

Muslim Spain

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Muslim Spain – Andalousia – was an Islamic Empire that should never be forgotten because it arguable surpasses any other civilization in the history of mankind in terms of complexity and richness on every level, socially, and intellectually

- **Al-Andalus, which means, "to become green at the end of the summer"**
- Years 700 – 1400 in the past
- So called “dark ages” – Europe was in a very weak state – tiny mud-hut villages and streetlamps unseen;
- Spain epicenter of global trade, intelligentsia and highly sophisticated
 - o Largest city in world with ½ **million ppl**
 - o **700 mosques**, 300 public baths
 - o **hot-air ducts** under mosaic floors
 - o **Marble** balconies
 - o **Gold coinage** – copied by many subsequent civilizations (Carolingians)
 - o **Tolerance** between Muslims, Christians, Jews – just too sophisticated to quarrel
 - o Parachet and kitchen utensils
 - o **Paper** was unknown to the west however Andalousia had over 70 libraries

INTELLECTUAL EPICENTER that I really want to highlight – it stood out in the amount of knowledge that came out; and they constant connection to the higher essence of existence beyond world manifestations;

- **HARVARD** in our age
- **ANDALOUSIA** then – Cordoba
- **Christians/Jews** priest would come to learn Arabic and in Andalousia
- Arabic was the language of encyclopedias on medicine and astronomy in 11th century, also including astrology, psychology, zoology, biology, botany, chemistry, physics, mathematics, algebra, geometry, trigonometry,;
- Az-Zahrawi and Ibn Zuhr, among other Muslim surgeons, performed hundreds of surgeries under inhalation anesthesia with the use of narcotic-soaked sponges which were placed over the face.
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- **Greek philosophy DIED in Europe (THREAT)**– Aristotlian philosophy stressing logic and deductive reasoning;
- *The harmonisation of Greek philosophy with Islam*
- **Ibn Rushd** (Averroes) and **Ibn Sina** (Avicenna) forefront

- Complex commentaries on Aristolian system of nature and logic; **shocked the West by giving religion and philosophy equal status as systems for explaining the cosmos**
- **St. Thomas Aquinas and Dante called Ibn Rushd or "Averroes" the "The Commentator" and incorporated the views of Muslims. Through the works of Aristotle, Ibn Rushd reconciled reason with religion. However, Aquinas attempted to refute Ibn Rushd's ideas because they placed a great deal of emphasis on human reason over faith, which were a "threat" to Christian beliefs.**

So we can see the period of Andalousia was a very exciting period, that constantly challenged intellectual paradigms, and rather than running away from religion, they brought forth the constructive and completeness of Islamic teaching, and this allowed their society to thrive; religion was never regarded as a domain that would take away from worldly affairs; on the contrary, it added much richness to it; (philosophy, mosques, architecture);

CONDUIT OF KNOWLEDGE – historians recognize that the knowledge output of Muslim Spain is what led to the European Renaissance and its coming out of the dark ages;

Connecting the lesson with modern day

- silent Andalousia
- So much knowledge at present is being transferred in the hearts and minds of the Muslims following the tenets of their faith

Famous German Philosopher Neitzsche living in early 1900's – pessimist; commented on the state of western society:

“GOD IS DEAD; HE REMAINS DEAD; and WE KILLED HIM”

- Terrible comments, but shows the reality of western society that has **forgotten believe in the unseen** and higher Godly essence;
- Nihilism where man and his logical reasoning is at the center of the world;
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- **JUST** as the Andalousian Muslims of past were conduits of knowledge; **MUSLIMS** today are conduits of knowledge; now forging the connection between the apparently reality, reason, science, technology, with the remembrance of how Above all these great triumphs of mankind is the Oneness of God and his ever present knowledge
- Muslims in very unique position –
 - o fastest growing religion in Canada and United States;
 - o 2nd largest religion in both countries;
 - o Muslim research lawyers in the supreme court of Canada
 - o Muslim females are amongst the most educated groups of women in north American, years of academic training well above national averages
 - o Devout Christian who against the concept of “interest” forging relations with Muslims

