

The Start of the Month of Ramaḍān: Legal Opinions and Community Cohesion

For many Muslims, the determination of the Islamic calendar can be a source of confusion—and often, such as when there are multiple dates for the beginning of Ramaḍān or for the two *‘Īds*, it can be a cause of considerable frustration as well.

The article below was originally written some years ago to shed light on the operation of the Islamic calendar and answer common questions that arise when various individuals and organizations reach different conclusions about the start of the month. We are publishing it in an updated version in this issue of *al-Sidrah* before the start of the blessed month of Ramaḍān.

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Questions about the calendar and the importance of sighting the crescent moon are not exclusive to the modern era. As the Qur’ān tells us, such questions existed in the time of the Prophet (s) himself.

We read in Sūrat al-Baqarah of the Qur’ān:

They ask you about the crescents. Say: They are times appointed for the people and for the hajj... (al-Qur’ān, 2:189)

This verse sets the new crescent as the standard for the beginning of the Islamic month. In this way, Islam introduced a purely lunar calendar that was distinct from the different calendars in use at the time in Arabia and elsewhere. Along with verses 36 and 37 of Sūrat al-Tawbah, which prohibit any form of modification or tampering with the calendar, this verse introduced a uniquely observational calendar that was directly accessible to the people without making them dependent on calculations, astrologers, or any central

coercive authority.

By establishing such a standard, Islam empowered the people: unlike other religions and civilizations, no emperor, priest, or king could impose his authority upon them by controlling or abusing the religious calendar. At the same time, a corresponding responsibility was placed on the people's shoulders: to determine each new month, they would have to learn to communicate with each other effectively and negotiate differences of opinion and understanding that naturally arise in any area of human endeavor.

For the Islamic calendar to fulfill its proper and intended function in society and in order to avoid doubt, confusion, and disunity, Muslims need to have some familiarity with the legal criteria for determining the beginning of the month. The first question which generally arises is, "Why can't Muslims achieve unity on such an important issue in the first place?"

The Role of *Ijtihād*

To answer that question, it is important to understand the nature and importance of the process of *ijtihād*—the process of deriving religious laws from the Qur'ān and Sunnah—within Islam, especially in the school of Ahl al-Bayt (a). When there are different *fatāwā* (pl. of *fatwā*) or religious rulings about an issue, it is common for people to ask questions along the lines of, "Why don't the scholars just get together, solve the issue, and give a single answer?"

This question reflects the natural tension that exists between free scholarly debate and uniformity of action. In any field of human endeavor, there is a tradeoff that arises in allowing academic disagreement: it permits scholarship to progress and develop, but it also leads to less conformity and agreement in practice. Two doctors may reach different conclusions about the best way to treat an illness; economists may offer different models and suggestions to prevent a recession; and jurists may differ in their interpretation of secular or religious law. On the other hand, imposing a specific solution or answer to a problem prevents confusion and disunity in practice, but it stifles the

advancement of knowledge.

Within the Sunni world, the introduction of the four well-known schools of *fiqh*—*Ḥanafī*, *Mālikī*, *Shāfi‘ī*, and *Ḥanbalī*—was just such an attempt to impose conformity on people’s religious practice by the Abbasid government of the time, who feared the proliferation of ever-increasing schools of *fiqh* among Muslims. By limiting the acceptable legal schools to four, they hoped to keep differences of opinion and practice within a manageable level.

However, within the school of Ahl al-Bayt (a) the practice of *ijtihād* has remained a continuous and unencumbered process from the time of the Imāms until the present day. The minor differences in religious rulings that do sometimes result are far outweighed by the benefits of the dynamic process of religious scholarship.

