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Bridging Law and Astronomy: The Influence of Astronomy on Islamic Law

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ABSTRACT

This paper explores the deep relationship between Islamic astronomy (Ilm al-Falak) and Islamic law, highlighting its influence on the determination of prayer times, the Qibla direction, and its role in Islamic legal decision-making. This study employs a qualitative method with a descriptive-analytical approach. It draws upon both classical and modern literature, as well as documented expertise from scholars of Islamic astronomy and Islamic law, to provide a comprehensive understanding. The results show that Islamic astronomy has enriched and enhanced the practice of Islamic law, particularly in accurately determining prayer times and the Qibla direction. However, challenges remain in harmonizing Islamic astronomy with Islamic law, necessitating ongoing dialogue between religious scholars and astronomers.

ABSTRAK

Tulisan ini membahas hubungan mendalam antara ilmu falak (astronomi Islam) dan hukum Islam, menyoroti pengaruhnya dalam penentuan waktu ibadah, arah kiblat, serta peranannya dalam pengambilan keputusan

hukum syariah. Tulisan ini menggunakan metode kualitatif dengan pendekatan deskriptif-analitis. Kajian ini memanfaatkan sumber-sumber literatur klasik dan modern, serta data-data dengan dokumentasi ahli ilmu falak dan hukum Islam untuk memperoleh pemahaman komprehensif. Hasil menunjukkan bahwa ilmu falak telah memperkaya dan memperbarui praktik hukum Islam, terutama dalam menetapkan waktu ibadah dan arah kiblat dengan akurasi tinggi. Meskipun demikian, tantangan tetap ada dalam menyelaraskan antara ilmu falak dan hukum Islam, yang memerlukan dialog berkelanjutan antara ulama dan ahli astronomi.

1. INTRODUCTION

Astronomy or Islamic astronomy is a branch of science that has long historical roots in the intellectual tradition of Islam. Since the early days of Islamic civilization, this science has played an important role in determining the times of worship that are highly dependent on the movements of celestial bodies such as the sun, moon, and stars. The existence of astronomy became even more crucial when Muslims began to expand their territory outside the Arabian Peninsula, where geographical challenges required a deeper knowledge of astronomy to ensure that the people could continue to carry out their religious obligations properly.[1]

Astronomy is not only useful in a religious context, but also has an influence in the field of Islamic law (fiqh). Islamic law, which covers various aspects of a Muslim's life, requires precision in its application, especially in matters involving time and space. For example, prayer times are determined based on the position of the sun, or the determination of the beginning of the Hijri month which is highly dependent on the sighting of the crescent moon, are some areas where astronomy has a real influence. Therefore, the integration of astronomy and Islamic law is not something new, but rather a tradition that has been going on for centuries.[2]

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[1]Muhammad Ibn Musa Al-Khwarizmi, *Al-Zij Al-Sindhind* (Baghdad: Dar al-Kutub al-Ilmiyah, 820).

[2]Muh Arif Royyani et al., "Religious Dialogue and Astronomy from the Perspective of Indonesian Muslim Scholars," *Samarah: Jurnal Hukum Keluarga*

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However, although the relationship between astronomy and Islamic law has been recognized, there are challenges that arise along with technological developments and social changes. One of them is the debate between the rukyat method (observation of the crescent with the naked eye) and hisab (astronomical calculations) in determining the beginning of the Hijri month. In addition, the advancement of modern technology has made it possible to determine the direction of the Qibla more accurately, which in turn raises questions about the relevance of traditional methods that have been used for centuries. This article aims to examine the influence of astronomy on Islamic law, with a focus on determining the time of worship, the direction of the Qibla, and other legal implications that require astronomical accuracy.[3]

