



## The Concept of Qibla Direction in Sayyid Usman's *Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah*

Mau'idhatul Hasanah Ridwan <sup>a,1\*</sup>, Ahmad Izzuddin <sup>b,2</sup>, Fatmawati Hilal <sup>b,3</sup>

<sup>a,1</sup> Penggiat Ilmu Falak Makassar dan Mahasiswa Pascasarjana UIN Walisongo Semarang, Jl. Walisongo No 3-5, Tambakaji, Kec. Ngaliyan, Kota Semarang, Jawa Tengah, 50185

<sup>b,2</sup> Ketua Asosiasi Dosen Falak Indonesia dan Guru Besar Ilmu Falak UIN Walisongo Semarang, Jl. Walisongo No 3-5, Tambakaji, Kec. Ngaliyan, Kota Semarang, Jawa Tengah, 50185

<sup>b,3</sup> Guru Besar Ilmu Fikih Siyash/Fikih Politik UIN Alauddin Makassar, Jl. Sultan Alauddin No. 63, Romangpolong, Kec. Domba Opu, Kabupaten Gowa, Sulawesi Selatan, 92113

<sup>1</sup>[nhana.la285@gmail.com](mailto:nhana.la285@gmail.com), <sup>2</sup>[izzuddin@walisongo.ac.id](mailto:izzuddin@walisongo.ac.id), <sup>3</sup>[fatmawati@uin-alauddin.ac.id](mailto:fatmawati@uin-alauddin.ac.id)

\*Corresponding Author

**Abstract:** Establishing the correct Qibla direction is essential for Muslims when performing prayers, particularly in distant regions like Southeast Asia, far from the Kaaba. This study examines the viewpoints and techniques of Sayyid Usman bin Abdullah bin Aqil bin Yahya in ascertaining the Qibla, as documented in his manuscript *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*, while evaluating its significance within the framework of Islamic astronomy and historical context. A qualitative methodology was adopted, relying on textual analysis of the primary source alongside supplementary scholarly references. The research highlights Sayyid Usman's integrative approach, blending religious principles with astronomical calculations to ensure precision in Qibla alignment. His techniques included observing *rasd al-qiblah* the phenomenon where the sun aligns vertically above the Kaabah and tracking the position of the star Arcturus (*as-Simak*) for regions like Java and the Malay Peninsula. His work differentiates between the exact bearing of the Kaaba (*'ain al-qiblah*) and its approximate direction (*jihah al-qiblah*), advocating for expertise in astronomical science (*'ilm al-falak*) to issue accurate religious rulings. Furthermore, he challenged unsubstantiated practices, urging adherence to rigorous scholarly interpretation (*ijtihad*) or the guidance of qualified jurists. In conclusion, Sayyid Usman's contributions in *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* advanced both theoretical and practical dimensions of Qibla determination in the Malay Archipelago. His methodologies transcended their era, retaining applicability in contemporary settings and offering potential synergy with modern advancements. This work exemplifies how interdisciplinary harmony between Islamic jurisprudence and empirical science can yield actionable solutions to theological challenges.

**Keywords:** Sayyid Usman, Qibla Direction, *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*.

**Abstrak:** Menentukan arah kiblat yang benar merupakan hal yang sangat penting bagi umat Islam ketika melaksanakan salat, terutama di wilayah yang jauh seperti Asia Tenggara, yang jauh dari Kaabah. Penelitian ini mengkaji sudut pandang dan teknik Sayyid Usman bin Abdullah bin Aqil bin Yahya dalam menentukan arah kiblat, seperti yang didokumentasikan dalam manuskripnya *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*, sambil mengevaluasi signifikansinya dalam kerangka astronomi Islam dan konteks historis. Metodologi kualitatif diadopsi, dengan mengandalkan analisis tekstual dari sumber utama bersama dengan referensi ilmiah tambahan. Penelitian ini menyoroti pendekatan integratif Sayyid Usman, yang memadukan prinsip-prinsip agama dengan perhitungan astronomi untuk memastikan ketepatan arah kiblat. Teknik-teknik yang digunakannya termasuk mengamati *rashdul kiblat*, yaitu fenomena di mana matahari sejajar secara vertikal di atas Kaabah dan melacak posisi bintang Arcturus (*as-Simak*) untuk wilayah-wilayah seperti Jawa dan Semenanjung Malaya. Karyanya membedakan antara arah yang tepat dari Kaabah (*'ain al-qiblah*) dan arah perkiraannya (*jihah al-qiblah*), menganjurkan keahlian dalam ilmu astronomi (*'ilm al-falak*) untuk mengeluarkan keputusan agama yang akurat. Lebih jauh lagi, ia menantang praktik-praktik yang tidak berdasar, dan mendorong kepatuhan pada interpretasi ilmiah yang ketat (*ijtihad*) atau bimbingan para ahli hukum yang berkualifikasi. Sebagai kesimpulan, kontribusi Sayyid Usman dalam *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* memajukan dimensi teoritis dan praktis penentuan kiblat di Kepulauan Melayu. Metodologi yang digunakannya melampaui zamannya, tetap dapat diterapkan di era kontemporer dan menawarkan potensi sinergi dengan kemajuan modern. Karya ini mencontohkan bagaimana keselarasan interdisipliner antara fikih Islam dan ilmu pengetahuan empiris dapat menghasilkan solusi yang dapat ditindaklanjuti untuk tantangan teologis.

**Kata Kunci:** Sayyid Usman, Arah Kiblat, *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*.



## A. Introduction

In Islamic worship practices, the direction of the Qibla is a crucial element, particularly for performing prayer,<sup>1</sup> which requires precise orientation toward the Kaaba more specifically, Mecca as the spiritual and geometric.<sup>2</sup> Although it may seem straightforward, determining the Qibla has often been a subject of complex debate. With advancements in science and technology,<sup>3</sup> Muslim scholars and intellectuals continue to strive for more accurate methods of establishing the Qibla direction, especially for Muslims residing far from Mecca.

