eclipse is sometimes used to describe a moment of gloom, it is important to use the term accurately to avoid confusion. Solar and lunar eclipses are physical phenomena that have been observed by humans. During an eclipse, the previously bright object suddenly becomes obscured, resulting in a dark and eerie atmosphere. This creates a striking contrast.⁴

¹ Sayful Mujab, "Gerhana Antara Mitos, Sains, Dan Islam," *Yudisia* 5, no. 1 (2014): 83–101, https://www.google.com/search?q=stain+kudus+gerhana+matahari&oq=stain+kudus+gerhana+matahari&aqs=c hrome..69i57j33i160.8564j0j7&sourceid=chrome&ie=UTF-8.

² Inclination is defined as the angle between the orbital plane of a celestial body and a reference plane. The reference plane can be (1) the equatorial plane, when considering the Earth system with its natural and artificial satellites, (2) the ecliptic plane, when considering the Sun as a celestial object surrounded by planets and comets, (3) or the celestial plane, for a binary star system orbiting around its center of mass. (4) The term 'galactic plane' refers to the plane in which star systems move around the centre of the galaxy. Inclination, on the other hand, is the angle between the plane of the trajectory of a planet or comet and the ecliptic plane. It can also refer to the misalignment of magnetic north with respect to true north. See more: Muhyiddin Khazin, *Kamus Ilmu Falak* (Yogyakarta: Buana Pustaka, 2005), 36.

³ Abu Sabda, *Ilmu Falak: Rumusan Syar'i & Astronomi Seri 2*, ed. A. Nurjaman (Bandung: Persis Pers, 2019), 122.

⁴ Slamet Hambali, *Pengantar Ilmu Falak: Menyimak Proses Pembentukan Alam Semesta*, ed. Farabi Institute (Yogyakarta: Bismillah Publisher, 2012), 228–29.

In Islam, the eclipse phenomenon is associated with the recommendation to perform eclipse prayers when it is visible and not covered by clouds. However, if an eclipse occurs and cannot be seen due to cloudy weather conditions, it results in a significant debate between the *Hisab* and *Rukyat*, commonly known as *Madhab Hisab and Madhab Rukyat*. In this case, the *Madhab Hisab* is represented by their *Hisab* results regarding the time of the eclipse, while the *Madhab Rukyat* is represented by their observation of the eclipse. However, there is a problem with the implementation of the eclipse prayer in areas where an eclipse occurs but is not visible due to natural factors such as thick cloud cover or heavy rain.

METHODS

The research methodology employed is qualitative library research, which is analogous to text analysis activities to ascertain the factual information pertaining to the problematic object, which serves as the primary subject. ⁵ Primary data is derived from texts pertaining to the legal basis for the ordinance of worship on the eclipse phenomenon, encompassing both the Al-Quran and Hadith, as well as the opinions of scholars on the ordinance of worship on the eclipse phenomenon. The primary data source of this research is also obtained from astronomy books related to the eclipse phenomenon, thus enabling a comprehensive study of both astronomy and Islamic astronomy. This research is analysed using an Islamic legal approach based on the foundation of *syar'i* (fiqh), with the collection of nash Al-Qur'an and Hadith. Furthermore, the author employs a comparative approach to examine the rationale provided by scholars for the observance or non-observance of eclipse prayers.

RESULTS AND DISCUSSION

A. Definition of Eclipse

Eclipses in Arabic are known as $kus\bar{u}f$ and $khus\bar{u}f$ (الخسوف او الكسوف). Both words are used to describe solar and lunar eclipses, but $kus\bar{u}f$ is more commonly used to refer to solar eclipses ($kus\bar{u}f$ al-syams) and $Khus\bar{u}f$ refers to the eclipse of the Moon ($kus\bar{u}f$ alqamr). In Latin, it is called 'eclipsis', while in English, it is known as an 'eclipse'. However, there are two terms used to describe eclipses: 'Eclipse of the Sun' or 'Solar Eclipse' for when the Moon covers the Sun, and 'Eclipse of the Moon' or 'Lunar Eclipse' for when the Earth's shadow covers the Moon. The Arabic terms ' $kus\bar{u}f$ ' and ' $khus\bar{u}f$ ' are the closest to the real meaning, where ' $kus\bar{u}f$ ' means covering and ' $khus\bar{u}f$ ' means entering.

⁵ Amir Hamzah, Metode Penelitian Kepustakaan: Library Research (Kajian Filosofis, Aplikasi, Proses Dan Hasil Penelitian), ed. Febi Rizki Akbar (Malang: Literasi Nusantara, 2020), 7.

