



Islamic Civilization

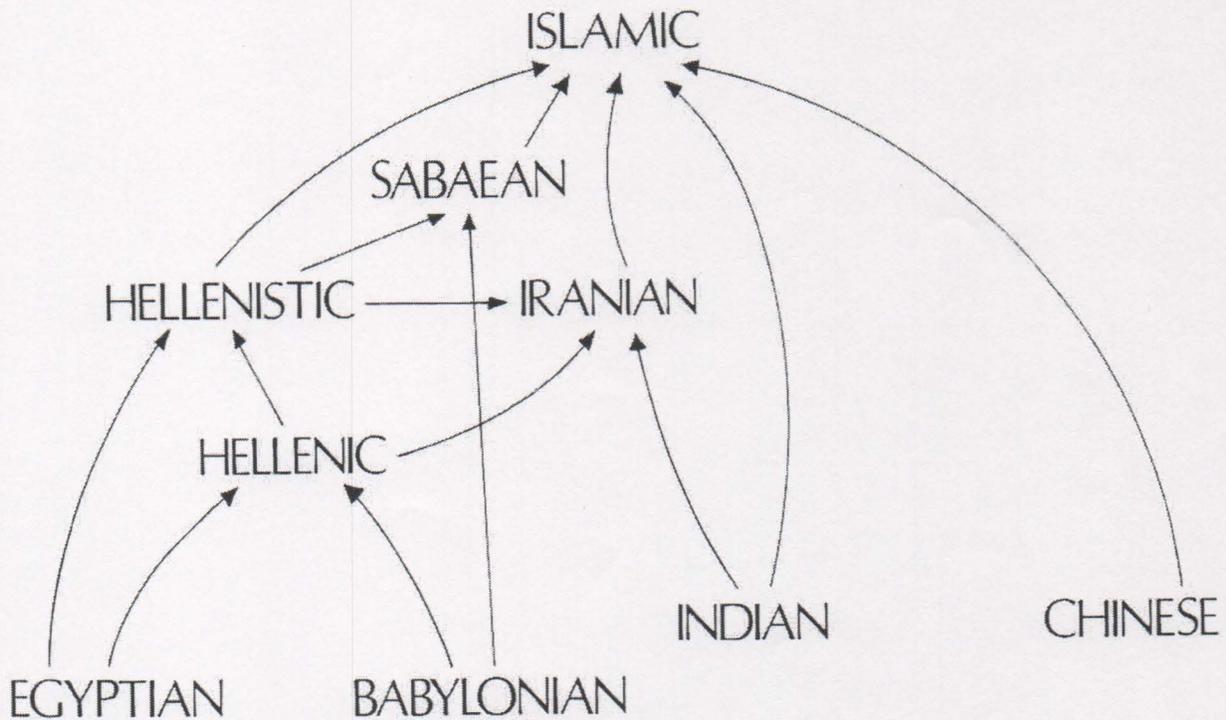
As formerly taught in many of the nation's schools, the history of Western European civilization was commonly held to have been composed solely of an amalgam of the Greco-Roman and Judeo-Christian traditions. This process was thought to have begun with the Greeks, who then passed the torch of civilization along to the Romans. Classical culture was thus spread from Britain in the west and north to the frontiers of Iran in the east and south. By the middle of the fourth century of the common era, Christianity became the dominant religious force in the Roman Empire which had already begun to undergo incursions by a variety of Germanic barbarian invaders. With the final collapse of the Empire, Europe was plunged into the period of economic, social, and cultural backwardness known as the Dark Ages. After nearly a millennium of decline, the Christian West was finally reborn through the rediscovery and study of the Greek and Latin classics which laid the foundations for the humanism, individualism, and liberalism of modern times. The Eurocentric periodization of history into ancient, medieval, and modern created a closed intellectual schema that allowed little place for influences and borrowings perceived as foreign to the Greco-Roman and Judeo-Christian substrata. The rest of the world was viewed for the most part in terms of its contemporary confrontation with the West.

In the years since World War II, many aspects of this outlook have been considerably modified under the impact of the changing realities of a post-colonial world system along with the development and refinement of more sophisticated methods for the scientific investigation of human societies. For example, through the efforts of researchers at centers such as the Oriental Institute of the University of Chicago, it is now generally recognized that the Greek achievement owed a great deal to the ancient civilizations of Anatolia, the Levant, Egypt, Mesopotamia, and Iran. Similarly, scholars are presently beginning to realize the extent of Western Europe's debt to the civilization of its onetime archrival and later thrall, the Islamic world.

Coming historically after Judaism and Christianity, Islam ("submission"—to the will of God) represents God's final dispensation to the children of Abraham revealed through the archangel Gabriel in the Arabic language to the Prophet Muhammad († 632). These revelations were later collected in the book known as the Qur'an ("reading" or "recitation") which Muslims believe to be the very words of God Himself. The earliest converts to Islam were the urban, rural, and nomadic inhabitants of the Arabian Peninsula, but, as the new faith rapidly spread across North Africa into Spain in the west and across the Iranian plateau into Central Asia and the Indian subcontinent in the east, many peoples of diverse ethnolinguistic backgrounds joined the Community of Believers. Later and more gradually, the frontiers of the Islamic world pushed into Sub-Saharan Africa, the Balkans, southern Russia, western China, and the Indonesian archipelago.