The Role of *Taqlīd* in Religious Practice

It is a misconception that *taqlīd* means following a *faqīh* (Islamic jurist) in all matters pertaining to religious practice. In reality, there is a difference between the legal ruling and its application. *Taqlīd* means abiding by the religious verdicts and rulings of a *faqīh*; these rulings are commonly known as *fatwā* (pl. *fatāwā*) in Arabic. However, the application of those rulings in daily life depends on determining that the conditions to which a particular ruling applies actually exist, and that is neither the role of a *faqīh*, nor necessarily his area of expertise.

For example, the *faqīh* will give us the ruling that wine is *najis* and *ḥarām* to ingest, and he will explain the standard by which to determine what constitutes wine. That standard—his religious ruling—is binding on those who follow him. But if we take a particular liquid to him and ask, “Is this wine?” the answer is not binding. Even if he says with certainty that it is wine, if we know he is wrong or even if we are uncertain, we are no more bound by his pronouncement than that of someone else. Instead, we have to refer to our own certainty or to experts who can make that determination. The *faqīh* himself may or may not be

such an expert with regard to a particular subject.

The moon sighting is one such issue where some people assume they should simply follow their *faqīh* in his declaration, but like the example given above, that is not what *taqlīd* entails. One refers to the *faqīh* to determine what standard to apply in starting the new Islamic month, but actually applying the standard is not subject to *taqīd*.

Declaration of the First of the Month by a *Faqīh*

Although the start of the Islamic month is not subject to *taqlīd*, there are some jurists who say that a *faqīh* can make a ruling declaring the beginning of the month. This is known as a *ḥukm* and not a *fatwā*, because it too has nothing to do with *taqlīd*. For the followers of jurists who consider such a declaration valid, it is binding if it is made by any *faqīh*—not only the *faqīh* whom that person follows in *taqlīd*.

To illustrate this point, let us look at the rulings of some of our present-day jurists. Sayyid Sistani holds that the *faqīh* does not have the prerogative of declaring the start of a new month, and such a declaration is not binding on others, though it is recommended to observe precaution (for example, by fasting without the intention of Ramaḍān):

The 1st day of any month will not be proved by the verdict of a Mujtahid and it is better to observe precaution.[1]

In contrast, both Sayyid Khamenei and Shaykh Makarim Shirazi consider the ruling of a jurist to be authoritative. In his answers to legal queries, Sayyid Khamenei states:

... and similarly if a religious jurist rules about the crescent, his judgment will be a religious hujjah (authority) for all believers, and it is obligatory on them to obey it.[2]

It should be noted that this only applies if the religious authority actually issues a ruling regarding the beginning of the month. If however, he is personally convinced about the moon sighting without issuing a ruling to that effect, that does not mean others are required to follow the same dates as he is following:

Until a religious authority issues a decree announcing the sighting of the new crescent, the mere ascertaining of it by him is not sufficient for others to follow him, unless they are convinced thereby of the end of Ramaḍān.[3]

and

In addition, even the ruling of a religious authority will not be binding on those who, through whatever means, know that ruling to have been made in error.[4]

Thus, for followers of Sayyid Sistani, they cannot follow the statement of either their own *faqīh* or any other jurist unless they are personally satisfied that it is correct (or, of course, if the crescent has been established by other means.)

Followers of Sayyid Khamenei or Shaykh Makarim, however, would have to follow the declaration of a religious authority, even if that declaration was not made by the jurist they follow in *taqlīd*. So a ruling by Sayyid Khamenei would be binding on followers of Shaykh Makarim as well.

Criterion for the Start of the Month

There is a near consensus among Shī'ī jurists that the criterion for the start of the Islamic month is for the new crescent to be visible in the sky; most jurists specify that it must be visible to the unaided eye (and not through a telescope or other instrument). The visible crescent is not the same as the new moon, which is actually invisible from earth. The crescent usually becomes visible one or two days after the new moon. Unlike the new moon, the visibility of the crescent cannot be calculated or predicted with absolute certainty.