Therefore, *'kusūf al-syamsi'* describes the Moon covering the Sun either partially or completely.⁶

Eclipses occur because of the Moon's revolution around the Earth. The Earth has a satellite whose circular plane forms an angle of about 5° to the Earth's plane. The two planes, the trajectories of the Earth and Moon planes, intersect at two points. The intersection point of the two planes is a knot, and the line connecting the two intersection points is called the knot line. The knot line is not fixed in position but rotates with a period of about 19 years.⁷ Konjungsi atau ijtima' terjadi ketika Matahari dan Bulan sejajar dan Bulan melintas di antara Matahari dan Bumi, menghasilkan bayangan di permukaan Bumi. Gerhana bulan terjadi ketika Bulan memasuki bayangan Bumi, dengan Bumi berada di antara Bulan dan Matahari, yang dikenal sebagai oposisi atau *istiqbal*.⁸

In astronomy, an eclipse occurs when a celestial body closer to the observer covers the direction of view of another celestial body. This is a simple physical phenomenon that is widely known.⁹ Eclipses of the Sun and Moon do not occur every month due to the physical size of the Earth, Moon, and Sun, as well as the distance between them, and the position of the Moon's orbital plane around the Earth in relation to the ecliptic. This limits the number of eclipses of the Moon and Sun to a frequency of seven per year, consisting of either five solar eclipses and two lunar eclipses or three lunar eclipses and four solar eclipses. If the plane of the Moon's orbit around the Earth forms a larger angle to the ecliptic, the occurrence of eclipses can become less frequent or more frequent in the opposite case.¹⁰

B. Types of Eclipses

a. Lunar Eclipse (Khusuf)

A lunar eclipse, also known as *khusūf*, happens when the Moon is in the Earth's shadow, specifically when the Earth's umbra covers the Moon. This phenomenon occurs when the Sun, Earth, and Moon are in a straight line, with the Earth positioned between the Sun and the Moon.¹¹ Lunar eclipses occur only during opposition (istiqbal) with the Sun or at full moon, when the astronomical longitude is -180° and the declination is about 0° or has a declination that is almost the same absolute value.

⁶ Ahmad Izzuddin, *Ilmu Falak Praktis: Metode Hisab-Rukyat Praktis Dan Solusi Permasalahannya*, 1st ed. (Semarang: PT. Pustaka Rizki Putra, 2012), 105.

⁷ Hambali, Pengantar Ilmu Falak: Menyimak Proses Pembentukan Alam Semesta, 230.

 ⁸ Izzuddin, Ilmu Falak Praktis: Metode Hisab-Rukyat Praktis Dan Solusi Permasalahannya, 105–6.
⁹ Ibid.

¹⁰ Hambali, Pengantar Ilmu Falak: Menyimak Proses Pembentukan Alam Semesta, 230.

¹¹ Ibid., 233.

Opposition occurs every month, but lunar eclipses do not occur every month due to the Moon's orbit inclination with respect to the ecliptic of -5°. If the Moon's orbit were exactly coincident with the ecliptic plane, every new moon *(ijtima')* would always coincide with a solar eclipse, and every full moon *(Istiqbal)* would coincide with a lunar eclipse.¹²

In astronomy, a lunar eclipse is possible when the full Moon is 16.5° or less the node point, which is the point where the Moon's orbit intersects the plane of the ecliptic. During a lunar eclipse, the Moon may still be visible due to rays of the Sun being deflected towards the Earth's atmosphere, with many of these rays having a red light spectrum. During a lunar eclipse, the Moon can appear dark, copper red, blood red, orange, or brown due to the two types of Earth's shadow: the core shadow (umbra) and pseudo shadow (penumbra). The shadow during a lunar eclipse is larger than that during a solar eclipse, and the duration of a total lunar eclipse is longer than that of a solar eclipse. Lunar eclipses can be observed in areas where the eclipse occurs at night.¹³ There are 4 types of lunar eclipses, namely:

- Total Umbra Lunar Eclipse (*al-Khusūf al-Hakīkī al-Kullī*), during a Total Umbra Lunar Eclipse, the entire disc of the Moon enters the core shadow (umbra) of the Earth at the peak of the eclipse.
- Partial Umbra Lunar Eclipse (*al-Khusūf al-Hakīkī al-Juz'ī*), during a Partial Umbra Lunar Eclipse, only a portion of the Moon's disc is in the Earth's core shadow (umbra) while the remainder is in the pseudo-shadow (penumbra).
- 3) Total Penumbral Lunar Eclipse (al-Khusūf asy-Syibhī al-Kullī) during a Total Penumbral Lunar Eclipse, the entire disc of the Moon enters the Earth's pseudoshadow (penumbra) at the peak of the eclipse.
- 4) Partial Penumbral Lunar Eclipse (al-Khusūf asy-Syibhī al-Juz'ī), during a partial penumbral lunar eclipse, part of the Moon's disc is in the Earth's penumbra, which is a pseudo-shadow. This means that the Moon is not completely in the Earth's shadow, but rather in a partial shadow.

The naked eye can witness the first two types of eclipses, namely Total and Partial Umbra Lunar Eclipses, which are also known as *Shari'i* eclipses due to their relation to *shar'i* law. The last two types of eclipses, Total and Partial Penumbral Lunar Eclipses,

¹² Sabda, Ilmu Falak: Rumusan Syar'i & Astronomi Seri 2, 124.