2. METHOD

This study uses a qualitative method with a descriptive-analytical approach. This method was chosen because it allows for an in-depth analysis of how astronomy influences Islamic law from a historical and contemporary perspective. Data were collected through a literature study of classical and modern books that discuss astronomy and Islamic law. Some of the primary sources used include works such as the Book of Tahdid Nihayat al-Amakin by Al-Biruni, Al-Zij al-Sindhind by Al-Khwarizmi, and various fatwas and sharia court decisions related to determining the time of worship.[4]

In addition, sources from experts in astronomy and Islamic law were conducted to gain in-depth insights into the interrelationship between the two disciplines. The interviews involved several key figures, including Ahmad Izzuddin, an expert in Islamic astronomy who has contributed greatly to research on determining the direction of the Qibla and prayer times using modern technology. Their insights help in understanding how astronomy is applied in the context of

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Dan Hukum Islam 7, no. 1 (March 31, 2023): 261–80, https://doi.org/10.22373/SJHK.V7I1.12406.

[3]Seyyed Hossein Nasr, *Islamic Science: An Illustrated Study* (Cambridge: Harvard University Press, 2009).

[4]Al-Sharif Al-Fasi, *Fiqh Al-Sunnah* (Kuala Lumpur: International Islamic University Malaysia Press, 2020).

Islamic law today and the challenges faced in integrating the two disciplines.[5]

The data obtained were analyzed using a comparative approach to see how changes in astronomy affect the interpretation of Islamic law over time. This analysis includes a comparison between traditional and modern methods in determining prayer times and the direction of the Qibla, as well as their implications for the practice of Islamic law in various countries.[6]

3. RESULTS AND DISCUSSIONS

Historical Background of Falak Science in Islam

Astronomy, or what is often called astronomy in the context of Islamic science, has a long and important history in Islamic civilization. Since the early days of the spread of Islam, Muslims have had a great interest in observing the sky and calculating the movements of celestial bodies. This interest is not merely for scientific purposes, but is also related to the needs of worship, such as determining the direction of the Qibla, prayer times, and determining the beginning of the Hijri month.[7]

The development of astronomy in Islam began during the time of the Prophet. At that time, observations of celestial bodies were carried out to determine prayer times and the beginning of the Hijri month, which was closely related to religious services in Islam. For example, determining the start of the months of Ramadan and Eid al-Fitr depends on observing the new moon (crescent moon). In this case, the Prophet himself encouraged his people to pay attention to the circulation of the moon in the context of determining times of worship. As in a hadith narrated by Imam Bukhari and Muslim, the Messenger of Allah said, "Fast because you see the new moon, and break your fast

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[5]Ahmad Izzuddin, "Typology Jihatul Ka'bah on Qibla Direction of Mosques in Semarang," *Ulul Albab: Jurnal Studi Dan Penelitian Hukum Islam* 4, no. 1 (November 1, 2020): 1–15, https://doi.org/10.30659/JUA.V4I1.12186.

[6]Ahmad Musonnif, "Pendekatan Dalam Penelitian Ilmu Falak DI Indonesia" 24, no. 01 (2024): 151–70, https://doi.org/10.21274/dinamika.2024.24.01.35-52.

[7]Ismail Ismail and Bastiar Bastiar, "Dinamika Kalender Hijriah Dalam Qanun Syariat Islam Provinsi Aceh," *Al-Qalam* 26, no. 2 (November 2, 2020): 255, https://doi.org/10.31969/alq.v26i2.832.

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because you see the new moon. This shows how important observing celestial bodies is in the lives of Muslims.[8]

The Golden Age of Falak Science in the Islamic World

After Islam spread and developed rapidly, especially during the Abbasid Dynasty (750–1258 AD), astronomy experienced rapid development with the establishment of the House of Wisdom in Baghdad by Caliph Harun al-Rasyid. The House of Wisdom became a center for translating Greek, Persian, and Indian works, including astronomical works. One of the important figures during this period was Al-Khawarizmi (780–850 AD), a scientist who wrote various works on astronomy and mathematics.[9] In his famous work, Zij al-Sindhind, Al-Khawarizmi introduced astronomical tables that were very helpful in calculating the positions of celestial objects.