- Muslim Muesum – Jackson Mississippi;
- I pray Allah swt give us all guidance and open our hearts like he has done for the muslims before us who have succeeded in their lives thorough His remembrance, and I pray that he facilitates us so that we worship not the created, but the creator;
- was started by Al-Kindi, continued by Farabi and was completed by Ibn Sina and Ibn Rushd. Of the great Muslim philosophers Al-Kindi belonged to Basrah, Farabi, Ghazali and. Ibn Sina hailed from Turkistan and Persia, while Ibn Rushd, Ibn Bajja and Ibn Tufail who rivalled their Eastern counterparts were natives of Muslim Spain.
- **Ibn Rushd, (Averroes) Ibn Sina, (Avicenna) Ibn Zuhr, (Avenzoar), Al-Kwarizmi, (Algorizm) and Al-Razi, (Razes) to name a few, were all Muslims educated in Andalus.**
- **Both St. Thomas Aquinas and Dante called Ibn Rushd or "Averroes" the "The Commentator" and incorporated the views of Muslims. Through the works of Aristotle, Ibn Rushd reconciled reason with religion. However, Aquinas attempted to refute Ibn Rushd's ideas because they placed a great deal of emphasis on human reason over faith, which were a "threat" to Christian beliefs.**
- This included Aristotle's system of nature and the logic of argument." (Burke, 1985, p. 42) **Found among the works were even Arab philosophers' commentaries of Aristotle's views. This "shocked the West by giving religion and philosophy equal status as systems for explaining the cosmos."** (Burke, 1985, p. 42) This questioning and the use of logic revolutionized the definition of truth and sparked the renaissance.
- The foundations of Andalucian hegemony rested on a considerable economic capacity based on important trade, a developed craft industry and an agriculture know-how which was much more efficient than anything else in the rest of Europe. The Cordoban caliphate had a **currency-based economy**, and the injection of coinage played a central role in its financial splendour. **The gold Cordobes coin became the principal currency of the period** and was probably imitated by the Carolingian empire.
- Therefore, the Cordoban caliphate was the first urban and commercial economy that had flourished in Europe since the disappearance of the Roman Wmpire. The capital and most important city of the Caliphate, Cordoba, had some **100,000 inhabitants, making it Europe's principal urban concentration during that epoch.**
- At a time when London was a tiny mud-hut village that "could not boast of a single streetlamp" (Digest, 1973, p. 622), in Cordova "there were half a million inhabitants, living in 113,000 houses. There were 700 mosques and 300 public baths spread throughout the city and its twenty-one suburbs. The streets were paved and lit." (Burke, 1985, p. 38) The houses had marble balconies for summer and hot-air ducts under the mosaic floors for the winter. They were adorned with gardens with artificial

fountains and orchards". (Digest, 1973, p. 622) **"Paper, a material still unknown to the west, was everywhere. There were bookshops and more than seventy libraries."** (Burke, 1985, p. 38).

- This rich and sophisticated society took a tolerant view towards other faiths. Tolerance was unheard of in the rest of Europe. But in Moorish Spain, "thousands of Jews and Christians lived in peace and harmony with their Muslim overlords." (Burke, 1985, p. 38) The society had a literary rather than religious base. Economically their prosperity was unparalleled for centuries. The aristocracy promoted private land ownership and encouraged Jews in banking. There was little or no Muslim proselytizing. Instead, non-believers simply paid an extra tax!
 - The intellectual plunder of Toledo brought the scholars of northern Europe like moths to a candle. The Christians set up a giant translating program in Toledo. Using the Jews as interpreters, they translated the Arabic books into Latin. These books included "most of the major works of Greek science and philosophy... along with many original Arab works of scholarship." (Digest, p. 622) "The intellectual community which the northern scholars found in Spain was so far superior to what they had at home that it left a lasting jealousy of Arab culture, which was to color Western opinions for centuries" (Burke, 1985, p. 41)
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 - Even the food utensils we use today come from the Cordova kitchen!\
- Andalusian and North African mosques gracefully combined elements of the native Roman basilica with Visigothic elements like the horseshoe arch.
- **Ibn Rushd, (Averroes) Ibn Sina, (Avicenna) Ibn Zuhr, (Avenzoar), Al-Kwarizmi, (Algorizm) and Al-Razi, (Razes) to name a few, were all Muslims educated in Andalus.**
 - **Both St. Thomas Aquinas and Dante called Ibn Rushd or "Averroes" the "The Commentator" and incorporated the views of Muslims. Through the works of Aristotle, Ibn Rushd reconciled reason with religion. However, Aquinas attempted to refute Ibn Rushd's ideas because they placed a great deal of emphasis on human reason over faith, which were a "threat" to Christian beliefs.**
 - Arab scholars produced encyclopedias on medicine and astronomy in 11th century, also including astrology, psychology, zoology, biology, botany, chemistry, physics, mathematics, algebra, geometry, trigonometry, etc., which Christian scholars acquired and translated. Toledo thrived essentially because of its Muslim rule, and became the "cradle of learning," and the chief point of interaction between the Muslims, Christians and Jews. **Western scholars traveled to Spain and Sicily to learn Arabic and to make transcripts of texts in Latin.** Muslims produced cotton, paper,