¹³ Ibid.

are challenging to observe/distinguish with the human eye as the light is only dimmer than 1%.¹⁴

b. Solar Eclipse (Kusuf)

A solar eclipse happens when the Moon's disk covers the Sun's disk either partially or completely from Earth. The Moon's shadow can completely shield the Sun's light even though the Moon is smaller because it is closer to Earth, with an average distance of 384.400 kilometers, than the Sun, which has an average distance of 149.680.000 kilometers.¹⁵ During a solar eclipse, the Moon blocks the Sun's radiation to Earth, causing complex changes in the Earth's atmosphere at all altitudes, from the surface layer to the upper ionosphere and even the plasmasphere.¹⁶

During the dead moon phase or *ijtima'*, which occurs when the Moon's astronomical longitude is around 0° and the position of the Sun is around *al-'Uqdah* (node/nodal point) around 18.5°, the Sun's disk can be covered by the Moon resulting in a solar eclipse. Solar eclipses can be observed locally as total, partial, or ring eclipses, while globally there are 6 types of solar eclipses.¹⁷

- 1) Total Solar Eclipse is an astronomical event that occurs when the Moon's shadow falls on the Earth's surface, blocking the Sun's light. It is important to note that this phenomenon is objective and not subject to personal interpretation. During the peak of the eclipse, the Moon's disk completely covers the Sun's disk, appearing as large or larger than the Sun's disk. The size of the Sun's disk and the Moon's disk varies depending on the distances between the Earth-Moon and Earth-Sun.
- 2) Partial Solar Eclipse, during a Partial Solar Eclipse, only a portion of the light that reaches Earth is blocked by the Moon. This occurs because the Moon's disk, at the peak of the eclipse, covers only a portion of the Sun's disk. It is important to note that during this type of eclipse, there will always be a section of the Sun's disk that remains uncovered by the Moon's disk.
- 3) Annular Solar Eclipse happens when the Moon is at its farthest point from the Earth and its disk appears smaller than the Sun's disk, leaving a ring of sunlight visible around the Moon. A solar eclipse occurs when the Moon passes between the Sun and the Earth, blocking all or part of the Sun's disk. It is important to note that

¹⁴ Ibid., 124–25.

¹⁵ Hambali, Pengantar Ilmu Falak: Menyimak Proses Pembentukan Alam Semesta, 233.

¹⁶ Jung Hee Kim and Heon Young Chang, "Statistical Analysis of Geomagnetic Field Variations During Solar Eclipses," *Advances in Space Research* 61, no. 8 (2018): 2040–49, doi:10.1016/j.asr.2018.01.022.

¹⁷ Sabda, Ilmu Falak: Rumusan Syar'i & Astronomi Seri 2, 127.

during a ring solar eclipse, only part of the Sun's disk is covered by the Moon's disk. The portion of the Sun's disk that is not obscured by the Moon's disk forms a luminous ring around the Moon.¹⁸

- 4) Hybrid Eclipse (Annular-Total Eclipse) are a combination of total solar eclipses and ring solar eclipses. They are central eclipses that can be seen as a total eclipse in one area on the Earth's surface and as a partial eclipse in another area. This occurs because during the middle of the eclipse, the peak of the shadow touches the highly curved surface of the Earth. They occur when the observer is situated on the path of the eclipse, but at different points along it. This results in the eclipse appearing as a ring due to the low Earth's surface only reaching the extension of the core shadow (antumbra) in the West and East. Hybrid eclipses are very rare.
- 5) Non-Central Total Solar Eclipse, In this type of eclipse, only a portion of the umbra cone touches the Earth's surface, specifically in the Polar region. However, the axis of the umbra cone does not intersect with the Earth's surface, so this type of eclipse is not considered a total eclipse.
- 6) Non-Central Annular Solar Eclipse, which occurs when only a portion of the extension of the umbra cone reaches the Earth's surface, specifically in the polar regions. The axis of the umbra cone does not intersect with the Earth's surface.¹⁹

C. Problems In Praying An Eclipse That Is Invisible

a. Time of the Eclipse Prayer

Lunar eclipse calculations have been known since Babylonian times. The calculations have continued to develop and can now accurately determine the timing of the beginning, middle, and end of the eclipse, as well as the length of the umbra and penumbra shadows. This demonstrates the increasing level of accuracy in the results over time.²⁰ Islam prescribes making observations and performing eclipse prayers related to the eclipse event, as the Prophet Saw. stated:

¹⁸ Hambali, Pengantar Ilmu Falak: Menyimak Proses Pembentukan Alam Semesta, 235–36.

¹⁹ Sabda, Ilmu Falak: Rumusan Syar'i & Astronomi Seri 2, 127–28.

