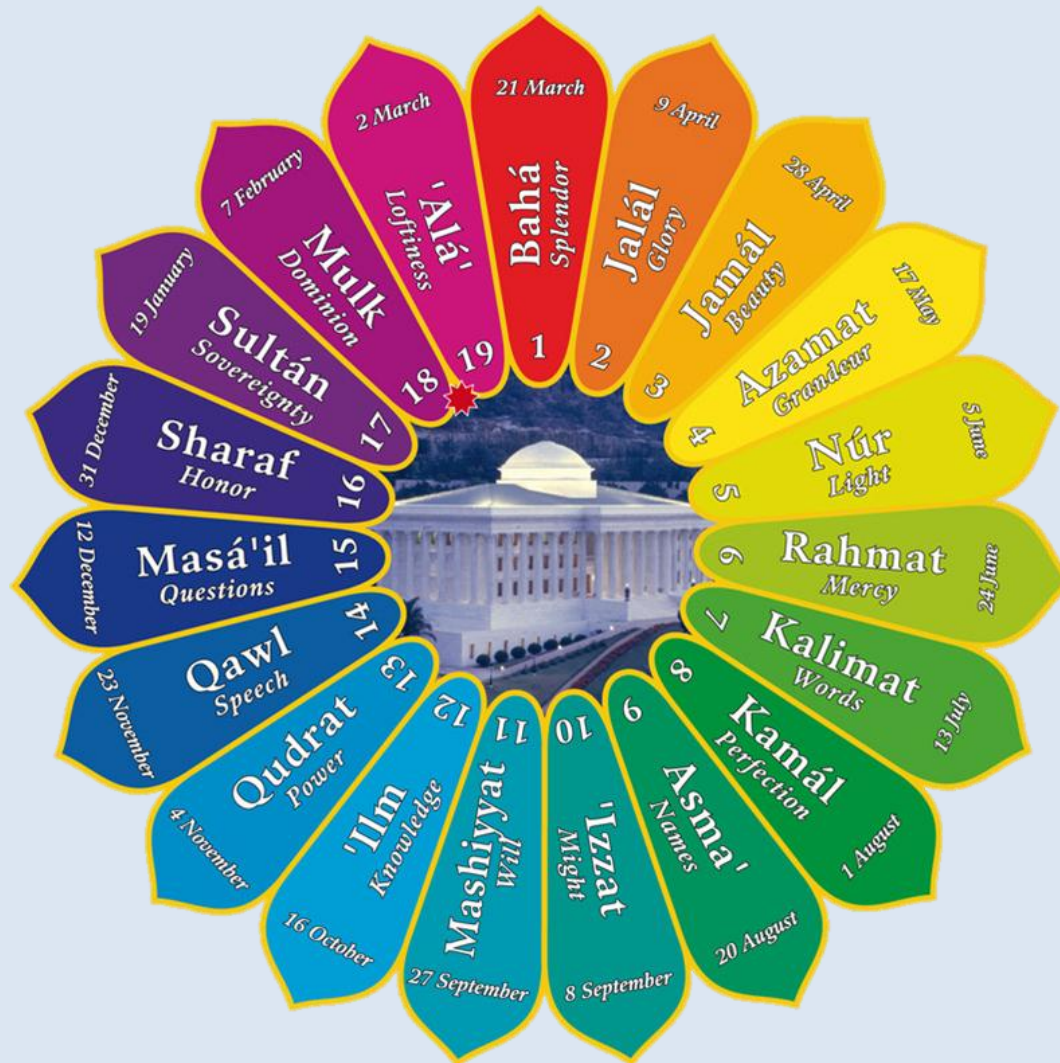


Recent Developments in the Bahá'í Calendar



Preview

- Calendars in general
- A refresher on the Bahá'í Calendar
- What are the 'Recent Developments'?
- Relevant astronomy
- Implications of Bahá'í Calendar –
Religious and Spiritual Significance



Calendars

- Calendars have been used since ancient times:
 - Align farming practices to seasons
 - Project timing of regular festivals and remembrances
 - Record the passage of time in manageable units
- Religious calendars survive ruling dynasties and empires
- Tied to astronomy:
 - Rotation of Earth on its axis
 - Revolution of Moon around Earth
 - Revolution of Earth around Sun and consequent change in the positions of Star constellations night on night