According to Abdul Jamil, the Qibla is defined as the direction measured from the northern point toward the vertical circle passing through a celestial body or a specific location, with the measurement taken along the horizontal circle's line, following the clockwise direction.<sup>4</sup> In contrast, Ahmad Izzuddin offers a differing perspective, stating that the Qibla refers to the direction toward the Kaaba or at least the Sacred Mosque (Masjid al-Haram) determined by the geographical coordinates of the Kaaba's longitude and latitude. This implies that the Qibla is the obligatory orientation toward the Kaaba or the Sacred Mosque, adjusted according to one's geographical location.<sup>5</sup> Meanwhile, Muhyiddin Khazin emphasizes that the Qibla is the prescribed direction every individual must face while performing Salah (prayer), ensuring that all prayer movements whether standing, bowing (ruku'), or prostrating (sujud) align precisely with this orientation.<sup>6</sup>

One of the scholars deeply invested in religious issues was Sayyid Usman bin Abdillah bin Aqil bin Yahya (1822–1914 CE), a prominent figure from Betawi (Jakarta) active from the 19th to early 20th century.<sup>7</sup> In his seminal work *Tahrir Aqwā al-Adillah fi Tahṣīl 'Ayn al-Qiblah* (The Clarification of the Strongest Proofs for Determining the Qibla's Direction), Sayyid Usman meticulously examined matters related to the Qibla, blending traditional Islamic scholarship with modern scientific advancements of his era particularly in astronomy. This treatise stands as a critical contribution, addressing the persistent challenge of Qibla determination for Muslim communities in archipelagic regions, geographically distant from the Islamic heartlands of the Middle East. Leveraging the scientific data available at the time, Sayyid Usman offered practical yet sharia-compliant solutions, establishing his work as a primary reference for scholars across the Malay Archipelago (Nusantara).

Sayyid Usman bin Abdullah bin Aqil bin Yahya's *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* (The Elucidation of the Strongest Evidence for Determining the Qibla Direction)

---

<sup>1</sup>Muhyiddin Khazin, *Ilmu Falak Dalam Teori Dan Praktik: Perhitungan Arah Kiblat, Waktu Shalat, Awal Bulan, Gerhana*, Cet.1. (Yogyakarta: Buana Pustaka: Buana Pustaka, 2004), 48.

<sup>2</sup>Mahya Ghouhani, Mohammad Taji, and Fatemeh Kordafshari, "The Effect of Qibla Direction on the Hierarchy of Movement in Mosque: A Case Study of Mosques in Yazd, Iran," *Frontiers of Architectural Research* 8, no. 3 (2019): 398, <http://dx.doi.org/10.1016/j.foar.2019.01.002>.

<sup>3</sup>Ahmad Izzuddin, *Ilmu Falak Praktis (Metode Hisab Rukyat Praktis Dan Solusi Permasalahannya)* (Semarang: Komala Grafika, 2006), 21.

<sup>4</sup>Abdul Jamil, *Ilmu Falak Menurut Teori Dan Aplikasi*, cet. IV. (Jakarta: Amzah, 2016), 109.

<sup>5</sup>Ahmad Izzuddin, *Menentukan Arah Kiblat Praktis* (Semarang: Walisongo Press, 2010), 4.

<sup>6</sup>Muhyiddin Khazin, *Kamus Ilmu Falak* (Yogyakarta: Buana Pustaka, 2004), 64.

<sup>7</sup>Muhammad Noupal, "Kontroversi Tentang Sayyid Utsman Bin Yahya (1822-1914) Sebagai Penasehat Snouck Hurgronje" (2012): 1371.



represents an authoritative synthesis of Islamic scholarly tradition and empirical astronomical approaches, particularly in the context of qibla determination. One of the treatise's most notable features is its employment of locally-based celestial observation methods, specifically using the star *as-Simak ar-Ramih* (Arcturus) as a qibla indicator for Java and the Malay regions. This approach demonstrates remarkable intellectual adaptability to the geographical conditions of the Malay Archipelago while affirming Sayyid Usman's position as a scholar responsive to the scientific and social challenges of the colonial era.

Beyond presenting traditional methods supported by astronomical data precision, the work also provides technical information in the form of qibla azimuth coordinates for various regions of the Dutch East Indies, making it a practical guide of significant scientific value. This distinctive quality establishes *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* as an intellectual heritage that holds importance not only historically but also maintains epistemological relevance for contemporary Islamic astronomy (falak) studies. Consequently, this treatise deserves to be a primary subject for educational media, serving as a means to introduce the dynamics and contributions of Nusantara Islamic thought to broader audiences through both scholarly and visual presentations.

Existing scholarship on Sayyid Usman's contributions to qibla determination has primarily focused on his role as a Nusantara scholar in the development of Islamic astronomy (falak). However, few studies have specifically examined his seminal work, *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* (The Elucidation of the Strongest Evidence for Determining the Qibla Direction). Fahmi and Rifai<sup>8</sup> discussed the historical development of Islamic astronomy and its application in qibla determination, mentioning Sayyid Usman's works only in passing. Similarly, Hakim and Mahmud<sup>9</sup> addressed traditional and astronomical methods in falak studies, including brief references to Sayyid Usman's views, but with broader focus on methodological debates in the field.

This scholarly gap highlights the need for dedicated research that specifically analyzes *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* to uncover the historical development of Sayyid Usman's thought regarding qibla determination. While the treatise is widely recognized as an important reference in qibla studies, there remains a paucity of research that critically examines the historical context and intellectual foundations of Sayyid Usman's ideas. Moreover, the contemporary relevance of his methodology for accurate and universally acceptable qibla determination has yet to be thoroughly explored. This study aims to address these research gaps by providing a comprehensive analysis of Sayyid Usman's historical contributions to qibla determination, particularly through close examination of his methodological approaches in *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*.

---

<sup>8</sup>Rifai, "Ilmu Falak Dan Perannya Dalam Penentuan Arah Kiblat," 2019.

<sup>9</sup>Hamdan Mahmud, "Penentuan Arah Kiblat Dengan Metode Kompas 'Mekkah,' *JOURNAL OF ISLAMIC AND LAW STUDIES* (2022).