²⁰ Hasna Tuddar Putri, "Tinjauan Astronomi Terhadap Hisab Gerhana Bulan Dalam Kitab Ittifāq Zāt Al-Bain Karya Moh. Zubair Abdul Karim" 6, no. 2 (2020): 163, doi:10.30596/jam.v.

حَدَّثَنَا أَبُو الْوَلِيدِ قَالَ حَدَّثَنَا زَائِدَةُ قَالَ حَدَّثَنَا زِيَادُ بْنُ عِلَاقَةَ قَالَ سَمِعْتُ الْمُغِيرَةَ بْنَ شُعْبَةَ يَقُولُ انْكَسَفَتْ الشَّمْسُ يَوْمَ مَاتَ إِبْرَاهِيمُ فَقَالَ النَّاسُ انْكَسَفَتْ لِمَوْتِ إِبْرَاهِيمَ فَقَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ إِنَّ الشَّمْسَ وَالْقَمَرَ آيَتَانِ مِنْ آيَاتِ اللَّهِ لَا يَنْكَسِفَانِ لِمَوْتِ أَحَدٍ وَلَا لِحَيَاتِهِ فَإِذَا رَأَيْتُمُوهُمَا فَادْعُوا اللَّهِ وَصَلُّوا حَتَّى يَنْجَلِيَ

Abu Al Walid said, Zaidah said, Ziyad ibn 'Alaqah said, "I heard Al Mughirah ibn Shu'bah say, "There was an eclipse of the sun at the time of Ibrahim's death. Then the Messenger of Allah (blessings and peace of Allah be upon him) said: "Verily, the sun and the moon are two of the signs of Allah's greatness, and they will not be eclipsed because of the death or life of a person. If you see an eclipse of either of them, then pray to Allah and offer prayer until they become visible again".²¹

The eclipse prayer is to be performed from the time of the eclipse until it is over. All madhhabs agree that the prayer should start from the time the eclipse appears. According to Imam Maliki, the prayer should be performed when the eclipse occurs and is at the times when the sunnat prayers are performed until the time of zawal. This is similar to the Eid prayer and the Istisqa' prayer, where it is permissible to perform additional prayers until the meridian of the Sun. If the eclipse occurs after the meridian of the Sun, there is no need to pray.²² The recommendation to perform the eclipse prayer is found in the Hadith of Sahih Muslim, as practiced by Prophet Muhammad Saw.

According to the opinions of Imam Hanafi and Imam Hambali, the eclipse prayer should not be performed during prohibited prayer times. Instead, the time should be used to recite tasbih. ²³ Imam Maliki has three opinions on this matter. The first is that the eclipse prayer may be performed at any time. The second is that the eclipse prayer may be performed at times other than the permissible time. The prayer during an eclipse should not be performed after the sun has inclined to the West, as it resembles the Eid prayer. ²⁴

Most scholars agree that the time for performing the eclipse prayer starts at the time of the eclipse until the end of the eclipse. However, it is important to note that the eclipse can also be observed and researched as a material for reflection on the greatness of Allah, and therefore the implementation of eclipse prayers does not necessarily have to follow the guidelines set forth in fiqh. Imam Shafi'i holds a

²¹ Abu Abdullah Muhammad ibn Ismail Ibn Ibrahim and Ibn al-Mughirah ibn Bardizbah al-Bukhari Al-Ja'fi, "Shahih Al-Bukhari," in *Juz II* (Semarang: Toha Putra, n.d.).

²² Al-Habib Ibnu Thahir, Al-Fiqh Al-Maliki (Beirut: dar Ibnu Jazm, 1998), 301.

²³ Wahbah Az-Zuhaili, Al-Fiqh Al-Islami Wa Adillatuhu (Beirut: Darul Fikr, 1985), 490.

²⁴ Muhammad bin 'Abdurrahman Ad-Damasyqi, *Fiqih Empat Mazhab (Rahmah Al-Ummah Fi Ikhtilaf Al-A'immah)* (Bandung: Hasyimi, 2015), 105.

different opinion, stating that the time of the eclipse is whenever it occurs, even if it falls within a prohibited time for prayer. This is because the eclipse prayer is performed due to a specific cause. According to Imam al-Shafi'i', the eclipse prayer should be performed in various conditions, including during a prohibited time for prayer:²⁵