The Bahá'í Calendar

- Derives from the Scripture of the Faith
- The Báb established the main structure
 - used within the Bábi community from 1840s
- Bahá'u'lláh reaffirmed and clarified
 - used within the Bahá'í community from 1870s
- Subsequent leadership clarified elements
 - used in western Bahá'í world from 1907
- Differences in application between the “West” and the “East” continued for decades



The Bahá'í Calendar continued

- The year is a solar year comprising nineteen months each of nineteen solar days with the day beginning at sunset
- Four or five extra days (intercalary days) are inserted to increase the $19 \times 19 = 361$ days to a full solar year
- The year commences at the Spring (or Vernal) Equinox in the northern hemisphere – New Year's day is “Naw-Rúz”
- Along with Naw-Rúz, there are eight other Holy Days
- A week is a seven day cycle with the first day being the Gregorian Saturday and Friday the “day of rest”
- Bahá'ís celebrate/commemorate in their local time zone
- Uses universally adopted timekeeping of a daily twenty-four hours of sixty minutes each of sixty seconds



What Clarifications were required?

Firstly - the day of Naw-Rúz: The Equinox is a moment in time and therefore occurs at different times/days across the world:

- For example, the March Equinox in 2014 which occurred at UTC/GMT 16:57:07pm Thursday March 20:

Place	Time	Day	Date
Los Angeles	09:57:07 am	Thursday	March 20
New York	12:57:07 pm	Thursday	March 20
Jerusalem	06:57:07 pm	Thursday	March 20
Moscow	07:57:07 pm	Thursday	March 20
Kuala Lumpur	00:57:07 am	Friday	March 21
Sydney	03:57:07 am	Friday	March 21

- A location was required to determine which day



What Clarifications were required?

Secondly - the dates of the Holy Days:

- Certain historical discrepancies arising from:
 - Certain records made with Ottoman Turk dates, others with Iranian dates, even with Gregorian dates – sometimes conflicting
 - Local variations in Islamic calendar dates due to varying observations of the crescent Moon, even in adjacent cities
- Specific statements in Scripture identifying dates (e.g. a certain number of days after Naw-Rúz)



What Clarifications were required?

Thirdly - the dates for the celebrations of the two Holy Days of the birthdays of The Báb and Bahá'u'lláh:

- The Báb was born on 20 October 1819, which was the first day of Muḥarram in the Islamic calendar.
- Bahá'u'lláh was born on 12 November 1817, which was the second day of Muḥarram in the Islamic calendar.
- Scripture says that these two Holy Days are to be celebrated as two adjacent days.
- Historically, in the East, they have been celebrated on the equivalent of the first and second days of Muḥarram. In the West, on the respective Gregorian days.



The Clarifications

- In 2014, the Universal House of Justice, the governing body of the Bahá'í Faith completed research and deliberations and announced to the Bahá'í World:
 - The Bahá'í day on which the March Equinox falls in the city of Ṭihrán is Bahá'í Naw-Rúz (the first day of the new year)
 - The Bahá'í dates of six further Holy Days were specified in the Bahá'í Calendar
 - The two Holy Days for the two Birthdays were set on the first and second days after the eighth lunar conjunction after Naw-Rúz (and therefore will move year on year)
- The Universal House of Justice drew on “astronomical computations from reliable sources” and produced a correlation of Bahá'í dates with Gregorian dates for the next fifty years



Implications?

- The Bahá'í Calendar is disconnected from the Gregorian calendar, the number of intercalary days being determined by the number of days from one Naw-Rúz to the next Naw-Rúz
- The date of Naw-Rúz will vary with respect to the Gregorian calendar and therefore the first day of the months will vary with respect to that calendar
- The Calendar is perpetually linked to the actual solar year, being annually corrected by the actual moment of the Equinox, year on year
- The adjacent Holy Days celebrating the two Birthdays will move year on year across three Bahá'í months
- The Bahá'í Community will observe the calendar consistently (and has done so since Naw-Rúz in 2015)

