

*From: **Lost History**, The Enduring Legacy of Muslim Scientists, Thinkers, and Artists*

By: Michael Hamilton Morgan

TIMELINE

Bold entries denote dynastic rule.

ca A.D. 570 The Prophet Muhammad is born in Mecca.

622 Muhammad and followers emigrate to Medina. Year 1 of Muslim calendar.

630 Muhammad conquers Mecca.

632 Death of Muhammad.

632 Abu Bakr succeeds Muhammad. Muslim armies consolidate their power over Arabia. 634-644 Umar succeeds Abu Bakr. Muslim forces advance through the Persian and Byzantine empires.

636 Battle of Yarmuk. Byzantine emperor Heraclius is defeated by Muslim army in Syria. 637-651 Skirmishes from Arabia lead to expansion into Iraq and Persia. 642 Arabs conquer Byzantine Egypt and expand into North Africa. 644 Uthman succeeds Umar.

656 Muhammad's son-in-law, Ali, succeeds to the leadership of Islam. 661 Ali is assassinated. Islam splits into rival Sunni and Shiite factions. 661-750 Umayyads rule in Damascus.

661 Umayyads shift seat of power to Damascus. Mu'awiya I becomes caliph.

711 Tariq with a mixed force of Arabs and Berbers invades Spain.

712 Muslims advance into Sind (modern-day Pakistan) and Central Asia. 715 Umayyad mosque in Damascus is completed.

721-815 Jabir ibn Haiyan, alchemist, pharmacist, philosopher, and mathematician, is known as the "father of chemistry." 725 Muslims occupy Nimes in France.

732 Battle of Tours, France; Charles Martel rebuffs Muslims under the command of Abd al-Rahman al-Ghafiqi.

750 Abbasids overthrow Umayyads. Empire is at its greatest extent reaching from Mongolia to Spain.

750-945 Abbasids rule in Baghdad,

ca 750 Ibrahim al-Fazari constructs first Muslim astrolabe.

754 Al-Mansur becomes second Abbasid caliph, after his brother's death.

756-929 Umayyad emirs rule in Spain.

762 Al-Mansur founds Baghdad.

ca 780-850 Muhammad ibn Musa al-Khwarizmi, mathematician and astronomer adopts Indian numerals; known as father of algebra.

786 Haroun al-Rashid becomes caliph in Baghdad.

786 In Mecca an uprising by the Shiites results in the flight of many Shiites to the Maghreb (Libya) in North Africa,

ca 790 Under Haroun al-Rashid, Baghdad becomes a center of learning where Arab and Persian cultures mingle to produce great philosophical, scientific, and literary works.

792 The first papermaking factory in the Muslim Empire is built in Baghdad, leading to greater use of written records.

801 Berber Kharijites set up an independent Muslim state in North Africa.

802 Haroun al-Rashid sends an elephant, silks, perfume, and other luxury goods to Charlemagne as gifts.

809 Haroun al-Rashid dies.

813-823 After civil war and a battle with his brother, al-Mamun (786-833) reigns in Baghdad, enlarging the Muslim empire with the areas of modern-day Turkmenistan and Afghanistan. He founds the House of Wisdom where scholars translate Greek, Syriac, Sanskrit, and Pahlavi classics into Arabic.

823 Beginning of Muslim conquest of Sicily.

829 Al-Mamun builds observatories in Baghdad, Iraq, and Palmyra, Syria.

ca 830 Hunayn ibn Ishaq (809-873), Nestorian physician in the House of Wisdom, translates Galen, Aristotle, Hippocrates, and other classics from Greek into Syriac; writes important texts on ophthalmology, "Ten Treatises of the Eye;" known in the West as Johannitius.

ca 830 Al-Kindi (801-873), philosopher, pharmacist, alchemist, mathematician, and musician toils in the House of Wisdom. His works *De aspectibus* and *De medicinarium* greatly influenced the West in later years.

833-849 Al-Mutasim reigns in Baghdad; moves capital to Samarra, Iraq; employs Turkic slaves at court,

ca 840 Al-Mutasim encourages the building of factories in Baghdad and Basra for the manufacture of soap and glass.

847-861 Al-Mutawakkil rules from Samarra.

852 Armen Firman jumps off a tower in Cordoba with an attachment of wings and lands as if by parachute.

856 Ibn Kathir al-Farghani writes an important treatise on the astrolabe and supervises the construction of the Nilometer in Cairo.