- 1) If an eclipse is obscured by clouds, dust, or other obstructions, and it is believed to be over, the eclipse prayer should still be performed once it is confirmed that the eclipse is ongoing. If the eclipse is visible through thin clouds or a clear or cloudy sky, and there is doubt, the prayer should be delayed until it is certain that the eclipse has occurred. If they see the eclipse with thin clouds or a clear or cloudy sky, and they are in doubt, they should wait to pray until they are certain that the eclipse has occurred.
- 2) If a solar eclipse occurs during or after the Ashar prayer, one should perform the eclipse prayer first as the Prophet Saw. ordered prayer during a solar eclipse. It is not prohibited to perform the eclipse prayer, funeral prayer, prayer for tawaaf, or prayer for the funeral prayer.
- 3) If a solar eclipse occurs during obligatory prayers, the eclipse prayer should be performed first, followed by the obligatory prayers and then the eclipse sermon. However, if there is a concern that there may not be enough time to perform the obligatory prayers, then priority should be given to performing the obligatory prayers.
- 4) In the event of a solar eclipse during the time of the Jumu'ah prayer, it is recommended to first perform a brief eclipse prayer, such as reciting a shorter surah, before combining the eclipse sermon with the Jumu'ah sermon. Afterward, make the intention and offer the Jumu'ah prayer. However, if the eclipse prayer takes precedence and the Jumu'ah prayer time runs out, then the Jumu'ah prayer takes precedence. If an eclipse continues after the Jumu'ah prayer, the eclipse prayer should be continued. However, if the eclipse ends after the Jumu'ah prayer and there is not enough time to perform the eclipse prayer, it is not necessary to perform it again. The eclipse prayer is only performed during an eclipse and not outside of it.

²⁵ Abdullah Muhammad Bin Idris Asy-Syafi'i and Beni Hamzah) (Terjm oleh Soihin, Hafid, *Fikih Imam Syafi'i*, ed. Mukhlis Abu Mugni and M. Iqbal Qadir, Jilid 3 (Jakarta: Pustaka Azzam, 2011), 457–63.

- 5) If the eclipse prayer coincides with the Eid prayer, *Istisqa'* prayer, and the funeral prayer, precedence should be given to the funeral prayer. However, if the imam is absent for the funeral prayer, instruct others to perform it, and the imam should begin by performing the eclipse prayer. He may choose to perform the funeral prayer or leave it, then perform the Eid prayer and delay the Istisqa' prayer on that day or any other day. If one fears that the time for the Eid prayer will run out, they should first offer a brief Eid prayer, then perform the eclipse prayer, and deliver a sermon on the eclipse and Eid. It is permissible to deliver the khutbah when the Sun is in the west because the khutbah is not the same as the Friday khutbah.
- 6) If a lunar eclipse occurs during the night prayer, the eclipse prayer should be performed before the Witr prayer and the voluntary prayer before dawn. This is because the eclipse prayer is performed in congregation, while the Witr prayer and the voluntary prayer before dawn can be performed individually without congregation. Therefore, it is better to prioritize the eclipse prayer over these two prayers, even if there is not enough time to perform them.
- If the prayer for an eclipse is forgotten until after the eclipse has passed, there is no obligation to make it up or replace it.

Imam al-Shafi'i' advised that when faced with two tasks, one of which is more important than the other, the more important task should be done first. Regarding the process of praying during a lunar eclipse, it is the same as during a solar eclipse. When praying during a solar eclipse, it is important to note that the verses are not recited aloud, as the Prophet himself did not raise his voice during this type of prayer, unlike during the Eid prayer. ²⁶

According to Shaykh al-Islam Ibn Taymiyyah, eclipses of the Moon and Sun occur at fixed times, similar to the new moon rising at a fixed time. These events regulate the alternation of day and night, winter and summer, and other natural phenomena that accompany the rotation of the Sun and Moon. They are considered signs of Allah's power and greatness. Just as Allah determines the appearance of the new moon, He also determines the occurrence of solar and lunar eclipses. It is important to note that this knowledge is not subjective, but rather based on scientific calculation. The timing of these events is known only to those who understand the calculation of the movement of the Moon and Sun. The announcement made by the

²⁶ Ibid., 464.

hisab expert is not a supernatural claim or an exaggerated statement. It is important to base statements on correct knowledge and avoid spreading misinformation.²⁷ As the firman of Allah Swt. :

هُوَ الَّذِيْ جَعَلَ الشَّمْسَ ضِيَآةَ وَالْقَمَرَ نُوْرًا وَقَدَّرَهُ مَنَازِلَ لِتَعْلَمُوْا عَدَدَ السِّنِيْنَ وَالْحِسَابُّ مَا حَلَقَ اللَّهُ ذٰلِكَ اِلَّا بِالْحَقْ يُفَصِّلُ الْالِتِ لِقَوْمِ يَعْلَمُوْنَ²⁸

It is He who made the sun to shine and the moon to shine, and it is He who fixed the places of their orbits, that you may know the number of years, and the reckoning (of time). Allah has not created these things except in truth. He explains the signs (of His greatness) to those who know. (Q.S.10 [Yunus]:5).

اَلشَّمْسُ وَالْقَمَرُ بِحُسْبَانِ⁹²

The sun and moon circulate according to calculations. (Q.S. 55 [AR-Rahman]: 5).