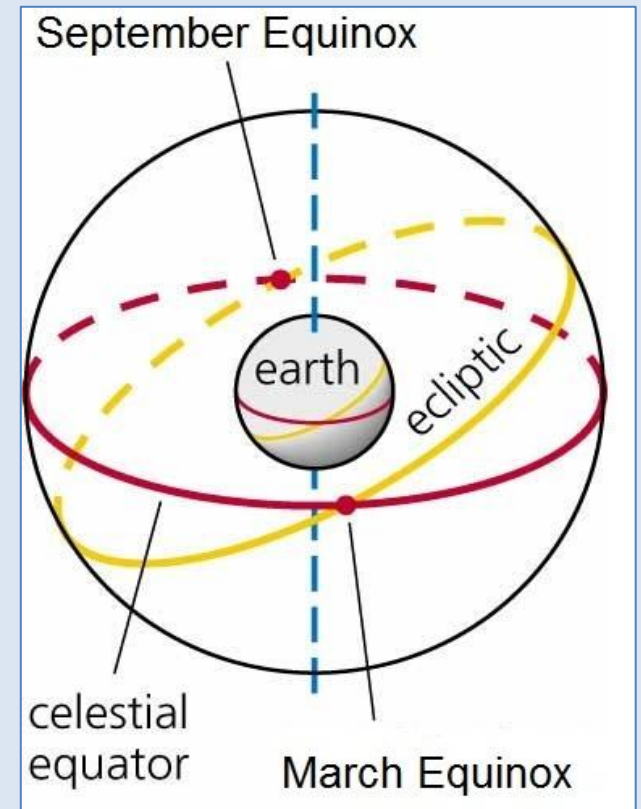
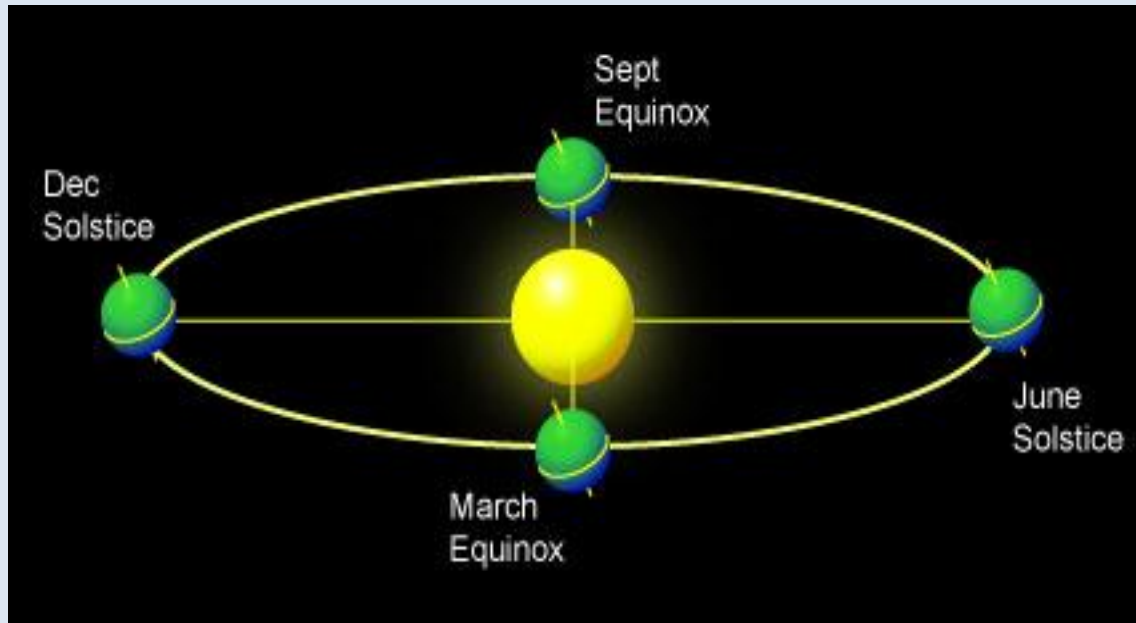