Another major figure in the history of Islamic astronomy was Al-Battani (858–929 CE), known in the West as Albategnius. He was an astronomer who was very influential in the development of calculations of the motions of the sun, moon, and planets. One of Al-Battani's greatest contributions was correcting the calculations of the orbits of the moon and sun used by Ptolemy in his geocentric system. Al-Battani's main work, Buku az-Zij, became a reference for Western and Muslim scientists for centuries later.[10]

The Influence of Islamic Falak Science in the Western World

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[8]Machzumy Machzumy and Badrun Taman, "The Role of Women in The Rukyat Hilal According to The North Aceh Ulema Consultative Assembly," *JURNAL ILMIAH MIZANI: Wacana Hukum, Ekonomi, Dan Keagamaan* 9, no. 2 (2022): 121–30, https://ejournal.iainbengkulu.ac.id/index.php/mizani/article/view/7014.

[9]Arwin Juli Rakhmadi Butar-Butar, "Khazanah Ilmu Falak Aceh (Sejarah, Tokoh, Naskah)," UMSU Press, 2022, https://books.google.co.id/books?id=3Ht4EAAAQBAJ&pg=PT46&lpg=PT46&dq=TM.+Ali+Muda&source=bl&ots=QPTAeqNr8U&sig=ACfU3U2hh1GU5-b8ecXArCArrBDUlTBRwQ&hl=en&sa=X&ved=2ahUKEwi1vYewuJWDAxUvTmwGHRXyDWI4ChDoAXoECAIQAw#v=onepage&q=TM. Ali Muda&f=false.

[10]Hasna Tuddar Putri and Ibnu Qodir, "ACEH LOCAL WISDOM IN THE METHOD OF DETERMINING THE HIJRI CALENDAR," *Al-Hilal: Journal of Islamic Astronomy* 4, no. 1 (April 29, 2022): 1–16, https://doi.org/10.21580/AL-HILAL.2022.4.1.11321.

During the Middle Ages, the Islamic world became a center of civilization and science. Astronomy that developed in the Islamic world was later translated into Latin, and became the basis for the development of astronomy in the Western world. One of the most influential works was Ptolemy's Almagest which was translated and commented on by Muslim scientists. Figures such as Al-Biruni (973 – 1048 AD) and Ibn al-Shatir (1304 – 1375 AD) conducted various astronomical studies and calculations that would later inspire European scientists such as Copernicus.

Ibn al-Shatir, for example, introduced a new mathematical model to explain the movement of celestial bodies, which was later found to be similar to Copernicus' heliocentric theory. Although the heliocentric theory was not popularized in Europe until the 16th century, the works of Muslim astronomers had made significant contributions to the understanding of the movement of planets and stars.

The Relevance of Astronomy in Muslim Life

Astronomy remains relevant to this day in the lives of Muslims. In addition to the interests of worship such as determining prayer times and the beginning of the Hijri month, astronomy also plays a role in broader studies related to the Islamic calendar and understanding natural phenomena, such as solar and lunar eclipses. Institutions such as the Indonesian Ulema Council (MUI) and the Meteorology, Climatology, and Geophysics Agency (BMKG) often use astronomical data and calculations in determining important times in the Islamic calendar, such as the beginning of Ramadan and Eid al-Fitr.[11]

Astronomy is one of the branches of science that is real evidence that Islamic civilization since ancient times has highly valued science and knowledge. Until now, this science is still an important study in various Islamic educational institutions, especially in Islamic boarding schools that teach astronomy as part of the Islamic curriculum.