The eclipse prayer is best performed after the eclipse, considering the benefits it provides. This allows observers to carefully observe the eclipse phenomenon, which can serve as a reminder and reflection for humans (*tafakkur*).

b. The Ruling On Praying During An Invisible Eclipse

Eclipses, both solar and lunar, are natural phenomena that have captured human attention throughout history. Even during the time of the Prophet, eclipses were a topic of conversation among the Companions. They serve as a reminder of Allah's power to create everything in an orderly manner. Although rare, eclipses are a fascinating event to observe. The worship of the eclipse phenomenon was first legislated during the time of the Prophet Muhammad. The sharia of worship for the eclipse phenomenon is determined based on the hadith of the Prophet Muhammad Saw: Hadith from Aisyah:

"Abdullah bin Maslamah, from Maliki narrated to us, from Hisham bin Urwah, from his father, from 'Aisha, who said: There was an eclipse of the Sun during the time of the Messenger of Allah. At that time the Prophet prayed the eclipse prayer, he stood for a very long time and bowed for a very long time, then raised his head and stood for a long time, but not like the length of the first stand. Then he bowed for a long time, but not like the length of the first bow. Then he prostrated. Then he stood for a long

²⁷ Ibnu Katsir, *Fikih Hadist Bukhori Muslim (Taisirul 'Allam Syarh 'Umdatil Ahkam)*, terjm. Umar Mujtahid, ed. Yasir Amri (Jakarta: Ummul Qura, 2013), 383–84.

²⁸ Lajnah Pentashihan Mushahaf Al-Qur'an, "Qur'an Kemenag," 2021.

²⁹ Ibid.

time, but not as long as the first standing, bowed for a long time, but not as long as the first bowing, raised his head, then stood for a long time, but not as long as the first standing, bowed for a long time, but not as long as the first bowing, then prostrated and finished. When the prayer was over the Sun was fully visible again. He delivered a sermon before the Muslims, praising Allah and honoring Him, and said: Verily, the Sun and the Moon are signs of the greatness of Allah. They are eclipsed not because of the death or birth of anyone. Therefore, if you see them eclipsed, then say Takbir, pray to Allah, perform the prayer and give alms! O people of Muhammad, no one is more jealous than Allah, if his servant, male or female, commits adultery. O people of Muhammad, by Allah, if you knew what I know, you would weep much and laugh little". ³⁰

Most scholars have not discussed the necessity to pray the eclipse when it is cloudy or covered by clouds, including Imam al-Shafi'i'. However, Ibn Hajar al-Haitami answered this problem and was quoted by Ahmad Ghazali in the book Irsyadul Murid, where the problem can be compared to the determination of the moon at the beginning of the month. According to him, the eclipse prayer can be performed if the eclipse is visible, meaning visible to the naked eye, not just scientifically.³¹

All four madhhabs agree that the eclipse prayer is Sunnah Muakkadah for every Muslim, regardless of age or travel status. While the majority of scholars also hold this view, Imamah considers the eclipse prayer to be *fardlu 'ain*.³² The Prophet Muhammad Saw. performed and commanded the five daily prayers, regardless of gender or travel status. The Prophet Muhammad Saw. performed and commanded the five daily prayers, regardless of gender or travel status. It is important to note that these prayers are obligatory for all Muslims.³³ The time is from when the eclipse occurs until it becomes light again (after the eclipse). ³⁴ There is no specific time for an eclipse. The time starts from the time of the solar eclipse or lunar eclipse at any time. However, if the Sun has emerged (the eclipse has ended) while the eclipse prayer is still ongoing and has not been completed, then you must finish the prayer that was started when the

³⁰ Shahih Al-Bukhori, *Imam Bukhori* (Beirut: Dar Ibnu Katsir, 2022), 254.

³¹ Ibnu Hajar Al-Haitami, *Tuhfatul Muhtaj Bisyarhil Minhaj* (Kairo: Maktabah AT-Tijariyah Al-Kubro, n.d.), 61–62.

³² Muhammad Jawad Mughniyah, Fiqih Lima Mazhab: Ja'far, Hanafi, Syafi'i, Hambali (Beirut, n.d.), 154.

³³ Wahbah Az-Zuhaili, *Fiqih Islam Wa Adillatuhu* (Jakarta: Gema Insani, 2010), 485.

³⁴ Ibnu Qudamah, AL-Mughni, ed. Mukhlis B. Mukti and Fajar Inayati (Jakarta: Pustaka Azzam, 2007),

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eclipse occurred. When a solar or lunar eclipse occurs, Muslims should immediately perform the eclipse prayer either at home or in the mosque, although performing it in the mosque is preferable.³⁵

If an eclipse is obstructed by clouds, dust, or other obstructions, and it is believed that the eclipse has ended, the eclipse prayer should still be performed once it is confirmed that the eclipse has occurred. If the eclipse is visible through thin clouds or a clear or cloudy sky, and there is doubt, it is best to wait until it is certain that the eclipse has occurred before performing the prayer. This is in accordance with the Prophet's Saw :