Relevant Astronomy

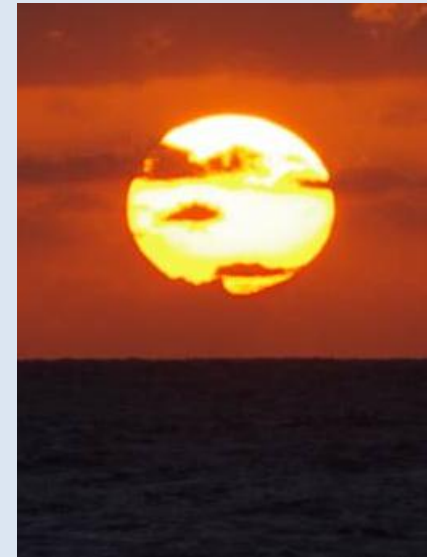
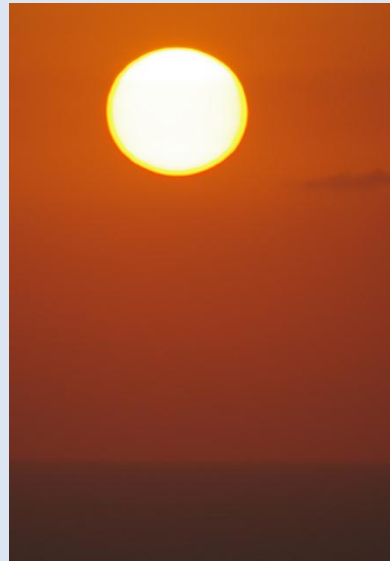
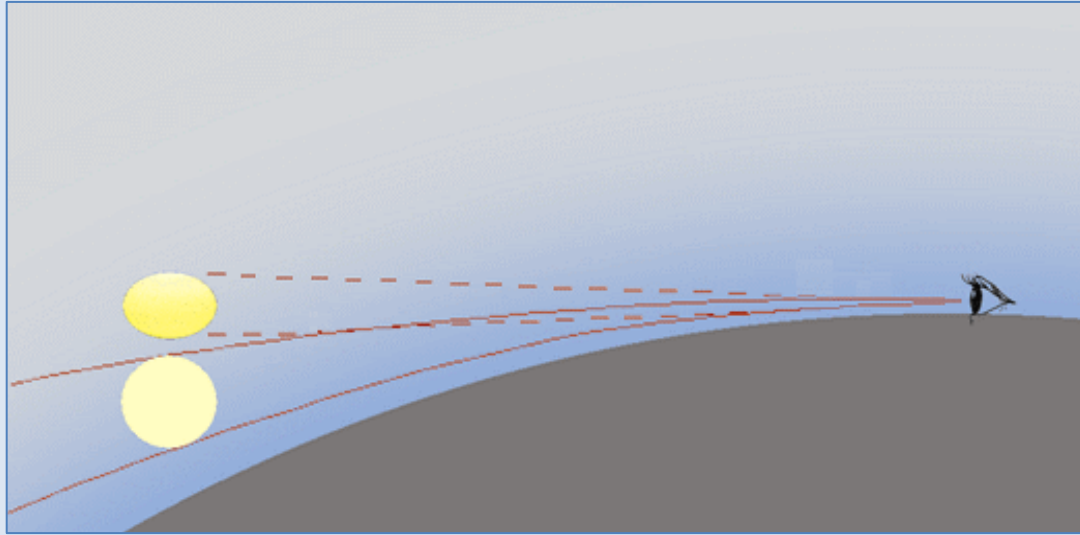
- Equinox
- Sunset
- Lunar conjunction