Syrians, Iranians, Turks, Berbers, Malays, and others all made distinctive contributions to the new civilization, but generally preferred to do so in Arabic, the language of the Qur'an. For example, the Iranian Muslim philosopher, scientist, and physician Ibn Sina

(known as Avicenna in Europe, † 1037) composed most of his massive corpus in Arabic rather than in his native Persian. This fact coupled with the geographical and spiritual centrality of the Holy Cities of Mecca and Medina in the Arabian peninsula ensured the Arabic language a pivotal role in the culture of Muslim lands. Thus, it is entirely appropriate to describe this international, polyglot civilization as Arabo-Islamic. Christians, Jews, and members of other non-Muslim religious groupings in the Islamic world also employed Arabic as their major vehicle of written expression. Their culture is sometimes called "Islamicate."



Islamic civilization was likewise enriched by the pre-Islamic cultural legacies of the peoples who participated in it. Works on philosophy from Greece, political administration from Iran, and mathematics from India were among types of materials translated into Arabic in the academies of Baghdad and other Islamic cities, and these areas of human endeavor were thus incorporated into, shaped, and elaborated by the new civilization. These composite cultural achievements in Arabo-Islamic forms were then reexported to Western Europe, especially through Spain, where many were again translated from Arabic into Hebrew and Latin. Warfare and the peaceful pursuit of commerce provided further avenues for contact and exchange between Western Europe and the Islamic world in pre-modern times.

The English language is clearly marked by these encounters. The following brief list of relatively common words in English transmitted from or through Arabic, Persian, and Turkish during the European Middle and Early Modern Ages attests to the manifold nature of Western cultural contacts with Arabo-Islamic civilization:

Agriculture, Plants, and Foodstuffs: *acequia, alfalfa, apricot, artichoke, aubergine, candy, caraway, coffee, cotton, crocus, cumin, ginger, henna, jasmine, julep, kebab, lemon, lilac, lime, marzipan, mocha, muscatel, orange, rice, saffron, sesame, sherbet, spinach, sugar, sumac, syrup, tarragon, yoghurt*

Science and Mathematics: *alchemy, alcohol, algebra, algorithm, alkali, almanac, amalgam, anilin, antimony, attar, azimuth, balsam, bismuth, borax, camphor, cipher, elixir, gypsum, nadir, talc, zenith, zero*; many star names such as *Altair, Betelgeuse, and Vega*

Navigation, Commerce, and Products: *admiral, amber, average, bazaar, cable, caliber, carat, caravan, check, chiffon, damask, gauze, jar, lacquer, macramé, magazine (storehouse), mohair, monsoon, musk, muslin, ream, sapphire, satin, sequin, taffeta, tariff, traffic, zircon*

Miscellaneous: *alcove, alpaca, camel, checkmate, chess, cummerbund, cupola, divan, gazelle, giraffe, ghoul, guitar, horde, khaki, kiosk, pajama, lute, mascara, mattress, racket, safari, sofa, tambourine, tulip.*

The achievements of Muslim astronomers, mathematicians, scientists, and physicians were far in advance of anything to be found in Medieval Europe. The Iranian Muslim al-Biruni († 1048) accurately calculated the circumference of the earth and suggested the possibility that the earth revolved around the sun while turning on its own axis long before Copernicus. The system of reckoning imported from India known as “Arabic numerals” enabled Muslim mathematicians—such as al-Khwarizmi (flourished about 825; from whose name the word *algorithm* is derived)—to make great strides in the solutions of quadratic equations and geometrical problems that had challenged the ancient Greeks and to invent the Arabo-Islamic disciplines of plane and spherical trigonometry. Born in present day Iraq, the specialist in optics and mathematics Ibn al-Haytham (Alhazen, † 1040) worked in Egypt where he developed a remarkable theory of the psychology of visual perception while experimenting with focusing and magnification using an early form of the camera. In the healing arts, Arabo-Muslim physicians excelled at observation, diagnosis, and drug therapy, and Ibn Sina’s vast compendium *The Canon of Medicine* dominated European medical practice until the 17th century. Great strides were also made in the fields of ophthalmology, obstetrics, pharmacology, and veterinary medicine. The physiologist Ibn al-Nafis († 1288) composed a treatise containing a detailed description of the lesser or pulmonary circulation of the blood, a discovery long attributed in the West to the Englishman William Harvey. In the Islamic world, universities, observatories, and hospitals generally predated similar institutions in Western Europe.

In the realm of the fine arts, Muslim artists, craftsmen, artisans, and architects created objects and monuments of enduring beauty greatly prized and appreciated in the West. Manuscript illumination, glass, ceramics, metalwork, textiles, and carpets all attained a high degree of refinement in the Islamic world. However, magnificent buildings such as the Alhambra in Granada, Spain, the Süleymaniye in Istanbul, Turkey, and the Taj Mahal in Agra, India testify to the importance of architecture and its decoration—especially calligraphy—as the premier forms of Islamic artistic expression throughout the Islamic lands. The influences of Islamic literature on the medieval West range from the tradition of courtly love transmitted through Muslim Spain by the troubadours to the possibility that Dante’s *Divine Comedy* was inspired by the account of the miraculous night journey of the Prophet Muhammad to Jerusalem, his ascension, and his visions of heaven and hell.

It is hoped that an understanding of the elements of a common heritage and contacts between the Islamic World and Western Europe and the contributions of Islamic civilization to

Western civilization will help to rectify the imbalanced and ethnocentric perspectives of the past, promote a more accurate positive image of this great civilization, and encourage further investigation into its rich and fascinating legacy to all humanity.

Suggestions for Further Reading

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