salt, silk, satin, pepper, stamps, clocks, soaps, rulers, maps, globes, furs, velvets, described over **200 surgical instruments, and named over 200 stars with Arabic names**. Hence, it was this Islamic civilization in Spain that was the main threshold behind the European Renaissance. During the time the Muslims set foot in Spain in 711 until 1084 (a year before Toledo was taken) Muslim Spain had become an area unique to the entire world.

- Muslim Spain served as a conduit for the teachings of the Muslim world at a time when Muslim learning was at its peak. For instance, the Catholic Church was utterly transformed by the study of Aristotle in Arabic translation; likewise, the introduction of double-entry bookkeeping by [Fra Luca Bartolomeo de Pacioli](#) relied on the introduction of negative numbers by Muslims (who themselves had learned from Hindu mathematicians centuries earlier) and the al-jabr (“algebra”) of [Al-Khwarizmi](#) (from whose name we also get the word “algorithm”). The work of [Ibn Rashid](#) (Averroës)—who also gave us Aristotle—and [Ibn Sina](#) (Avicenna) form the foundation of Western medical knowledge; the poetry and dialogues of and about Muslim philosophers and warriors (and non-Muslims deeply embedded in Andalusian culture, such as El Cid, from the Arabic *el Sayyid*, “leader” or “chief”) laid the groundwork for the birth of the novel (in Spain, of course!); and the pointed arch essential to Gothic monumental architecture was adopted from Muslim architects.

Parachute A thousand years before the Wright brothers a Muslim poet, astronomer, musician and engineer named Abbas ibn Firnas made several attempts to construct a flying machine. In 852 he jumped from the minaret of the Grand Mosque in Cordoba using a loose cloak stiffened with wooden struts. He hoped to glide like a bird. He didn't. But the cloak slowed his fall, creating what is thought to be the first parachute, and leaving him with only minor injuries. In 875, aged 70, having perfected a machine of silk and eagles' feathers he tried again, jumping from a mountain. He flew to a significant height and stayed aloft for ten minutes but crashed on landing - concluding, correctly, that it was because he had not given his device a tail so it would stall on landing. 18 Earth is in sphere shape?

By the 9th century, many Muslim scholars took it for granted that the Earth was a sphere. The proof, said astronomer Ibn Hazm, "is that the Sun is always vertical to a particular spot on Earth". It was 500 years before that realisation dawned on Galileo. The calculations of Muslim astronomers were so accurate that in the 9th century they reckoned the Earth's circumference to be 40, 253.4km - less than 200km out. The scholar al-Idrisi took a globe depicting the world to the court of King Roger of Sicily in 1139.

Gardens: Medieval Europe had kitchen and herb gardens, but it was the Arabs who developed the idea of the garden as a place of beauty and meditation. The first royal pleasure gardens in Europe were opened in 11th-century

Muslim Spain. Flowers which originated in Muslim gardens include the carnation and the tulip.