## B. Method

This study employs a qualitative research design,<sup>10</sup> specifically utilizing a literature-based (library research) approach. The primary data is obtained through direct textual analysis of the original manuscript of *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* (The Elucidation of the Strongest Evidence for Determining the Qibla Direction), accessed in digital format as the main textual source. For data collection, the researcher examines relevant materials concerning *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* from various academic literature, including journal articles and dissertations. These secondary sources serve to enhance comprehension of the primary text by establishing correlations that provide broader contextual understanding.

The data analysis involves in-depth interpretation of *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* as the primary source, employing content analysis to identify Sayyid Usman's core ideas and arguments regarding qibla determination. A historical approach is implemented to explore both internal factors (such as Sayyid Usman's personal intellectual framework) and external factors (including socio-cultural contexts and the development of Islamic astronomy during his era). This analytical process aims to produce a comprehensive synthesis of Sayyid Usman's thought, examining its relevance to qibla determination methodology and its contributions to Islamic astronomical studies (falak) from both historical and contemporary perspectives.

## C. Results And Discussion

### 1. Biography Sayyid Usman

Amidst the historical currents of the Nusantara region emerged a prominent figure, Sayyid Usman, fully named Al-Habib Sayyid Usman bin Abdullah bin Aqil bin Yahya al-Alawy al-Husainy. Born in Pekojan, Batavia in 1238 H (1840 CE).<sup>11</sup> he came from a distinguished lineage - his father being a Hadhrami born in Mecca, while his mother Aminah was the daughter of Sheikh Abd ar-Rahman bin Ahmad al-Mishry. Sayyid Usman rose to become one of the most influential Arab – Hadhrami figures in the late 19th and early 20th century Nusantara. His authority was formally recognized when he was appointed Mufti of Batavia by the Dutch colonial government. Beyond his religious duties, he held a special advisory position on Arab affairs within the colonial administration, frequently mediating in matters concerning native populations and Islamic affairs. Notably, he maintained a close professional relationship with the renowned Orientalist scholar Snouck Hurgronje.<sup>12</sup> Sayyid Usman's early career in Nusantara began when he was asked to replace Haji Abdul Ghani Bima, an aging prominent scholar who could no longer teach due to health issues, as instructor at Pekojan Mosque. Haji Abdul Ghani Bima himself was among the leading Javanese ulama who had studied in Mecca

---

<sup>10</sup>Lexy J. Meleong, “Metodologi Penelitian Kualitatif” (Bandung: Remaja Rosdakarya, 2008), 6.

<sup>11</sup>Arwin Juli Rakhmadi Butar-butur, *Mengenal Karya-Karya Ilmu Falak Nusantara (Transmisi, Anotasi Dan Biografi)* (Yogyakarta: CV Arti Bumi Intaran, 2018), 48.

<sup>12</sup>Azyumardi Azra, “Jaringan Global Dan Lokal Islam Nusantara” (Bandung: Mizan, 2002).



but chose to return to Nusantara in his later years, making this transition particularly significant in the transmission of Islamic knowledge.<sup>13</sup>

The historical narrative of Sayyid Usman's lineage reveals significant influences and contributions, particularly through his maternal grandfather, Sayyid Abd ar-Rahman al-Mishry (d. 1847 CE). Originally from Egypt, al-Mishry first arrived in the Nusantara region, making initial landfall in Palembang and Padang as a merchant. However, he eventually settled in Petamburan, Batavia, where he established a mosque and dedicated himself to Islamic education. Renowned for his expertise in astronomical science (ilm al-falak), al-Mishry made substantial contributions, particularly in correcting and refining the qibla orientations of several mosques in Palembang. His scholarly legacy extended to the upbringing of his grandson, as he assumed primary responsibility for Sayyid Usman's early education after the boy's father returned to Mecca when Sayyid Usman was merely three years old.<sup>14</sup> This familial tutelage proved foundational, as al-Mishry personally instructed the young Sayyid Usman in religious matters, with special emphasis on qibla determination methodologies. The grandfather's dual role as both spiritual mentor and scientific practitioner indelibly shaped Sayyid Usman's later scholarly approach, particularly in his synthesis of traditional Islamic learning with practical astronomical applications.

In his formative years, Sayyid Usman embarked on a transformative journey to Mecca at the age of 18 in 1840, residing there until 1847. During this period, he studied under several distinguished scholars, including Sayyid Ahmad Zaini Dahlan, Sheikh Ahmad Dimyathi, and Sayyid Muhammad bin Husein al-Habsyi, whose teachings profoundly shaped his intellectual foundation and future contributions to the Muslim community in the Malay Archipelago. Following seven years in Mecca, in 1848, Sayyid Usman traveled to Hadramaut to further his education under renowned scholars such as Sayyid Abdullah bin Husein bin Thahir and Sayyid 'Alwi bin Saqqaf al-Jufri. He then visited Medina to study under Sheikh Muhammad al-Azab before spending eight months in Egypt. His scholarly pursuits took him to Tunisia, where he studied for five months with Sheikh Muhammad bin Abdul Jawad and the Mufti Pasha of Gabes.

Continuing his quest for knowledge, Sayyid Usman traveled to Algeria and Fez, Morocco, to deepen his understanding of Islamic jurisprudence. In Istanbul, he established a three-month mentorship with the Sheikh al-Islam (Ottoman chief religious authority). His educational journey also included a pilgrimage to Jerusalem (Bayt al-Maqdis) and Al-Aqsa Mosque, where he studied under Sheikh Abdul Qadir al-Jazairi. After spending several years in Hadramaut with his family, he ultimately returned to Indonesia.<sup>15</sup> bringing with him a wealth of knowledge that would significantly influence Islamic scholarship in the region.<sup>16</sup>

---

<sup>13</sup>Edwin P. Wieringa, "Islam, Colonialism and the Modern Age in the Netherlands East Indies. A Biography of Sayyid 'Uthman (1822–1914) By Nico J. G. Kaptein," *Journal of Islamic Studies* (2017).

