Islamic Calendars

A. General Definition
The Islamic calendar par excellence is the pure lunar calendar starting from the Hijra, i.e., the “Emigration” of the Prophet Muḥammad b. Abī Ṭālib from Mecca (see below). This is the calendar normally used by Muslim peoples: nowadays only for religious purposes, but in the past for approximately all the exigencies of historical chronology. However, one may consider “Islamic” any calendar starting with this era.

B. Solar Islamic Calendars
Many forms of calendar starting from the Hijra developed in the countries of the Islamic world during different period of its millenary history, such as the numerous solar calendars elaborated for administrative (fiscal) or agricultural purposes. Two calendars of this kind are in use today in the Islamic Republic of Iran and in the Islamic Republic of Afghanistan respectively. Historically, alongside the Hijrī era and the Arabic lunar calendar, we have specific forms of calendars that seem to be the product of combining the Muslim era with the solar years and months of different national or religious traditions existent in the territories subjected to Islamic rulers. These were helpful especially for financial needs and show different forms in various countries of the Islamic world, such as the financial solar calendars of Abbasid times or the still not well-known sūrsana of Moghul India. About the origin of the Persian fiscal era the question is still open. For instance, see Reza Abdollahy, “Calendars – II. The Islamic period,” *Encyclopaedia Iranica*, vol. IV, 1990, 669–70 (a summary of his “Taqwim-e ḫarāji,” *Našriya-ye dāneškada-ye adabīyāt wa ʿolum-e ensānī-ye Esfahān*, II-1 [1361š/1982–83]: 37–58), who hypothesizes a starting point of that era in pre-Islamic times, and Simone Cristoforetti, *Izdrāq: miti e problemi calendrali del fisco islamico* (*Izdrāq: calendrical myths and problems of Islamic public revenue*), 2003, 89–118, who summarizes the different opinions about this topic and proposes an analysis of the persistent monetary crisis during Omayyad and Abbasid Chalifates in the light of calendrical facts. In addition, in many texts one may find dates calculated according to solar calendars and different eras, especially for astronomical

C. The Lunar Hijrī Calendar
In September 622, the Prophet Muhammad fleeing Mecca, after some days’ travelling, reached the oasis of Yatīrib (later called al-Madīna, i.e., “the City” par excellence). This event – which occurred in the Arab month of Rabī’ I′ – is the Hijrī, the basis of Islamic chronology. After an initial period of about 17 years in which the dates were reckoned by counting the months from Rabī’ I′, under the second caliph ʿUmar ibn al-Ḥātīb (13–23/634–644) the fixing of the beginning of the new Islamic era took place. Then, the term Hijrī, that in Arabic was used to denote the Emigration of the Prophet from Mecca to
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Medina, was also applied to this era (Hijrī, i.e., “of the Hijra”). In spite of the opinion of the Prophet’s cousin, ‘Alī ibn Abī Ṭalib, who preferred to reckon from the first day of the month Rabī’ 1st, the caliph ordered that the year start with the 1st of Muḥarram – the first month of the Arabic traditional calendar – in that lunar year corresponding to 15th/16th of July 622 in the Julian calendar (R. Abdollahy, “Calendars …,” op. cit. 668). The choice of Muḥarram as the first month of the year instead of Rabī’ 1st or Ramādān (the month of the first Coranic revelation) reveals the greater importance attributed to the traditional (pre-Islamic) starting point of the year and to the social and economic relevance of that moment (end of the annual pilgrimage to Mecca).

In the preference given to the year of the Hijra as the first year of the new Islamic era it is possible to see the prevalence of some politico-social issues (e.g., severance of relations between Muhammad and his clan and the following alliance with the people of Medina) over purely religious events (e.g., God’s call to Muhammad) or hagiographical facts (e.g., the Prophet’s birth) (S. Cristoforetti, Forme ‘neopersiane’ …, op. cit., 14). The incertitude between 15th and 16th of July concerns the beginning of the day (nychtemeron) in Arabic custom. Still today, for religious purposes, the day is considered to start after the sunset. Then, for example, Monday night for the Muslims is the night between Sunday and Monday and not that between Monday and Tuesday. For this reason the beginning of the Hijrī era is Friday 16th July in civil usage, or Thursday 15th July in the common astronomic (and religious) usage. The lunar Hijrī calendar was based on the synodic month (29.53 days approximately), reckoned from one sighting of the new moon to the next (on the matter see Miquel Forcada, “L’Expression du cycle lunaire dans l’ethnoastronomie arabe,” Arabica 47 [2000]: 37–77; Jan P. Hogendijk, “Three Islamic Lunar Crescent Visibility Tables,” Journal for the History of Astronomy 19 [1988]: 29–44). This could have caused a one- or two-day discrepancy between the effective sighting of the new moon and the start of the corresponding month in civil usage (the latter constitutes the basis on which all the tables for converting dates are elaborated). In such cases, any presence in the sources of indications on the position of the days in the week may be of the greatest importance for the reconstruction of the exact date. For example, the existence of a double recording system of lunar months is clearly documented in Somalia. There it was normal usage to distinguish al-sana al-qamarīyya (“lunar year”) – reckoned on the basis of months corresponding to the effective sightings of the new moon – from al-sana al-ta’rīḥīyya (“civil year”) – reckoned according to the written Islamic calendar (Enrico Cerulli, Somalia: Scritti vari editi ed inediti, vol. I, 1957, 185). For many years the most trustworthy work for help in establishing concordances between the official Is-
Islamic calendar and the Julian and Gregorian has been Ferdinand Wüstenfeld, *Vergleichungs-Tabellen der muhammedanischen und christlichen Zeitrechnung* (1854), third edition revised by Bertold Spuler in collaboration with Joachim Mayr (1961), which also gives a table for converting the Ottoman financial (solar) years. Nowadays, in addition to Edward M. Reingold and Nachum Dershowitz, *Calendrical Tabulations 1900–2200*, 2002, many conversion programs are easily available on-line.