The history of astronomy in Islam can be traced back to the Abbasid Caliphate, when science experienced rapid development in the Islamic world. At that time, Baghdad became a center of science where scholars from various backgrounds, including astronomy, gathered to develop and spread knowledge. One of the famous figures

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[11]Muhammad Awaludin and Thomas Djamaluddin, "Lunisolar System of Sasak Rowot Calendar Based On the Pleiades Cluster," *Proceedings of the 4th International Conference on Social Science, Humanity and Public Health, ICoSHIP 2023, 18-19 November 2023, Surabaya, East Java, Indonesia*, January 16, 2024, https://doi.org/10.4108/EAI.18-11-2023.2342551.

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in the field of astronomy was Muhammad ibn Musa al-Khwarizmi, who was known as the father of algebra and also contributed significantly to the development of astronomy. His work, Al-Zij al-Sindhind, became one of the main references in the study of astronomy at that time.[12]

In addition to al-Khwarizmi, another influential figure was Al-Biruni, a versatile scientist whose works covered a wide range of disciplines, including astronomy, mathematics, and geography. In his famous work, Kitab Tahdid Nihayat al-Amakin, Al-Biruni describes a method for determining geographical coordinates and prayer times based on the position of the sun. Al-Biruni's thinking shows how astronomy and Islamic law can complement each other to ensure that worship is carried out in accordance with the Shari'a.

In the 11th and 12th centuries, astronomy in the Islamic world reached its peak with the development of astronomical observatories in various regions, such as in Maragha (Iran) and Samarkand (Uzbekistan). This observatory not only functions as a place for astronomical research but also as a center for the development of Islamic law, especially in the context of determining times of worship and the Islamic calendar. Scientists at this observatory developed various astronomical instruments, such as astrolabes and quadrants, which helped in calculating the positions of celestial bodies with high accuracy.[13]

In the following period, astronomy continued to develop in the Islamic world, although it declined along with the political and economic decline in those regions. However, the legacy of Islamic astronomy lived on through works translated into Latin and later became the basis for the development of astronomy in Europe during the Renaissance.

The Influence of Falak Science on Determining Worship Times

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[12]Muhammad Islam Ghuni and Dr. Manzoor Ahmad, "'Description of Prayers Timings' A Research Study in the Light of "Tafseer Al Ahkamul AlQuran Lljsas," *Al Khadim Research Journal of Islamic Culture and Civilization* 2, no. 2 (2021), https://doi.org/10.53575/arjicc.u12-v2.2(21)183-197.

[13]Abdul Mufid and Thomas Djamaluddin, "The Implementation of New Minister of Religion of Brunei, Indonesia, Malaysia, and Singapore Criteria towards the Hijri Calendar Unification," *HTS Teologiese Studies / Theological Studies* 79, no. 1 (June 30, 2023): 8, https://doi.org/10.4102/HTS.V79I1.8774.

One of the most important aspects in which astronomy plays a role in Islamic law is the determination of the times of worship. In Islam, the times of worship such as prayer, fasting, and hajj are determined based on the positions of celestial bodies, especially the sun and the moon. Astronomy provides a framework that allows for the determination of the times of worship with high accuracy, which is essential to ensure that worship is performed at the right time according to the guidance of the Shari'a.[14]

a. Determining prayer times

Prayer, as one of the pillars of Islam, has five times determined based on the position of the sun. For example, the time for Subuh begins when dawn rises (when the white light begins to appear on the eastern horizon), and ends before sunrise. The time for Dhuhr begins when the sun reaches its peak (zenith) and the shadow of an object begins to lengthen. The time for Asr is determined when the shadow of an object is the same length as the object, while the time for Maghrib begins when the sun sets. The time for Isha begins after the disappearance of the twilight light on the western horizon.