<sup>14</sup>Arwin Juli Rakhmadi Butar-butur, "Warisan Ilmu Falak Sayyid Usman (w. 1331 H/1913 M)" (Umsu Press, 2021).

<sup>15</sup>Abdullah bin Utsman, "*Suluh Zaman*" (Jakarta: Percetakan Sayyid Utsman, tt, n.d.), 3.

<sup>16</sup>Alimuddin, "Sejarah Perkembangan Ilmu Falak," *Al-Daulah* 2, no. 2 (2013), [https://journal.uin-alauddin.ac.id/index.php/al\\_daulah/article/download/1475/1423/](https://journal.uin-alauddin.ac.id/index.php/al_daulah/article/download/1475/1423/).





Renowned for his scholarly productivity, Sayyid Usman authored an impressive corpus of 104 works spanning Islamic theology (aqidah), jurisprudence (fiqh), and particularly Islamic astronomical sciences (falak), with fourteen specialized treatises dedicated to celestial calculations including his notable works *Qawl al-Sawab* and *Kitab Keker Bulan*, which demonstrate his sophisticated understanding of astronomical principles and their application within an Islamic framework; his writings consistently reflect both technical mastery and deep engagement with classical Islamic scholarship through extensive citations of authoritative opinions from diverse scholarly traditions, methodically incorporated to construct well-substantiated arguments while maintaining relevance to Southeast Asia's unique socio-religious context, thereby establishing his works as significant contributions that bridge traditional Islamic learning with localized scientific applications.<sup>17</sup> A closer examination of Sayyid Usman's scholarly output reveals his writings as direct responses to contemporary societal concerns, systematically addressing pressing questions from his community through rigorous Islamic scholarship; his works consistently begin by identifying practical issues faced by Muslims in daily life, particularly reflecting his dual role as both a mufti resolving jurisprudential matters (fiqh) and an astronomer tackling technical challenges in Islamic celestial sciences (falak), including qibla determination and lunar calendar calculations, while deeper textual analysis demonstrates how his treatises emerged from genuine academic concerns that motivated him to articulate sophisticated solutions through writing, ultimately showcasing his remarkable intellectual breadth and profound engagement with both classical Islamic traditions and the specific needs of Southeast Asian Muslim communities during the colonial period.

Sayyid Usman's astronomical treatises were strategically composed in dual linguistic formats – classical Arabic and Malay using Arabic script (Jawi/Pegon) - demonstrating both his scholarly versatility and socio-cultural awareness as this bilingual approach effectively accommodated the varied literacy levels within his contemporary Muslim community.<sup>18</sup> with the deliberate alternation between Arabic-Malay hybrid texts and later Latin script publications revealing his astute understanding of different reader demographics and their respective educational backgrounds, thereby ensuring wider accessibility while maintaining academic rigor in Islamic astronomical discourse.

## **2. Historical Review of Sayyid Usman's Intellectual Contributions**

As a prominent Islamic scholar in the Malay Archipelago, Sayyid Usman bin Abdul Halim frequently addressed various community challenges, including contentious issues that sparked public debate, particularly the recurring disputes over lunar month determination which emerged from methodological disagreements among scholars regarding the most accurate calculation system, reflecting the broader epistemological tensions between traditional

---

<sup>17</sup>Muh. Ilham Usman and Baharil, “Kontribusi Pemikiran Islam Sayyid Ahmad Khan Di Dunia Islam India,” *PAPPASANG* (2020).

<sup>18</sup>M Ulinuha, “Penentuan Arah Kiblat Menggunakan Arah Tenggelam Bintang As-Simak (Arcturus) Dalam Kitab Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah Karya Syaikh,” 2022.



observation practices and emerging astronomical computations in 19th century Islamic scholarship.<sup>19</sup> The treatise *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* (Clarification of the Strongest Evidence for Determining the Qibla) represents Sayyid Usman's second major work on qibla orientation, following his earlier composition *Igazz an-Niyam fima Yata'allag bi al-Ahillah wa ash-Shiyama*.<sup>20</sup> where he systematically examines qibla determination through comprehensive references to authoritative opinions within the Shafi'i school of jurisprudence, demonstrating his methodological approach of combining classical legal interpretations with practical astronomical applications for accurate prayer direction.

The composition of this treatise was motivated by two significant events in 1320 H: first, Sayyid Usman's encounter with persistent resistance in Yogyakarta regarding the correction of a mosque's mihrab alignment, where despite precise astronomical measurements demonstrating the inaccuracy of the existing qibla direction, local communities stubbornly adhered to the traditional orientation while dismissing the authoritative opinion of Al-'Allamah al-Kurdi, a respected Shafi'i scholar who emphasized the obligatory nature of precise qibla determination; and second, a similar controversy in Banjarmasin where certain groups maintained that general directional approximation (jihah) sufficed for prayer, arrogating to themselves the authority of qualified jurists (mujtahid) by claiming their rulings - whether correct or erroneous - deserved unquestioned compliance. These recurring disputes prompted Sayyid Usman to systematically compile this work, meticulously referencing established opinions within the Shafi'i school to address these prevalent misconceptions while clarifying the stringent qualifications required for authentic Islamic legal reasoning (ijtihad), thereby asserting that neither arbitrary personal judgments nor popular consensus could override theologically and scientifically verified qibla orientations.<sup>21</sup>

### 3. *Kitab Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*

*Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* (The Exposition of the Strongest Evidence for Determining the Qibla Direction) stands as one of Sayyid Usman bin Yahya's significant bilingual works, composed in both Arabic and Malay in 1872 CE, wherein he systematically examines various qibla-related issues through the jurisprudential lens of the Shafi'i school, presenting detailed astronomical calculations alongside authoritative legal interpretations to address contemporary debates about prayer direction accuracy in the Malay Archipelago.<sup>22</sup> The treatise is systematically organized into an introductory chapter (mukadimah), fourteen substantive chapters (fasal), and a concluding section, with the main body of work addressing:<sup>23</sup>

---

<sup>19</sup>Wieringa, "Islam, Colonialism and the Modern Age in the Netherlands East Indies. A Biography of Sayyid 'Uthman (1822–1914) By Nico J. G. Kaptein."