Using Astronomy to Determine the Start of the Month

There is also consensus among jurists that using astronomy or calculations to determine the new month is not allowed, unless one derives certainty through those means. In that case, it is permitted.[5]

There is a common misconception that astronomy gives definitive answers and should be able to resolve any disputes about the beginning of the Islamic month. In reality, the visibility of the crescent is different from calculations of sunrise, sunset, the new moon, and so forth—all of which can be calculated with precision.

The visibility of the new crescent depends on many different factors, including the age of the moon, its angular separation from the sun (which affects how much of the moon's surface is illuminated), and when the moon sets. Experts have created models based on these and other factors that in some instances can rule out the moon's visibility and in other instances can say with certainty that the moon will be visible, but this is not true in all cases.

Thus, even though it cannot be relied on in entirety, there is a clear role for astronomy in moon sighting, especially in ruling out reports or claims of seeing the crescent where such a sighting was not actually possible.[6]

Eyewitness Testimony of the Moon sighting

There are several ways to establish the new crescent. Whether a jurist's declaration is binding or not was discussed above. The other ways are:

1. for a person to see the crescent personally,
2. for its sighting to have been established with certainty (for example if a large number of men and women saw the moon),
3. for thirty days to have passed from the start of the previous month,
4. or for two *'ādil* witnesses to testify that they have seen the crescent.

With regard to the testimony of two ‘*ādil* witnesses, there are two opinions among Shī‘ī jurists. One holds that their testimony is valid as long as:

1. they do not contradict one another[7]
2. they are not contradicted by at least two other ‘*ādil* witnesses who say the crescent moon was not visible[8]
3. a person does not have personal certainty that they are in error.[9]
4. Sayyid Khamenei and Shaykh Makarim Shirazi hold this view.[10]

Sayyid Sistani, however, expresses the conditions for the testimony of witnesses to be admissible differently:

If two just (Adil) persons say that they have sighted the moon at night. The first day of the month will not be established if they differ about the details of the new moon. This difference can be either explicit or even implied.

For example, when a group of people goes out in search of a new moon and none but two Adils claim to have seen the new moon, though, among those who did not see, there were other Adils equally capable and knowledgeable [in terms of locating the crescent], then the testimony by the first two Adils will not prove the advent of a new month.[11]

Thus, in the view of Sayyid Sistani, the sighting of the moon should be something that is clearly and unambiguously established. If the crescent is visible in the sky and many people go out to look for it, it does not make sense for many or most of them not to see it. In several questions that were asked of him, Sayyid Sistani has specified that this standard applies even if the reported sightings of the crescent were more than two in number:

لو كان هناك اكثر من شاهدين عادلين بالرؤية (اربعة او ستة او ثمانية شهود بالرؤية) فهل هذا يعني وقوعهم بالخطأ والاشتباه عليه تترك شهادتهم؟

الجواب: يمكن الخطأ في العشرة ايضاً.

This was part of a question regarding a case in which more than two ‘ādil witnesses report seeing the moon even though it is not astronomically possible:

What if there are more than two ‘ādil witnesses to the sighting (four, six, or eight witnesses to the sighting)? Does this mean that they are in error and their testimony will be rejected?

Answer: Even ten people can be in error [let alone a smaller number].

Another question and answer deal specifically with the issue of a crescent that was seen by some people but not others:

*في بعض الشهور يعلن عن ثبوت الهلال عند بعض العلماء في بعض بلاد الشرق استناداً الى أقوال بعض من شهدوا برؤيته فيها، ولكن يقترن ذلك ببعض الأمور:
أ- كون الشهود وعددهم 30 مثلاً - موزعين على عدة بلدان، مثلاً (2) في أصفهان، (3) في قم، (2) في يزد، (4) في الكويت، (5) في البحرين، (2) في الأحساء، (6) في سوريا، وهكذا.
ب - صفاء الأفق في عدد من البلاد الغربية واستهلال المؤمنين فيها مع عدم وجود مانع لرؤية.
ج - اعلان المرصد الفلكي البريطاني انه يستحيل رؤية الهلال في تلك الليلة في بريطانيا ما لم يستخدم المنظار (التلسكوب) وأن رؤيته بالعين المجردة إنما يتيسر في الليلة اللاحقة.
فما هو الحكم في هذه الحالة؟ افتونا مأجورين.
الجواب: إن العبرة باطمئنان المكلف نفسه بتحقق الرؤية أو بقيام البينة عليها من دون معارض، وفي الحالة المذكورة ونظائرها لا يحصل عادة الاطمئنان بظهور الهلال على الأفق بنحو قابل للرؤية بالعين المجردة، بل ربما يحصل الإطمئنان بعدمه وكون الشهادات الصادرة مبنية على الوهم والخطأ في الحس، والله العالم.*

During certain months, it is declared that the sighting has been proven according to some religious scholars in some eastern countries. This is based on the testimony of those who have sighted the new moon. Such declarations are usually coupled with the following facts:

- 1. The witnesses who sighted the moon and who number around thirty, for example, are scattered in various cities such as 2 in Isfahan, 3 in Qum, 2 in Yazd, 4 in Kuwait, 5 in Bahrain, 2 in Aḥṣā’, and 6 in Syria, etc.*

2. *The sky was clear in a number of cities in the West, and the believers went out in the attempt to sight the moon; and there was nothing preventing the sighting.*
3. ***The observatories in England announced that it was impossible to sight the new moon that evening in England except by using a telescope; and that its sighting with the naked eye would be possible only in the following night. So, what is the ruling in such a case? Please guide us, may Allāh reward you.***

*Answer: The criterion is the satisfaction of the individual himself [1] about the actual sighting [of the new moon] or [2] the proof of sighting without any counter claim. **In the case mentioned above, satisfaction is not normally achieved concerning the appearance of the new moon on the horizon in such a way that it could have been sighted by the naked eye. On the contrary, one is satisfied that it was not sighted** and that the testimony [of sightings in the Eastern cities] is based on illusion and error in sight. And Allāh knows the best.[12]*

In short, the beginning of each Islamic month must be based on certainty, and even the testimony of trustworthy and ‘ādil witnesses cannot be utilized unless it fulfills the standard mentioned above.

Evaluating Sighting Reports Scientifically

As mentioned earlier, astronomical models are still not precise enough to tell us with absolute certainty exactly where the crescent will or will not be visible in all cases. This is because of the many factors, both astronomical and atmospheric, that affect its visibility.

At the same time, it is frequently possible to scientifically rule out the prospect of sighting in a particular area, a fact which we can also see reflected in the questions posed to Sayyid Sistani that are quoted above. Experts have created astronomical models that explain the possibility of seeing the crescent in terms of “visibility curves” that spread westward across the globe. These curves,

plotted on a map or globe, show where the crescent should be visible with ease, where it may be visible under perfect atmospheric conditions, where optical aids may be needed to find or see it, and finally, where the crescent will not be visible at all, even with telescopes.

The models created in this way are based on astronomical realities and are corroborated by years, or even centuries, of observations, and thus are extremely reliable—especially in ruling out any report of sighting the crescent that originates from outside of even the widest visibility curve (in which the crescent can only be seen with optical aid, not with the naked eye). So if there is a case where a reported sighting conflicts with conclusive astronomical data, it can be discounted.

Reported Sightings and Astronomical Models

One might be tempted to say that if the moon sighting is reported by trustworthy and *'ādil* witnesses even though the astronomical models show it to be impossible, that should call into question the validity of those models rather than result in the discounting of the witnesses' testimony.