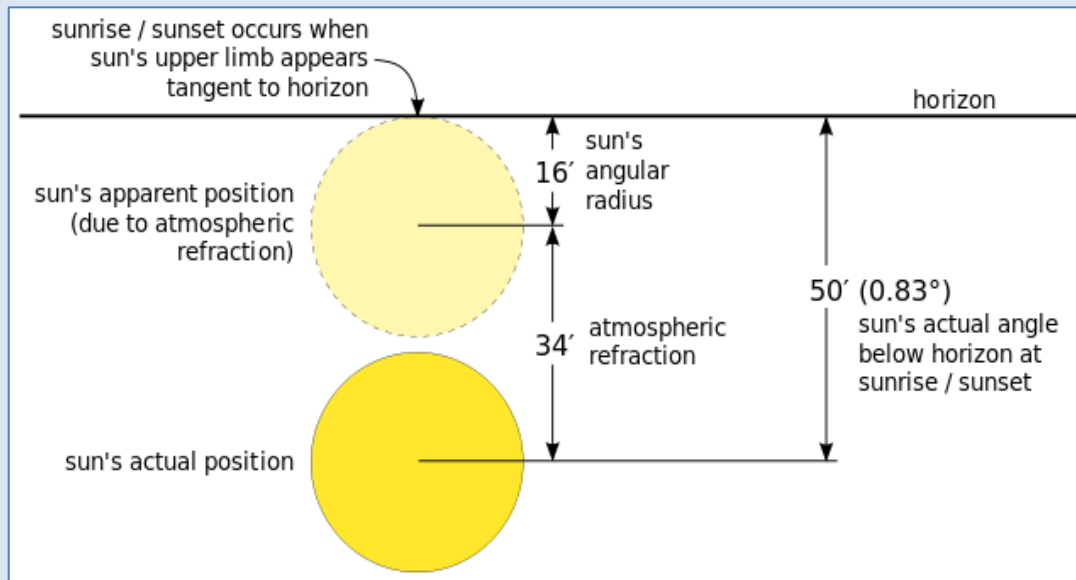
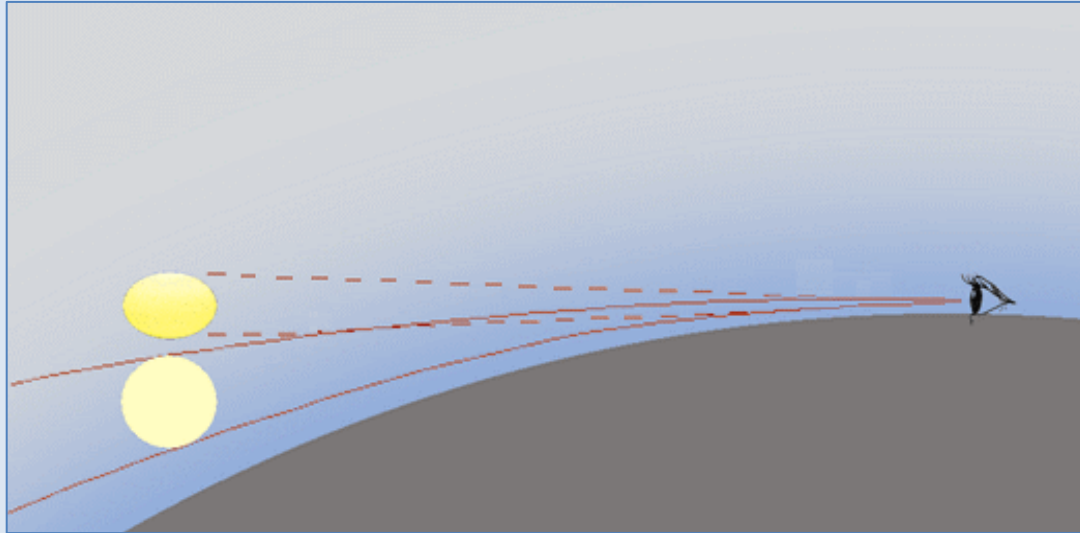
Relevant Astronomy - Equinox