<sup>20</sup>Mada Sanjaya W.S, "Astronomi Ilmu Falak Habib Usman Bin Yahya Mufti Betawi (1822-1914)," in *Cet 1* (Bandung: Bolabot, 2021).

<sup>21</sup>Mada Sanjaya, *Astronomi Ilmu Falak Habib Usman Bin Yahya Mufti Betawi (1822-1914)*, Cet. 1. (CV.Bolabot : Bandung, 2021).

<sup>22</sup>Sayful Mujab, "Kiblat Dalam Perspektif Madzhab-Madzhab Fiqh," *Jurnal Pemikiran Hukum Dan Hukum Islam* 5 (2014).

<sup>23</sup>Usman bin Abdillah bin Aqil bin Yahya, "Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah" (Betawi, 1902), 2.



- a. The treatise first systematically examines authoritative positions within the Shafi'i school concerning the obligatory application of jurisprudential rulings (fatwa) and related legal determinations.
- b. Secondly, it delineates the prohibition against employing non-canonical (ghairu mu'tamad) opinions within Shafi'i jurisprudence when issuing legal verdicts, while emphasizing the imperative to adhere strictly to divine revelations.
- c. Thirdly, the work underscores the prohibition against issuing fatwas or legal judgments without proper scholarly foundation, particularly addressing prevalent misconceptions and deviations regarding qibla orientation and related matters.
- d. Fourthly, it stresses the mandatory obligation to reference verified truths while comprehending existing erroneous interpretations.
- e. The fifth section methodically outlines the procedural stages required for accurate qibla determination.
- f. Sixthly, the text provides a jurisprudential classification of regulations pertaining to mosque prayer niches (mihrabs).
- g. Seventhly, it establishes the compulsory nature of studying evidentiary proofs (adillah) related to qibla direction.
- h. The eighth chapter clarifies the critical distinction between precise qibla alignment ('ain al-qibla) and general directional approximation (jihah al-qibla).
- i. Ninthly, it examines scholarly consensus (ijma') regarding the obligation of qibla orientation based on strong probability (zhan) when distant from Mecca.
- j. The tenth section presents geographical coordinates (latitude and longitude) as the most substantiated evidence for determining qibla directions across regions.
- k. Eleventhly, it analyzes Java and Malay archipelago qibla determinations through advanced cartographic examination.
- l. The twelfth chapter introduces an alternative qibla calculation method utilizing biannual solar positioning (rasd al-qibla phenomenon).
- m. Thirteenthly, it emphasizes proper qibla comprehension while documenting scholarly consensus against arbitrary directional practices.
- n. The final chapter provides jurisprudential rulings (ahkam) concerning prayer validity when incorrectly oriented away from the true qibla direction.

This 22-page scholarly work provides a comprehensive examination of several critical aspects regarding qibla determination.<sup>24</sup> The treatise meticulously explores four main themes: first, the necessity of employing authoritative legal opinions when establishing qibla direction; second, the obligatory nature of studying evidentiary proofs related to proper prayer orientation; third, the crucial distinction between exact qibla alignment ('ain al-qibla) and general directional approximation (jiha al-qibla); and fourth, various methodological approaches for accurate qibla

---

<sup>24</sup> Yahya, "Tahrīr Aqwā Al-Adillah Fī Tahshīl 'Ain Al-Qiblah," 10.





calculation, including the specialized technique of solar alignment known as *rasd al-qibla* (qibla observation through sun positioning).

#### 4. Analysis of *Kitab Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*

This seminal work by Sayyid Usman provides meticulous qibla direction charts measured in degrees and minutes for numerous locations across the Dutch East Indies, spanning from Aceh to Ternate. These precise guidelines enabled communities to establish new mosques with unprecedented accuracy in prayer orientation. The treatise thus serves dual purposes: as a practical manual for mosque construction and as a significant intellectual contribution to Islamic scholarship in the Malay Archipelago, emphasizing the importance of precision in worship practices. Sayyid Usman highlights the fundamental nature of proper qibla orientation in Islamic worship by building upon Sheikh al-Masyhur's four-tiered classification system. The highest level involves direct visual or physical contact with the Kaaba, attainable only by those in Mecca. The second tier applies when visual confirmation is obstructed, requiring reliance on trustworthy witnesses. The third level emphasizes *ijtihad* (independent reasoning) for distant locations, necessitating the use of various indicators to determine exact qibla alignment (*'ain al-qibla*). Finally, for those incapable of personal judgment, the work permits following the guidance of qualified jurists (*mujtahid*), thereby creating an inclusive system accommodating different circumstances while maintaining theological rigor.<sup>25</sup>

The treatise elaborates on two fundamental interpretations of *'ayn al-qibla* (exact qibla direction). The first denotes physical orientation toward the Kaaba with absolute certainty, applicable primarily to those in proximity to the sacred sanctuary. The second constitutes symbolic alignment (*qibla 'urfi*), achieved through scientific instruments like azimuth calculations - a methodological approach particularly relevant for distant locations. This dual conceptualization finds resonance in contemporary Islamic scholarship, as exemplified by Slamet Hambali's definition of qibla as directional orientation toward the Kaaba, a perspective rooted in Muhammad al-Katib al-Syarbini's classical jurisprudence. The work thus bridges traditional Islamic legal thought with practical astronomical applications, accommodating both theological ideals and geographical realities in Muslim worship practices.<sup>26</sup> Through this explanation, Sayyid Usman not only provides practical guidance for Muslims in determining the direction of the Qibla but also emphasizes the importance of a deep and accurate understanding of worship practices. This work reflects his commitment to scholarly rigor and correct methodology in upholding Islamic law, while also making a significant contribution to Islamic thought in the Nusantara region. Thus, *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* serves as an essential reference for future generations in comprehending and fulfilling religious obligations properly and correctly.<sup>27</sup>

In conclusion, this book thoroughly examines the importance of relying on well-founded opinions when determining the Qibla direction, the obligation to study relevant evidence

---

<sup>25</sup>Yahya, "Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah," 6.