To understand why that is not necessarily the case, it is important to understand that it is entirely possible and even common for people to think they have seen the moon when in reality they have not. Clouds, dust, pollution, and other natural factors can sometimes be confused for the young crescent. And of course, today there are also many manmade objects in the sky that can confuse even an experienced observer, such as aircraft and various types of satellites. This type of confusion existed even in the era of the Imāms, as evidenced by this *ḥadīth* from Imām Ṣādiq (a), in which he was asked how many witnesses are sufficient in sighting the crescent. The Imām replied:

إن شهر رمضان فريضة من فرائض الله، فلا تؤدوا بالتظني. وليس رؤية الهلال أن يقوم عدة فيقول واحد: قد رأيته، ويقول الآخرون: لم نره؛ إذا رآه واحد رآه مائة، وإذا رآه مائة رآه ألف. ولا يجزئ في رؤية الهلال إذا لم يكن في السماء علة أقل من شهادة خمسين، وإذا كانت في السماء علة قبلت شهادة رجلين يدخلان ويخرجان من مصر.

Verily, the month of Ramaḍān is one of the Divine obligations, so don't base it on conjecture. And sighting the crescent is not for a group to go out, and then one says, "I have seen it," while the others say "We didn't see it." If one sees it, a hundred see it, and if a hundred see it, a thousand see it. And in sighting the moon, the testimony of less than fifty is not sufficient if there is no obstacle in the sky; and if there is an obstacle, the testimony of two men who enter and leave a city is acceptable.[13]

There are several other similar *aḥadīth* from the Imāms that demonstrate that mistaken sightings were an issue even in that era, before pollution and the presence of foreign objects in the sky were as much of an issue as they are today.

Thus, if the astronomical models and data are conclusive in eliminating the possibility of sighting, that determination in fact can be relied upon even if there are reports of the moon sighting. However, if the scientific models are not conclusive, the eyewitness testimony cannot be discounted.

Conclusion

It sometimes happens that various Shī'ī and Sunnī centers arrive at different dates for the start of the Islamic month. In accordance with the different scholarly opinions, some rely on reported sightings, while others make use of astronomical models and calculations. Whatever determination an individual may make, it is important to bear in mind that unity does not require conformity, but rather respect and understanding for those who may have come to a different determination.

[1] *Islamic Laws*, Issue 1740. See also 475 المسألة المنتخبة، المسائل.

[2] وهكذا لو حكم الحاكم الشرعي بالهلال كان حكمه حجة شرعية لعامة المكلفين ووجب عليهم

اتباعه.”

[3] *Practical Laws of Islam*, Question 839.

[4] *Tawḍīh al-Masā'il*, Shaykh Makarim Shirazi, Issue 1456.

[5] *Tawḍīh al-Masā'il*, Shaykh Makarim Shirazi, Issue 1457. See also *Islamic Laws*, Sayyid Sistani, Issue 1741.

[6] “On the Crescent’s Visibility,” S. Kamal Abdali, Ph.D. (<http://patriot.net/~abdali/ftp/moon.pdf>)

[7] For example, if one says the moon was in one direction and the other says it was in another direction, their testimony will not be valid.

[8] In this case, if two ‘*ādil* witnesses say, “We saw the crescent,” and two others say, “We did not see it,” the testimony of the first group will be admissible. But if the second group actually denies and the sighting of the crescent itself, for example, by saying, “We looked, and the crescent wasn’t there,” then the two conflicting testimonies cancel each other and neither is admissible.

[9] For example, if two ‘*ādil* witnesses testify to seeing the moon but a person is satisfied by scientific or other means that their sighting is mistaken or in error.

[10] *Practical Laws of Islam*, Issue 837; *Tawḍīh al-Masā'il*, Issue 1456. Shaykh Makarim adds that if the two witnesses mention attributes of the crescent that indicate they made a mistake, their testimony does not prove the new month—even if they don’t contradict one another.

[11] *Islamic Laws*, Issue 1739.

[12] See <http://www.najaf.org/english/book/5/> and <http://www.rafed.net/books/fegh/moqtarabin/se4.html#15>.

[13] *Wasā'il al-Shī'ah*, vol. 10, p. 289