The determination of these times is highly dependent on astronomy, especially in the context of establishing the Islamic calendar and calculating the position of the sun. In the early days of Islam, determining prayer times was done manually by observing the position of the sun. However, along with the development of astronomy, the method of calculating prayer times became more accurate. Today, many Muslim countries use calendars based on astronomical calculations developed by Muslim scientists, so that prayer times can be determined precisely for each day of the year.[15]

The use of modern technology, such as smartphone applications that use real-time astronomical data, has made it easier for Muslims around the world to know prayer times with high accuracy. However, there is still debate among scholars regarding the use of this technology, especially when the astronomical data generated by the application is inconsistent with traditional methods. Some scholars

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[14]Habibullah Rintonga; and Arwin Juli Rakhmadi Butra-Butar, "Peran Ilmu Falak Dalam Masalah Arah Kiblat, Waktu Salat Dan Awal Bulan," *Al-Marshad*, 2016.

[15]Ismail Ismail, "METODE PENENTUAN AWAL WAKTU SALAT DALAM PERSPEKTIF ILMU FALAK," *Jurnal Ilmiah Islam Futura* 14, no. 2 (February 1, 2015): 218–31, https://doi.org/10.22373/JIIF.V14I2.330.

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argue that modern technology can be used as long as consistency with traditional methods can be ensured.[16]

b. Determination of the beginning of the

In addition to determining prayer times, astronomy also plays an important role in determining the beginning of the Hijri month, which is very important for determining the times of worship such as fasting in Ramadan, Eid al-Fitr, and Eid al-Adha. The method of determining the beginning of the Hijri month has been the subject of long debate among scholars, with two main methods used: rukyat and hisab.

Rukyat is a traditional method carried out by observing the crescent moon with the naked eye or with the aid of a telescope. This method has been used since the time of the Prophet Muhammad SAW and is considered a valid way to determine the beginning of the month. However, this method has limitations, especially because the observation of the crescent moon can be affected by weather conditions or other obstacles that make the moon invisible, even though astronomically it has appeared on the horizon. Hisab, on the other hand, is a method of astronomical calculation used to determine the position of the moon based on astronomical data. This method is more accurate because it does not depend on weather conditions or visual observation capabilities. In many Muslim countries, the hisab method is starting to be accepted as a valid alternative to determine the beginning of the Hijri month, especially in areas where rukyat is difficult to do.[17]

However, the use of hisab is also not free from controversy. Some traditional scholars still reject the use of hisab because it is considered inconsistent with the traditions taught by the Prophet. Even so, more and more contemporary scholars accept hisab as a valid method, especially in the modern context where accuracy and efficiency are becoming increasingly important. For example, the Indonesian Ulema Council (MUI) has issued a fatwa that allows the use of hisab in

[16]Muhamad Syazwan Faid et al., "Confirmation Methodology for a Lunar Crescent Sighting Report," *New Astronomy* 103 (October 1, 2023): 102063, https://doi.org/10.1016/J.NEWAST.2023.102063.

[17]Mohd Saiful Anwar Mohd Nawawi et al., "HIJRI MONTH DETERMINATION IN SOUTHEAST ASIA: AN ILLUSTRATION BETWEEN RELIGION, SCIENCE, AND SOCIOLOGICAL BACKGROUND," *Heliyon* 0, no. 0 (September 2024): e38668, https://doi.org/10.1016/J.HELIYON.2024.E38668.

determining the beginning of the Hijri month, although it still recognizes rukyat as a valid method. This fatwa reflects a pragmatic approach that tries to combine tradition and modern technology in Islamic law.

c. Determining the time of hajj

The timing of the Hajj, which is one of the pillars of Islam, is also heavily influenced by astronomy. The Hajj is performed in the month of Dhul-Hijjah, the last month of the Islamic calendar, with its peak days occurring between the 9th and 13th of Dhul-Hijjah. The 9th of Dhul-Hijjah, known as the Day of Arafah, is the day on which Muslims perform wukuf at the Plain of Arafah, one of the mandatory pillars of the Hajj. Since the Hajj is performed according to the Islamic calendar, determining the beginning of Dhul-Hijjah is crucial to ensuring that the Hajj is performed at the correct time. Like determining the beginning of Ramadan and Eid al-Fitr, determining the beginning of Dhul-Hijjah can be done through rukyat or hisab. However, since the Hajj involves millions of Muslims from all over the world, using accurate and consistent methods is essential.[18]