<sup>26</sup>Slamet Hambali, "Ilmu Falak 1," in *Semarang: Program Pascasarjana IAIN Walisongo*, 2011, 167.

<sup>27</sup>Yahya, "Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah," 10.



concerning the Qibla, and the methods established by Sayyid Usman during his time. One particularly fascinating aspect of Sayyid Usman's work is his use of the star As-Simak (Arcturus) to determine the Qibla—a method that remains remarkably accurate and relevant even in contemporary times,<sup>28</sup> as extensively detailed in his book *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah*. Additionally, the text explores the solar shadow method for identifying the Qibla, known as rasydul kiblat, which occurs when the sun aligns directly above the Kaaba twice a year. Below is a detailed explanation of these methods.

This book presents a fascinating and distinctive approach to determining the Qibla direction. It explains that for the regions of Java and the Malay Archipelago, the Qibla can be identified by observing the setting position of the star as-Simak ar-Ramih, more commonly known as Arcturus,<sup>29</sup> Located in the Bootes constellation (the Plough), this star is easily visible in these regions due to its declination of 19 degrees from the celestial equator and its brightness with a magnitude of -0.05,<sup>30</sup> making it the fourth brightest star in the night sky. According to Sayyid Usman, using Arcturus as a celestial marker for the Qibla directly corresponds to the geographical position of the Kaaba ('ainul Ka'bah).

In the fourteenth chapter, Sayyid Usman further elaborates on this sunset-direction method by describing it as "ala sabili at-taqrib",<sup>31</sup> meaning an approximation-based approach. The author clarifies that this method does not require the star as-Simak (Arcturus) to be precisely below the horizon (ufuk), as stellar sunset differs from celestial bodies like the Sun or Moon. Given its immense distance and the limitations of human vision, only bright stars, planets, the Moon, and the Sun can be distinctly observed. Beyond the Moon and Sun, humans have long recognized bright planets such as Mercury, Venus, Mars, Jupiter, and Saturn since ancient times. Thus, as-Simak (Arcturus) indicates the Qibla direction when positioned at its "setting point" – westward for Java and the Malay Archipelago – specifically during its rashdul qiblat alignment. According to manual calculations, the star's elevation at this rashdul qiblat position ranges between +21 to +25 degrees above the horizon, which is still considered its "setting" orientation for practical determination.

The use of the star as-Simak (Arcturus) as a reference point for determining the qibla direction offers a fascinating alternative method to solar observation. According to Sayyid Utsman, the qibla direction for Java and the Malay Archipelago can be approximated by observing the setting position of this star. In practice, as-Simak (Arcturus) proves particularly easy to recognize and identify due to its distinctive color and notable magnitude. Furthermore, the Earth's rotational movement causes this star to pass through the qibla's azimuth point in

---

<sup>28</sup>Ulinuha, "Penentuan Arah Kiblat Menggunakan Arah Tenggelam Bintang As-Simak (Arcturus) Dalam Kitab Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah Karya Syaikh."

<sup>29</sup>Winardi Sutantyo, *Bintang Di Alam Semesta* (Bandung: Penerbit ITB, 2010).

<sup>30</sup>Imam Saruji, "Penentuan Arah Kiblat Menggunakan Azimuth Bintang Dan Planet" (skripsi Fakultas Syari'ah dan Ekonomi Islam IAIN Antasari, 2016).

<sup>31</sup>Yahya, "Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah," 6.



these regions daily. During specific times and in certain months when the star is visible, one can easily determine the qibla direction simply by facing toward this celestial marker.<sup>32</sup>

The stellar method for determining the qibla direction demonstrates remarkable accuracy, with only minimal deviation (a matter of minutes) when compared to solar azimuth measurements. This precision falls well within the maximum permissible tolerance threshold of  $0^{\circ}30'$ . The observation technique itself proves relatively straightforward, as observers need only focus on the star's central point. By aligning the star precisely at the center of a theodolite's lens, users can ensure proper targeting accuracy. Furthermore, calculations determining when the star reaches the qibla azimuth point remain highly reliable, as they derive from precise nighttime astronomical observations.<sup>33</sup> Thus, the methodology proposed by Sayyid Usman in his treatise demonstrates enduring relevance and warrants further scholarly examination. When the star Arcturus (as-Simak) aligns with the qibla azimuth in the Java-Malay archipelago, its position indeed indicates its impending setting. During this alignment, astronomers can conveniently calculate relevant celestial data by consulting the Nautical Almanac and other authoritative references.

The following discussion examines a significant astronomical phenomenon for qibla determination – the solar zenith transit over the Ka'bah (Rashd al-Qiblah). This biannual event in the Islamic calendar serves as the foundation for precise gnomon shadow calculations to verify the qibla direction. The much-anticipated Rashd al-Qiblah phenomenon occurs annually on May 28 and July 16 (with possible variations on May 27 and July 15), marking what astronomers celebrate as "Qibla Observation Day" a crucial occasion for qibla alignment verification. During these dates, Muslim communities worldwide typically organize various activities including on-site verification of qibla directions in mosques, prayer halls, and open fields, along with educational seminars and practical demonstrations using astronomical instruments. A particularly remarkable occurrence happens when the Sun reaches its zenith directly above the Ka'bah at latitude  $21^{\circ}25'N$ , causing vertical objects to cast shadows pointing precisely toward the qibla direction at any global location. This method has proven exceptionally effective for ensuring accurate qibla orientation across diverse geographical areas.<sup>34</sup>

Sayyid Usman's work commands particular attention for its detailed explanation of the Rashdul Qiblah phenomenon, which serves as a precise method for determining prayer direction. From an astronomical perspective, this significant event occurs when the Sun reaches its zenith directly above the Ka'bah, corresponding to a solar declination of  $21^{\circ}25'$  - matching the sacred site's latitude. This celestial phenomenon results from the Sun's annual apparent motion and becomes observable within the tropical belt between  $23.5^{\circ}N$  and  $23.5^{\circ}S$  latitude.