حَدَّثَنَا أَبُو الْوَلِيدِ قَالَ حَدَّثَنَا زَائِدَةُ قَالَ حَدَّثَنَا زِيَادُ بْنُ عِلَافَةَ قَالَ سَمِعْتُ الْمُغِيرَة بْنَ شُعْبَةَ يَقُولُ انْكَسَفَتْ الشَّمْسُ يَوْمَ مَاتَ إِبْرَاهِيمُ فَقَالَ النَّاسُ انْكَسَفَتْ لِمَوْتِ إِبْرَاهِيمَ فَقَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ إِنَّ الشَّمْسَ وَالْقَمَرَ آيَتَانِ مِنْ آيَاتِ اللَّهِ لَا يَنْكَسِفَانِ لِمَوْتِ أَحَدٍ وَلَا لِحَيَاتِهِ فَإِذَا رَأَيْتُمُوهُمَا فَادْعُوا اللَّهِ وَصَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ إِنَّ

Abu Al Walid said, Zaidah said, Ziyad ibn 'Alaqah said, "I heard Al Mughirah ibn Shu'bah say, "There was an eclipse of the sun at the time of Ibrahim's death. Then the Messenger of Allah Swt. said: "Verily, the sun and the moon are two of the signs of Allah's greatness, and they will not be eclipsed because of the death or life of a person. If you see an eclipse of either of them, then pray to Allah and offer prayers until they become visible again". ³⁶

According to scholars, if an eclipse is not visible due to cloud cover or other factors, even if information about the eclipse is available, the recommendation to pray during the eclipse is void. This Hadith also indicates that the eclipse prayer should be performed during the eclipse until the Sun or Moon becomes bright again. If the eclipse ends before the prayer, it is not necessary to perform it because the Prophet Saw. intended the eclipse prayer to be performed only during the time when the Sun or the Moon is obscured.

According to Ibn Haitam, the eclipse prayer can be performed only if the eclipse is visible to the naked eye, not just scientifically. If the Moon or the Sun is obscured by clouds before the eclipse, but according to the *hisab*, the eclipse has occurred, then it is not Sunnah to pray the eclipse prayer because the basic law is that the eclipse did not

³⁵ Asy-Syaikh Abu Abdurrahman and 'Adil bin Yusuf Al-Azzazi, *Tamamul Minnah (Al-Minnatu Fi Fiqhi Al-Kitab Wa Shahih As-Sunnah)*, terjm. Abu Halbas, ed. Team Pustaka As-Sunnah (Jakarta: Pustaka As-Sunnah, 2009), 555.

³⁶ Abu Abdullah Muhammad ibn Ismail Ibn Ibrahim and Ibn al-Mughirah ibn Bardizbah al-Bukhari Al-Ja'fi, "Shahih Al-Bukhari," in *Juz II* (Semarang: Toha Putra, n.d.).

occur. However, if the Moon or Sun is eclipsed and it becomes cloudy, causing uncertainty about whether the eclipse has ended or not, it is still Sunnah to pray the eclipse prayer. This is because the basic principle is that the eclipse was seen. It is not permissible to rely solely on *hisab*, even if the *hisab* is *qoth'*i, as there is no place for *hisab*.³⁷

In fact, there are at least four eclipses every year, consisting of two solar eclipses and two lunar eclipses. Eclipses of the Sun and Moon are not rare events, despite the misconception that they are infrequent. The maximum number of eclipses that can occur in a year is seven, as was the case in 1982 (four solar eclipses and three lunar eclipses). However, the location of visible eclipses on the surface may vary from year to year. While Indonesia may not have a visible eclipse this year, other countries will experience them. In some years, there can be up to five solar eclipses, as was the case in 1805 and 1935, and will be in 2206. Additionally, there can be up to five lunar eclipses, as occurred in 1676, 1694, and 1749, and will occur in 2132.³⁸

The occurrence of an eclipse is a reminder of Allah's power to negate something, and it is important for humans to increase their dzikir to remember Allah. Eclipses are not related to someone's death or life, but rather they reflect events on Earth. It is crucial for humans to engage in dzikir by remembering Allah as the One and Powerful entity. The Sun and the Moon are two signs of Allah's greatness. Eclipses serve as a reminder and a means to inspire obedience to Allah. The prescribed worship of the eclipse phenomenon serves as a reminder that Allah has the power to negate something that originally existed into nothing. Therefore, humans consider the eclipse phenomenon as an ibrah (lesson).

Performing the eclipse prayer is a recognition and submission to the belief that Allah is the most powerful and entitled to be worshiped. The eclipse phenomenon serves as a reminder of the almighty Being who created it and who must be worshiped. ³⁹ According to the Prophet Saw., the Sun and the Moon are signs of Allah's greatness, demonstrating His power and wisdom. The alteration of the natural order is not due to the birth or death of a significant individual, as the jahiliyyah believed. Rather, it serves as a means to instill fear in the servants of Allah, prompting them to repent and

³⁷ Al-Haitami, Tuhfatul Muhtaj Bisyarhil Minhaj, 61–62.

³⁸ Rinto Anugraha, *Mekanika Benda Langit* (Yogyakarta: MIPA UGM, 2012).