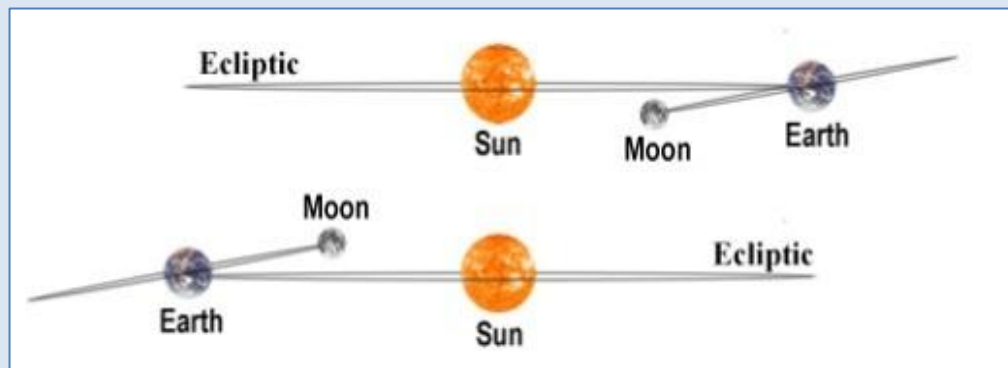
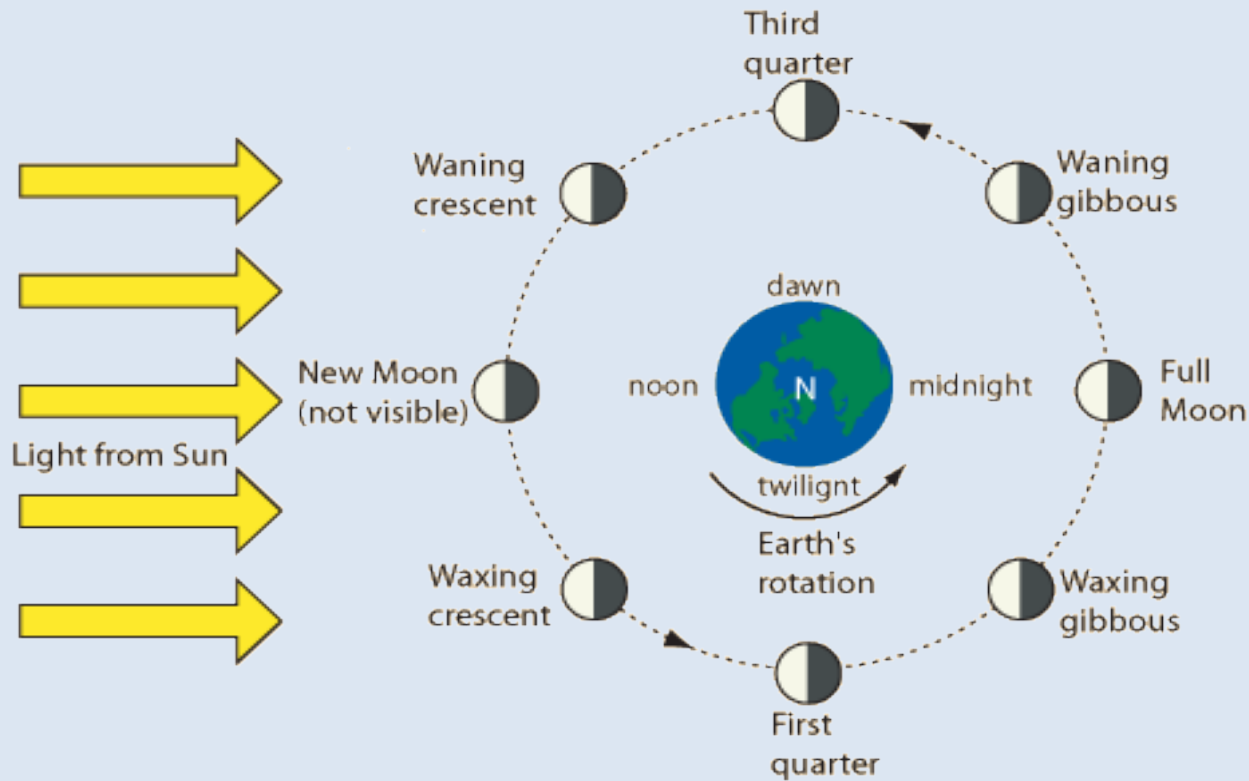
Relevant Astronomy - Sunset