---

<sup>32</sup>Ulinuha, "Penentuan Arah Kiblat Menggunakan Arah Tenggelam Bintang As-Simak (Arcturus) Dalam Kitab Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah Karya Syaikh."

<sup>33</sup>Ulinuha, "Penentuan Arah Kiblat Menggunakan Arah Tenggelam Bintang As-Simak (Arcturus) Dalam Kitab Tahrir Aqwa Al-Adillah Fi Tahsil 'Ain Al-Qiblah Karya Syaikh."

<sup>34</sup>Adi Misbahul Huda, "Rashdul Kiblat Dua Kali Dalam Sehari Di Indonesia : Studi Analisis Pemikiran KH. Ahmad Ghozali Muhammad Fathullah Dalam Kitab Jami' Al-Adillah Ila Ma'rifati Simt Al-Qiblah - Walisongo Repository," 2016, 43.



This geographical coverage includes most of the Indonesian archipelago, enabling Muslim communities throughout the region to utilize this astronomical alignment for accurate qibla verification. Sayyid Usman's comprehensive treatment of *Rashdul Qiblah* maintains both scientific rigor and practical relevance, offering timeless guidance that remains valuable for contemporary Muslims seeking precise prayer orientation. His methodology bridges traditional Islamic astronomy with modern applications, demonstrating the enduring value of classical scholarship in addressing perennial religious needs.<sup>35</sup>

The term *Rasdul Qibla* has been an important part of the worship practices of Muslims in the archipelago for many years<sup>36</sup> In his work, Sayyid Usman carefully presents illustrations and visualizations that clarify the concept of *Rasdul Qibla* in the Java-Malay region. However, after conducting a deeper investigation, the author found that Sayyid Usman did not use the term *Rasdul Qibla*. Instead, he preferred to refer to One alternative way to determine the zenith position of the Kaaba is through the method of measuring latitude and longitude (*fi bayan kaifiyyah ukhra li ma'rifah samt al-Kakbah min thariq al-athwal wa al-'urudh*) in the 12th discussion. The approach taken by Sayyid Usman in explaining this method of determining the direction of the Qibla reflects its own uniqueness even though he does not use commonly known terminology.

One of the methods explained by Sayyid Usman in this book, chapter 12, to determine the direction of the Qibla is by observing the position of the Sun when it is directly above the Kaaba, a phenomenon that occurs twice a year in the city of Mecca. Sayyid Usman noted that these dates fall on May 30 and July 18. On both of these occasions, the Sun will be directly above the Kaaba, provided there are no obstructions around it. At that time, the declination of the Sun corresponds to the latitude of the city of Mecca, which is 21.5 degrees. Thus, anyone who faces the Sun or uses the shadow of a perpendicular object as a guide is actually heading directly towards the Kaaba.<sup>37</sup>

In his work entitled "*Astronomy of the Astronomical Sciences of Habib Usman bin Yahya Mufti Betawi (1822-1914)*", Mada Sanjaya conducted an in-depth analysis of the concept of *Rasdul Qibla* formulated by Sayyid Usman. To support his research, he developed a program using Python 3.9 which aims to determine the time of implementation of *Rasdul Qibla* accurately,<sup>38</sup> In an in-depth study of the *Rasdul Qibla* phenomenon, Sanjaya refers to the book "*Mekanika Bodies Celestial*" by Rinto Anugraha and "*Astronomical Algorithms*" by Jean Meeus. Through the algorithm analysis conducted, he found that the *Rasdul Qibla* event on May 30, 1902 occurred at 12:17:53 Mecca time, which is equivalent to 16:17:53 WIB. Meanwhile, the event that took place on July 18, 1902 was recorded as occurring at 16:26:36 WIB. Referring to Rinto Anugraha's explanation, Sanjaya emphasized that observations of the *Rasdul Qibla* are still considered accurate if carried out in the time span between May 26-30

<sup>35</sup>Butar-butur, "Warisan Ilmu Falak Sayyid Usman (w. 1331 H/1913 M)," 82.

<sup>36</sup>Ila Nurmila, "Metode Azimuth Kiblat Dan *Rashdul Kiblat* Dalam Penentuan Arah Kiblat," *Istinbath | Jurnal Penelitian Hukum Islam* (2017): 200.

<sup>37</sup>Yahya, "Tahrir Aqwā Al-Adillah Fi Tahshil 'Ain Al-Qiblah," 16.

<sup>38</sup>Sanjaya, *Astronomi Ilmu Falak Habib Usman Bin Yahya Mufti Betawi (1822-1914)*.



and July 14-18 each year.<sup>39</sup> In this study, it can be concluded that the Rasdul Qiblat method proposed by Sayyid Usman has proven to be very appropriate and relevant. It is important to note that Sayyid Usman did not specifically introduce the term Rasdul Qiblat (*rashd al-qiblah*) and the term seems to have emerged later and is more commonly used in Indonesia.

#### D. Conclusion

The study of *Tahrir Aqwa al-Adillah fi Tahsil 'Ain al-Qiblah* reveals that Sayyid Usman bin Abdullah bin Aqil bin Yahya successfully developed an integrative approach combining Shafi'i jurisprudence with astronomical methodology for qibla determination. The text's structure comprising an introduction, fourteen chapters, and a conclusion demonstrates not only systematic argumentation but also practical tools such as qibla coordinates for various Dutch East Indies regions. Methodologically, Sayyid Usman innovatively employed celestial phenomena like the setting of Arcturus (*as-Simak ar-Ramih*) and the solar zenith over the Ka'bah (*Rasdul Qiblah*) as empirical references. Beyond technical solutions, he emphasized scholarly authority in fatwa issuance and rejected weak opinions (*ghayr al-mu'tamad*) in legal determinations.

Theoretically, Sayyid Usman's work significantly expands contemporary astronomical discourse by bridging Islamic jurisprudence with modern scientific methodology. His integrative model remains relevant for addressing contemporary challenges from satellite verification to digital qibla applications while underscoring the necessity of astronomical literacy in collective Islamic decision-making. As such, his thought provides a conceptual framework for interdisciplinary astronomy curricula. Future research should comparatively analyze his methods with other 19th and early 20th-century Muslim astronomers while conducting philological studies of *Tahrir Aqwa al-Adillah* manuscripts to better understand its intellectual circulation. Rather than merely historical, Sayyid Usman's contributions offer an epistemological foundation for contextual and authoritative developments in contemporary Islamic astronomy.