**D. History of Research**

The knowledge of different calendarical systems is basic for astronomers. Normally a section on calendars is present in ancient astronomic Arabic works; see for example the section entitled *De Arabum, Romanorum, Coptorum et Persarum aevis atque de alia in aliam convertenda* in Carlo Alfonso Nallino’s annotated Latin translation of *Zīj al-Ṣābī* by the famous astronomer of 9th–10th century Abū ‘Abdallāh Muhammad al-Battānī (al-Battānī, sive Albatenii opus astronomicum, Milano, 1899–1907: vol. I, 66–71 [rpt. 1977]). One of the most ancient and important sources on different calendars used in the Islamic world is the masterpiece of the great man of science Abū al-Rayhān Muḥammad ibn Aḥmad al-Bīrūnī (362–440/973–1048) translated by C. E. Sachau, *The Chronology of Ancient Nations: An English Version of the Arabic Text of the Athâr-ul-Bâkiya of Albîrûnî, or ‘Vestiges of the Past,’ Collected and Reduced to Writing by the Author in AH 390–1, AD 1000*, 1879; rpt. in 1998. In Europe the knowledge of Hijrī lunar calendar keeps up with the translations of Arabic astronomical writings (on the topic see Bruce S. Eastwood, “Astronomy in Christian Latin Europe,” *Journal for the History of Astronomy* 28 [1997]: 235–58; José María Millás i Vallicrosa, “Las primeras traducciones científicas de origen oriental hasta mediados del siglo XII,” *Nuevos estudios sobre la historia de la ciencia española*, ed. id. 1960, 79–115). A good example of it is John Greaves’s *Epochæ celebriores, astronomis, historicis, chronologis, Chataiorum, Syro-Græcorum, Arabum, Persarum, Chorasmiorum, usitata ex traditione Ulug Beigi …* (1650), i.e., “The most famous eras […] according to tradition by Uluğ Beg,” Timurid ruler (850–853/1447–1449) and astronomer, author of an important astronomic treatise. A more specific interest in the lunar Arabic calendar develops during the later 17th and 18th centuries (Barthélemy d’Herbelot de Molainville, *Bibliothèque orientale, ou dictionaire universel contenant généralement tout ce qui regarde la connaissance des peuples de l’orient*, 1697, 444–45, 857; William Marsden, “On the Era of the Mahometans, called the Hejerà,” *Philosophical Transactions of the Royal Society of London* 78 [1788]: 414–32). Old studies of great importance for research on the calendars used in the Islamic world are to be found in the fundamental miscellany edited by Fuat Sezgin,
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A comprehensive work on the history of calendrical systems in Islamic world is still needed.

Select Bibliography

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Cantigas de Amigo (“Songs of the beloved”)

A. Introduction
The earliest known examples of traditional Galician-Portuguese lyric poetry, essentially those brought together in three medieval cancioneiros (“song-books”), dating approximately from the late 13th century to the early 14th, plus early fragments and some later copies (Lanciani and Tavani, 113–26, 132–39, 627–32). The cantigas de amigo appear in these MSS, together with two other contemporary poetic genres, both rather less oral or traditional in character and more learned in origin: cantigas de amor (“songs of love”) and cantigas de escarnho e maldizer (“insulting and scandalous songs”). In the cantigas de amor, the author, influenced by the Provençal lyric, writes of his own amorous sentiments; in cantigas de escarnho (from the same Germanic root as English scorn), the poet singles out some contemporary enemy – or perhaps only a supposed enemy – as an object of total ridicule and not infrequently of