Relevant Astronomy - Sunset

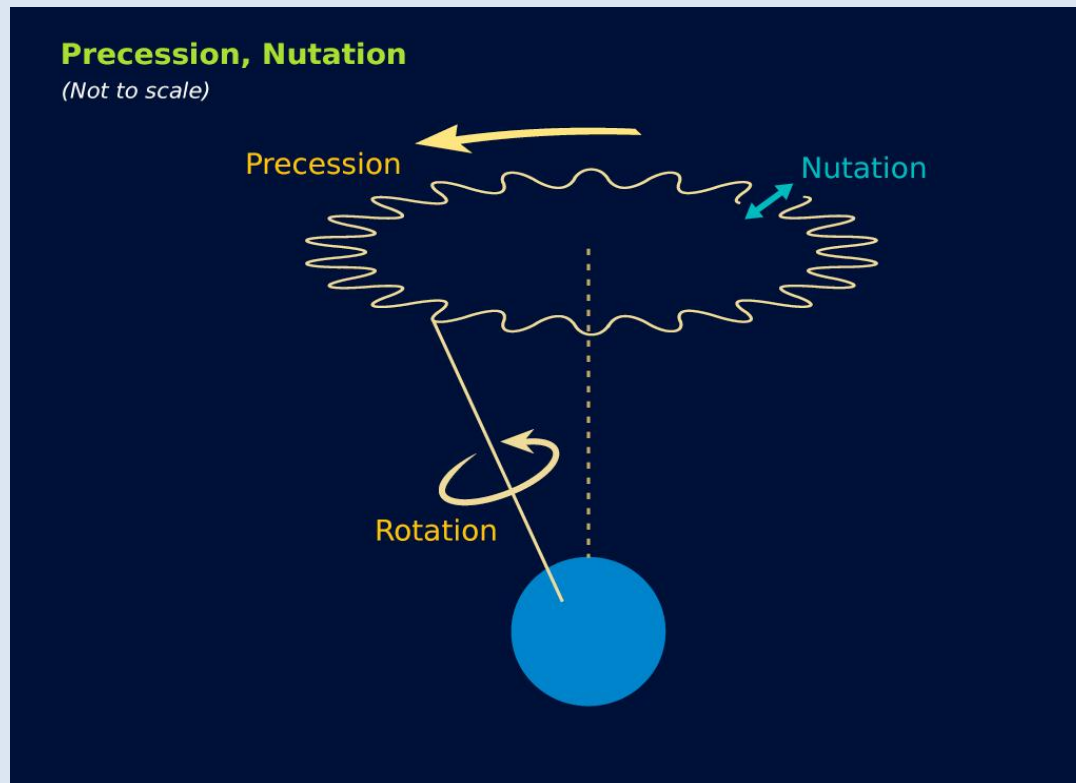


Relevant Astronomy – Lunar Conjunction



Relevant Astronomy – Complicating Factors?

- The Earth's rate of rotation is slowing irregularly – the length of the day is increasing (about one minute per century) and sunset times are changing - significant.
- Precession and Nutation of the Earth's rotational axis - insignificant



Relevant Astronomy – Complicating Factors?

- Receding Moon (4cm per year at present) and the reduction in its period of revolution - insignificant
- Elevation of Tīhrán with respect to Sunset times. Western horizon is much the same as observer's location - standard conditions apply and projected data is applicable – elevation is not an issue
- Plate tectonics moving Tīhrán perhaps a metre in 50-100 years, perhaps north and perhaps east therefore Sunset times change (particularly if east) - insignificant



Data Required

To correlate the Bahá'í Calendar with Gregorian dates, the following information is required:

Gregorian Calendar: Identification of leap years to which February 29 is added. The leap years in the fifty-year period covered are 2016, 2020, 2024, 2028, 2032, 2036, 2040, 2044, 2048, 2052, 2056, 2060 and 2064 AD.

Astronomical Event Data (Her Majesty's Nautical Almanac Office):

Astronomical Event	Reason Required
March Equinox – Gregorian Date and time	To establish the Gregorian Day upon which the March Equinox falls
Sunset time in Tīhrán of the Gregorian Day of the March Equinox	To establish the Gregorian Day upon which the Day of Naw-Rúz (1 Bahá) falls
Sunset time in Tīhrán that commences the Bahá'í day after Naw-Rúz (2 Bahá)	To establish which is the first Lunar Conjunction after Naw-Rúz
The Lunar Conjunctions near Naw-Rúz (Gregorian Date and time)	To establish which is the first Lunar Conjunction after Naw-Rúz
The Lunar Conjunctions through until late November (Gregorian Date and time)	To establish which is the eighth Lunar Conjunction after Naw-Rúz
Sunset time in Tīhrán on the Gregorian Day of the eighth Lunar Conjunction	To establish the Bahá'í Day upon which the eighth Lunar Conjunction falls.