#### Bibliography

- Alimuddin. (2013) "Sejarah Perkembangan Ilmu Falak." *Al-Daulah* 2, no. 2. [https://journal.uin-alauddin.ac.id/index.php/al\\_daulah/article/download/1475/1423/](https://journal.uin-alauddin.ac.id/index.php/al_daulah/article/download/1475/1423/).
- Anugraha, Rinto. (2012) *Mekanika Benda Langit*. Jurusan Fisika Fakultas MIPA Universitas Gadjah Mada.
- Azra, Azyumardi. (2012) "Jaringan Global Dan Lokal Islam Nusantara." Bandung: Mizan.
- Butar-butar, Arwin Juli Rakhmadi. (2018) *Mengenal Karya-Karya Ilmu Falak Nusantara (Transmisi, Anotasi Dan Biografi)*. Yogyakarta: CV Arti Bumi Intaran.
- . "Warisan Ilmu Falak Sayyid Usman (w. 1331 H/1913 M)" (2021) Umsu Press.
- Ghouchani, Mahya, Mohammad Taji, and Fatemeh Kordafshari. (2019) "The Effect of Qibla Direction on the Hierarchy of Movement in Mosque: A Case Study of Mosques in Yazd, Iran." *Frontiers of Architectural Research* 8, no. 3 : 396–405.

---

<sup>39</sup>Rinto Anugraha, *Mekanika Benda Langit* (Jurusan Fisika Fakultas MIPA Universitas Gadjah Mada, 2012).





- <http://dx.doi.org/10.1016/j.foar.2019.01.002>.
- Huda, Adi Misbahul (2016) “Rashdul Kiblat Dua Kali Dalam Sehari Di Indonesia : Studi Analisis Pemikiran KH. Ahmad Ghozali Muhammad Fathullah Dalam Kitab Jami’ Al-Adillah Ila Ma’rifati Simt Al-Qiblah - Walisongo Repository.
- Izzuddin, Ahmad. (2010) Menentukan Arah Kiblat Praktis. Semarang : Walisongo Press.
- Izzudin, Ahmad. (2006) Ilmu Falak Praktis (Metode Hisab Rukyat Praktis Dan Solusi Permasalahannya). Semarang:Komala Grafika.
- Jamil, Abdul. (2016) Ilmu Falak Menurut Teori Dan Aplikasi. Cet. IV. Jakarta : Amzah.
- Khazin, Muhyiddin. (2004) Ilmu Falak Dalam Teori Dan Praktik: Perhitungan Arah Kiblat, Waktu Shalat, Awal Bulan, Gerhana. Cet.1. Yogyakarta: Buana Pustaka: Buana Pustaka.
- . (2004) Kamus Ilmu Falak. Yogyakarta: Buana Pustaka.
- Mahmud, Hamdan. (2022) “Penentuan Arah Kiblat Dengan Metode Kompas ‘Mekkah.’” JOURNAL OF ISLAMIC AND LAW STUDIES.
- Meleong, Lexy J. (2008) “Metodologi Penelitian Kualitatif.” Bandung: Remaja Rosdakarya.
- Muh. Ilham Usman, and Baharil. (2020) “Kontribusi Pemikiran Islam Sayyid Ahmad Khan Di Dunia Islam India.” PAPPASANG.
- Mujab, Sayful. (2014) “Kiblat Dalam Perspektif Madzhab-Madzhab Fiqh.” Jurnal Pemikiran Hukum Dan Hukum Islam 5.
- Noupal, Muhammad. (2012) “Kontroversi Tentang Sayyid Utsman Bin Yahya (1822-1914) Sebagai Penasehat Snouck Hurgronje”.
- Nurmila, Ila. (2017) “Metode Azimuth Kiblat Dan Rashdul Kiblat Dalam Penentuan Arah Kiblat.” Istinbath | Jurnal Penelitian Hukum Islam.
- Rifai. (2019) “Ilmu Falak Dan Perannya Dalam Penentuan Arah Kiblat”.
- Sanjaya, Mada. (2021) Astronomi Ilmu Falak Habib Usman Bin Yahya Mufti Betawi (1822-1914). Cet. 1. CV.Bolabot : Bandung.
- Saruji, Imam. (2016) “Penentuan Arah Kiblat Menggunakan Azimuth Bintang Dan Planet.” kripsi Fakultas Syari’ah dan Ekonomi Islam IAIN Antasari.
- Slamet Hambali. (2011 ) “Ilmu Falak 1.” In Semarang: Progam Pascasarjana IAIN Walisongo, 167.
- Sutanty, Winardi. (2010) Bintang-Bintang Di Alam Semesta. Bandung: Penerbit ITB.
- Ulinuha, M. (2022) “Penentuan Arah Kiblat Menggunakan Arah Tenggelam Bintang As-Simak (Arcturus) Dalam Kitab Tahrir Aqwa Al-Adillah Fi Tahsil ‘Ain Al-Qiblah Karya Syaikh. Utsman, Abdullah bin. “Suluh Zaman.” Jakarta: Percetakan Sayyid Utsman, tt, n.d.
- W.S, Mada Sanjaya. (2021) “Astronomi Ilmu Falak Habib Usman Bin Yahya Mufti Betawi (1822-1914).” In Cet 1. Bandung: Bolabot.
- Wieringa, Edwin P. (2017) “Islam, Colonialism and the Modern Age in the Netherlands East Indies. A Biography of Sayyid ‘Uthman (1822–1914) By Nico J. G. Kaptein.” Journal of Islamic Studies.
- Yahya, Utsman bin Abdillah bin Aqil bin. (1902) “Tahrīr Aqwā Al-Adillah Fī Tahshīl ‘Ain Al-Qiblah.” Betawi.