875 Abbas ibn Firnas, chemist, physicist, and astronomer, constructs the first glider at age 70 and launches himself from a mountain; he lands with injuries, and dies 12 years later.

ca 900 Abu Bakr Muhammad ibn Zakariya al-Razi, or Rhazes, (865-925), chief physician of Baghdad hospital, first accurately describes smallpox and measles and prescribes treatments.

ca 900 Abu Nasr al-Farabi, philosopher and scientist, writes a book on music that is still in use today in Arabic music.

909-1171 Fatimids expand in North Africa.

912-961 Abd al-Rahman III rules as emir, then in 929 pronounces himself Caliph of all Islam in Cordoba.

929-1031 Umayyad caliphate reigns in Spain.

945-1055 Buyids rule in Baghdad.

969 Fatimid Ismailis conquer Egypt and transfer their capital to Cairo in 973.

ca 960 al-Zahrawi (936-1013) of Cordoba, one of the greatest surgeons of his time, develops new treatments ranging from dentistry to childbirth. 976 Al-Azhar university is founded in Cairo.

ca 990 Al-Biruni (973-1048), mathematician, astronomer, and philosopher, advances cartography, astronomy, and devises methods of determining gravity; produces some 120 works.

ca 1000 Abu Ali al-Husayn ibn Abd Allah ibn Sina (980-1037), or Avicenna, physician, philosopher and scientist, is considered by many to be "the father of modern medicine."

ca 1020 Ibn al-Haytham, or Alhazen, mathematician and astronomer, refines theory of optics, refraction of light, and human sight.

1037-1307 Seljuks rule in Central Asia and Anatolia.

1050 Kings of Mali convert to Islam.

1054 East-West Schism, dividing the Christian Church into Roman Catholic and Eastern Orthodox.

1058 Seljuks take Baghdad.

1072-1092 Malik Shah is Seljuk sultan.

1076 Ghana is conquered by Morocco.

1090 Cordoba is sacked by Almoravids.

1096 First Crusade. Christians rule in Jerusalem in 1099.

1100 Mathematician-poet Omar Khayyam composes the Rubayyat.

1145-1232 Almohads rule in Spain.

ca 1160 ibn Rushd, or Averroes, (1126-1198), philosopher and physician translates works from Arabic into Hebrew, especially Aristotle's works.

1171 Saladin overthrows the Fatimids in Egypt.

1171-1250 Ayyubid dynasty rules in Egypt and Syria.

1187 Saladin returns Jerusalem to Muslim rule. 1175 First Muslim Indian empire is founded.

ca 1200 Ibn Ismail al-Razzaz al-Jazari invents the crankshaft, some of the first mechanical clocks driven by water and weights, and water pumps. Among his 50 other inventions is the combination lock.

1206-1406 Mongol empire.

1206- 1526 Delhi sultanate.

1207- 1273 Poet al-Rumi.

1218 Beginning of the Mongol conquests.

ca 1230 ibn al-Nafis (1213-1288), physician from Damascus, works in a hospital in Cairo, describes the pulmonary circulation of blood and makes further contributions to ophthalmology.

1232-1492 Nasrids rule in Spain.

1250-1517 Mamluks seize power in Egypt.

1258 Mongols sack Baghdad.

ca 1270 Nasr al-Din al-Tusi (1201 - 1274) , mathematician and astronomer at Maragheh observatory, devises astronomical tables for calculating the positions of stars and planets; develops trigonometry as a separate mathematical discipline.

1285 Hassan al-Rammah writes about the use of gunpowder in rockets.

1325 Ibn Battuta leaves Tangier to travel the world and keeps a written record.

1336-1405 Tamerlane conquers parts of present-day Afghanistan, Persia, India, Turkey, Syria, and Egypt; makes his capital at Samarkand.

1336-1506 Timurids rule in Central Asia and the Middle East.

1453 Mehmet II conquers Byzantine Constantinople, makes it the capital of the Ottoman Empire.

1492 Christian Reconquest of Spain.

1453-1922 Ottoman Empire.

1526 Mughal dynasty is established in India.

1587-1629 Shah Abbas regains much of the ancient territory of Persia.

1494-1566 Suleiman I guides the Ottoman Empire to its fullest extent, ranging from Morocco to the Caspian Sea and the Persian Gulf and into Europe through the Balkans to Hungary.

1922 End of the Ottoman Empire.