³⁹ Muhammad Fu'ad 'Abdul Baqi, *Mutiara Hadist Shahih Bukhori-Muslim (Al-Lu'lu' Wal Marjan Fima Ittifaqa "Alaihi Asy-Syaikhani Al-Bukhori Wa Muslim)*, Terj. Arif Rahman Hakim, ed. Junaidi Manik (Sukoharjo: AL-Andalus Solo, 2014), 233.

return to Him. This is why the Prophet led them in immediate prayer until the eclipse had passed and the Moon or Sun reappeared. Allah SWT has many secrets and arrangements within this universe.⁴⁰

However, Muhammadiyah has a different interpretation of the traditions about eclipse fiqh when it comes to eclipse prayer that is not visible. They still perform the eclipse prayer, as the shari'ah requires it to be performed at the designated time. The eclipse prayer is performed for natural phenomena, even if the eclipse is not physically visible due to cloud cover or other obstructions. The types of eclipses for which it is sunnah to perform the eclipse prayer include total solar eclipses, partial solar eclipses, annular solar eclipses, total lunar eclipses, and partial lunar eclipses. Although the penumbral lunar eclipse does not require prayer, it is important to note that the light of the Moon's surface only appears to be dimmed, not changed.⁴¹

The time of the eclipse prayer may be performed after the eclipse. This allows the observer to observe the movement of the eclipse phenomenon carefully, so that the eclipse phenomenon can be a reminder and reflection for humans (tafakkur). The maslahah caused will be great if the eclipse prayer is performed after the eclipse. The implementation of eclipse prayers after the eclipse phenomenon also includes general benefits (maslahah amah) aimed at everyone. The benefit of performing the eclipse prayer after the eclipse phenomenon will make a person more mindful and fearful of Allah's power.

Its implementation does not contradict the basic principles that have been established by *qath'i* proofs. By performing the eclipse prayer after the eclipse phenomenon, people can witness the full eclipse phase in detail, so that it can be a material reflection (*tafakkur*) on the power and greatness of Allah. The prayer is charged to the one who sees the eclipse phenomenon (*Syahid*). This makes the implementation of eclipse prayers determined by regional boundaries (wilayat Al-hukmi), because the occurrence of eclipses is not comprehensive on earth. There are some areas of the earth's surface that can see the eclipse, there are some areas that

⁴⁰ Ibnu Katsir, Fikih Hadist Bukhori Muslim (Taisirul 'Allam Syarh 'Umdatil Ahkam), 386.

⁴¹ Maulidina Nur Rokhmah, "Shalat Gerhana Ketika Gerhana Tidak Tampak Dalam Perspektif Muhammadiyah" (UIN Walisongo Semarang, 2019).

cannot see it. From here, the eclipse prayer is charged to the people in the area where the eclipse can be seen, so the limit of the eclipse prayer is determined by the region.⁴²

From some of the above explanations, it can be seen that the Shari'i worship of the eclipse phenomenon includes:

- During an eclipse, it is recommended to engage in dhikr, istighfar, takbir, eclipse prayers, and giving alms. This is in accordance with the hadith narrated by Aisyah Ra and Ibn Abbas.
- 2) Calling out and inviting the congregation to perform the eclipse prayer with the call *as-salatu jami'ah* without performing the *adzan* and *iqamah*.
- 3) The sermon after performing the eclipse prayer is based on the Prophet's guidance. The sermon is to remind people not to get carried away with the transient life of the world. Allah has the power to negate everything depending on what He wants.
- 4) Observing an eclipse is a form of contemplation by witnessing one of the proofs of Allah's power and greatness. This is in accordance with what the Prophet has said that the Sun and the Moon are signs of Allah's greatness.

From the eclipse phenomenon, not only the shari'a aspect is emphasized, but also as a form of correction and self-introspection of Allah's verses. The eclipse phenomenon is a momentum that must be used as contemplation (tafakkur), so that at the peak of the eclipse the community can observe the eclipse to better feel the power of Allah Swt.

CONCLUSION

Solar and lunar eclipses are natural phenomena that occur two to three times each year. Muslims are encouraged to perform the sunnah eclipse prayer during an eclipse, even if it is not visible due to weather conditions. It is important to note that not every eclipse can be seen physically. If an eclipse is obstructed by clouds, dust, or other obstructions after it has occurred, the eclipse prayer should still be performed. This is because the eclipse is still considered to be ongoing as long as it has not yet reached its completion time. If there are thin clouds or a clear or cloudy sky and there is uncertainty about whether the eclipse has occurred, it is recommended to wait until there is certainty before praying. If the eclipse is not visible due to cloud cover or other reasons, even if there is information about the eclipse, the recommendation to pray during the eclipse is cancelled.

⁴² Muhammad Shofa Mughtanim, "Rekonstruksi Syariat Ibadah Atas Fenomena Gerhana" (UIN Walisongo Semarang, 2016).

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