Modern astronomy allows the determination of the beginning of Dhul-Hijjah with a very high degree of accuracy, which helps in the planning of the Hajj by authorities in Saudi Arabia and other Muslim countries. However, challenges remain in reconciling traditional and modern methods, especially when there are differences between the results of rukyat and hisab.

d. Qibla direction and astronomy accuracy

The direction of the Qibla is an important element in performing prayers. Muslims around the world are required to face the Qibla, which is the direction of the Kaaba in Mecca, when performing prayers. Determining the correct direction of the Qibla is very important, especially for Muslims living outside the Arabian Peninsula. In the early days of Islam, determining the direction of the Qibla was done in a simple way, namely facing the general direction of Mecca. However, when Muslims began to spread to various regions outside the Arabian Peninsula, determining the direction of the Qibla became more complex and required deeper geographical and astronomical knowledge. Astronomy provides a framework for

[18]I Ismail and Abdul Ghofur, "Implementasi Maqashid Syariah Dalam Sidang Itsbat Hilal Penentuan Awal Ramadhan," *International Journal Ihya' 'Ulum Al-Din* 21, no. 1 (May 2, 2019): 80–94, https://doi.org/10.21580/IHYA.21.1.4163.

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determining the direction of the Qibla with high accuracy. In classical times, Muslim astronomers used various instruments such as astrolabes and quadrants to determine the direction of the Qibla based on the positions of the stars and the sun. Al-Biruni, in his work Kitab Tahdid Nihayat al-Amakin, describes a method for determining the direction of the Qibla using accurate astronomical and geographical data.[19]

With the development of modern technology, determining the direction of the Qibla has become easier and more accurate. Today, Muslims can use various applications and software specifically designed to determine the direction of the Qibla using GPS data and digital maps. These devices utilize the principles of astronomy that have been developed over centuries, but with much greater precision. For example, smartphone applications that use augmented reality (AR) technology allow users to point their devices at the sky and see the direction of the Qibla visually in real time. This technology is very helpful for Muslims who live in areas wher determining the direction of the Qibla manually is difficult.

However, the use of this technology also raises questions about the validity of the results obtained, especially when compared to traditional methods. Some scholars argue that modern technology can be used as long as the results are consistent with traditional methods taught by the Shari'a. In this case, modern astronomy not only helps in determining the direction of the Qibla but also provides practical solutions to the challenges faced by Muslims in carrying out their worship.

The Case of Determining the Direction of Qibla in the Sharia Court

In some cases, determining the direction of the Qibla becomes a legal issue that is brought to the Sharia court. One example is the case of a mosque that was built with the direction of the Qibla that was deemed wrong after re-measurement using modern technology. In such cases, the Sharia court must decide whether the direction of the Qibla needs to be changed or whether the prayers performed in the mosque are still valid. Astronomy plays a key role in providing the

[19] Irfan Irfan, "COMPARATIVE STUDY OF FAZILET CALENDAR AND MABIMS CRITERIA ON DETERMINING HIJRI CALENDAR," *Al-Hilal: Journal of Islamic Astronomy* 5, no. 1 (2023), https://doi.org/10.21580/al-hilal.2023.5.1.13760.

data and analysis needed to decide cases like this. In some cases, the Sharia courts have decided to accept the results of modern calculations and instruct the direction of the Qibla to be changed.[20]

However, there are also cases where the courts have ruled that the direction of the Qibla that has been used for years remains valid because it is based on traditional methods that were valid at the time. Cases like thes show how astronomy can influence Islamic legal decisions, and how modern technology can help ensure that Islamic law is applied with greater accuracy.