It is taught that Isaac Newton's 17th century study of lenses, light, and prisms form the foundation of the modern science of optics. Actually al-Haytham in the 11th century determined virtually everything that Newton advanced regarding optics centuries prior and is regarded by numerous authorities as the "founder of optics." There is little doubt that Newton was influenced by him. Al-Haytham was the most quoted physicist of the Middle Ages. His works were utilized and quoted by a greater number of European scholars during the 16th and 17th centuries than those of Newton and Galileo combined.

The English scholar Roger Bacon (d. 1292) first mentioned glass lenses for improving vision. At nearly the same time, eyeglasses could be found in use both in China and Europe. Ibn Firnas of Islamic Spain invented eyeglasses during the 9th century, and they were manufactured and sold throughout Spain for over two centuries. Any mention of eyeglasses by Roger Bacon was simply a regurgitation of the work of al-Haytham (d. 1039), whose research Bacon frequently referred to.

- It is taught that the difficult cubic equations (x to the third power) remained unsolved until the 16th century when Niccolo Tartaglia, an Italian mathematician, solved them. Muslim mathematicians solved cubic equations as well as numerous equations of even higher degrees with ease as early as the 10th century.
- C.W. Long, an American in 1845, conducted the first surgery performed under inhalation anesthesia. Six hundred years prior to Long, Islamic Spain's Az-Zahrawi and Ibn Zuhr, among other Muslim surgeons, performed hundreds of surgeries under inhalation anesthesia with the use of narcotic-soaked sponges which were placed over the face.
- William Harvey, during the early 17th century, discovered that blood circulates. He was the first to correctly describe the function of the heart, arteries, and veins. Rome's Galen had presented erroneous ideas regarding the circulatory system, and Harvey was the first to determine that blood is pumped throughout the body via the action of the heart and the venous valves. Therefore, he is regarded as the founder of human physiology. In the 10th century, Islam's ar-Razi wrote an in-depth treatise on the venous system, accurately describing the function of the veins and their valves. Ibn an-Nafs and Ibn al-Quff (13th century) provided full documentation that the blood circulates and correctly described the physiology of the heart and the function of its valves 300 years before Harvey. William Harvey was a graduate of Italy's famous Padua University at a time when the majority of its curriculum was based upon Ibn Sina's and ar-Razi's textbooks.
- **Philosophy** The Abbasid Caliphate which was influenced by Persian culture provided the most congenial atmosphere for the development of learning especially philosophy, Secular philosophy found its first entrance into the Muslim world through the Persian administrators of the early Abbasid Caliphate. The Abbasid Caliph Harun-ar-Rashid had some of the works of Aristotle translated into Arabic for the first time. His successor Mamun-ar-Rashid founded the well-known Darul

Hukama (House of Wisdom) where the translation of books from foreign languages into Arabic was made by eminent translators who were employed on handsome salaries by the talented Caliph. His great patronage of learning attracted men of letters from all parts of the world who were engaged in translation and research work. The translation of the works of Aristotle and Plato paved the way for the growth of Islamic philosophy. The harmonisation of Greek philosophy with Islam was started by Al-Kindi, continued by Farabi and was completed by Ibn Sina and Ibn Rushd. Of the great Muslim philosophers Al-Kindi belonged to Basrah, Farabi, Ghazali and Ibn Sina hailed from Turkistan and Persia, while Ibn Rushd, Ibn Bajja and Ibn Tufail who rivalled their Eastern counterparts were natives of Muslim Spain.

- **[NOT FROM SPAIN; FROM MODERN DAY IRAQ] Al-Kindi (d/873 A.D.), who is the greatest philosopher of the Arab race is known as the "Philosopher of the Arabs"**. He translated and wrote commentaries on a number of works by Aristotle. Being a natural philosopher he elaborately discussed the doctrine of soul and intelligence. The divine intelligence is the cause of the existence of the world. According to him, the world as a whole is the work of an extremely active cause, the divine intelligence, whose activity is transmitted in many ways from above to the world. Between God and the world of bodies is the world of soul, which created the world of Heavenly spheres, In so far as the human soul is combined with the body, it is dependent on the influence of heavenly bodies, but in its spiritual origin and being it is free. Both immortality and freedom could be attained in the world of intelligence.

<http://www.netmuslims.com/info/philosophy.html>