Religious and Spiritual Significance

- More properly known as the Badí` Calendar. “Badí`” meaning ‘something that comes into being where there was nothing before’, or ‘wondrous’
- The Báb established a solar calendar with intercalary days initially for people using the Islamic lunar calendar without intercalation (and one interpretation of a Koranic verse (9: 36-37) is that such intercalation is forbidden) – new and different
- Bahá'u'lláh called for the Day of Naw-Rúz to be the day of the Equinox, contrary to Iranian practice of frequently using the next day, depending on Equinox timing - different



Religious and Spiritual Significance continued

- The name Badí' was given by Bahá'u'lláh to a young Bahá'í who fulfilled one of the great missions of the Faith, carrying Bahá'u'lláh's message to the Shah of Iran for which he was consequently martyred.
- The names of the months derive from a beautiful Ramadan dawn prayer, the Du'á Sahar, which commences:

O my God! I beseech Thee by Thy **Bahá'** (**Splendor**) at its most Splendid (*abhá'*) for all Thy Splendor (*bahá'*) is truly resplendent (*bahí*).
I, verily, O my God, beseech Thee by the fullness of Thy Splendor (*bahá'*).

O my God! I beseech Thee by Thy **Jamál** (**Beauty**) at its most beautiful (*ajmal*) for all Thy Beauty (*jamál*) is truly beauteous (*jamíl*).
I, verily, O my God, beseech Thee by the whole of Thy Beauty (*jamál*).

O my God! I beseech Thee by Thy **Jalál** (**Glory**) in its supreme Glory (*ajall*) for all Thy Glory (*jalál*) is truly Glorious (*jalíl*).
I, verily, O my God, beseech Thee by the totality of Thy Glory (*jalál*).



Religious and Spiritual Significance continued

The Badí` Calendar has cycles of nineteen years know as a Váhíd. These cycles correlate with the astronomical Metonic cycle in which the solar and lunar cycles coincide closely every nineteen years. If we use as our repetition point, a lunar conjunction occurring very close to the March Equinox, this occurs in 1844, 1863 etc. Not only important are these important years in Bahá'í history but they are the first year of each cycle of nineteen years.



Religious and Spiritual Significance continued

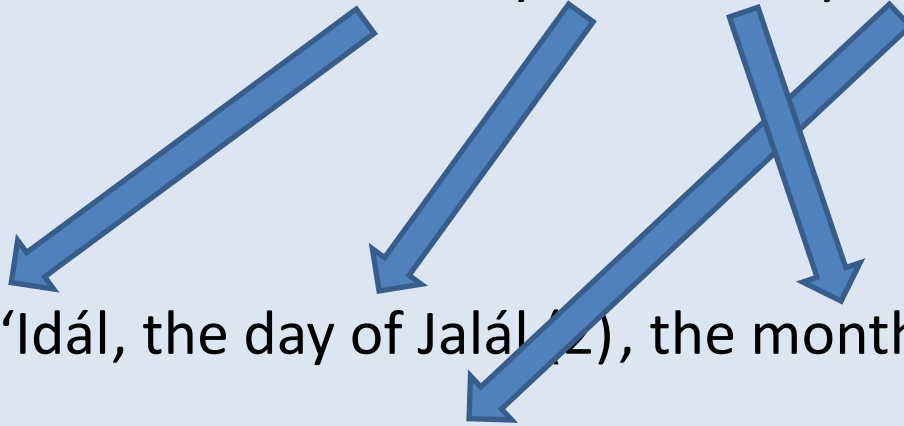
The Universal House of Justice stated in its 10 July 2014 message:

The adoption of a new calendar in each dispensation is a symbol of the power of Divine Revelation to reshape human perception of material, social, and spiritual reality. Through it, sacred moments are distinguished, humanity's place in time and space reimagined, and the rhythm of life recast. Next Naw-Rúz will mark yet another historic step in the manifestation of the unity of the people of Bahá and the unfoldment of Baha'u'llah's World Order.



Today is

Wednesday, 20 January 2016



The day of 'Idál, the day of Jalál (2), the month of Sulṭán

of the year B.E. 172 (the year Alif of the tenth Váhíd of
the first Kull- i-Shay')



Today is

Wednesday, 20 January 2016

which is

The day of 'Idál, the day of Jalál (2), the month of Sulṭán
of the year B.E. 172 (the year Alif of the tenth Váḥid of
the first Kull- i-Shay')

Thank you