In addition to determining the time of worship and the direction of the Qibla, astronomy also plays an important role in various decisions taken by the sharia court. Several legal cases that require precision in timing, such as determining the beginning and end of the iddah (waiting period) for women who are divorced or whose husbands have died, are influenced by astronomy.

Iddah is the waiting period that a Muslim woman must undergo after a divorce or death of her husband before she is allowed to remarry. The iddah period is determined based on the menstrual cycle or the Islamic month. In some cases, especially when the divorce or death occurs towards the end of the Islamic month, determining the beginning and end of the iddah can be complicated and requires accurate calculations. Astronomy provides a framework that allows the Shari'a courts to determine important dates during the iddah period with high accuracy. In some cases, the Shari'a courts use astronomical data to ensure that the iddah period is observed in accordance with the Shari'a, without any doubt about its accuracy.

Astronomy can also play a role in inheritance cases, especially when determining the time of death is a determining factor in the division of property. For example, in a case where two heirs die at approximately the same time, a sharia court may need to determine the exact time of death in order to decide how the estate will be divided.[21]

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[20]Ismail Ismail, "Urgensi Dan Legitimasi Fatwa Majelis Permusyawaratan Ulama Aceh Nomor 3 Tahun 2018 Tentang Penetapan Arah Kiblat," *Al-Manahij: Jurnal Kajian Hukum Islam* 14, no. 1 (June 2, 2020): 87–98, https://doi.org/10.24090/MNH.V14I1.3669.

[21]Lauhatun Nashiha and Mahsun Mahsun, "Kajian Ilmu Falak Dan Astronomi Dalam Sudut Pandang Filsafat Ilmu," *Astroislamica: Journal of Islamic Astronomy* 3, no. 1 (2024): 29–50, https://doi.org/10.47766/astroislamica.v3i1.2645.

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In such cases, astronomy can be used to provide relevant astronomical data, such as the phase of the moon or the time of sunrise and sunset, to assist the court in determining the exact time of death. Although such cases are rare, the use of astronomy in a legal context shows how science can influence Islamic legal decisions in complex situations.

4. CONCLUSION

This paper has discussed how astronomy has influenced Islamic law in various aspects, including determining the time of worship, the direction of the Qibla, and sharia legal decisions. Astronomy has made significant contributions in ensuring that Islamic law practices can be carried out with high accuracy, which is very important in the daily lives of Muslims. The use of astronomy in determining worship times, such as prayer times and the beginning of the Hijri month, has enabled Muslims to perform their worship on time. The development of modern technology, such as smartphone applications and astronomical software, has made it easier to determine prayer times and the direction of the Qibla, but has also sparked debate among scholars regarding the acceptability of these new methods in the context of Islamic tradition.

In the context of sharia law, astronomy plays an important role in decisions that require precise timing and astronomical calculations. Cases involving determining the beginning and end of the iddah period, the division of inheritance, and the establishment of the Hijri calendar show how astronomy can influence Islamic legal decisions. However, challenges remain in reconciling traditional and modern astronomy, and in integrating new technologies with sharia principles. Ongoing dialogue between scholars, astronomers, and the public is needed to ensure that Islamic law remains relevant and accurate in the modern context.

In conclusion, astronomy and Islamic law are two complementary disciplines, and their integration is an essential part of the Islamic intellectual tradition. By understanding and appreciating the role of astronomy in Islamic law, Muslims can continue to practice their worship with full confidence and certainty. Astronomy has made a very significant contribution to the practice of Islamic law, especially in the context of determining the time of worship, the direction of the Qibla, and determining the beginning of the Hijri month. Through astronomy, Muslims can carry out Islamic teachings more precisely

and accurately. In the development of modern fiqh, the role of astronomy is increasingly recognized as an important tool in interpreting and implementing Islamic law, especially in terms of determining the time and scheduling of worship. Therefore, the influence of astronomy in Islamic law is one example of how science and religion can go hand in hand to facilitate the religious life of Muslims.

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