

The Intellectual History of Islamic Sicily

831-1072 CE

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Sicily is the largest island in the Mediterranean Sea. Other islands of note are Cyprus, Sardinia, Corsica, Malta, and Crete. Sicily is shaped like a triangle, from East to West its length is no more than 175 miles. It is about ninety miles from Tunisia and only two miles from mainland Italy. Palermo is the capital, with a population of little more than one million. Sicilians are descendants of Greeks, Frenchmen, Spaniards, Italians, and Arabs. Other big cities are Palermo, Catania, Messina, and Syracuse. Famous Greek physicist, Archimedes lived in Syracuse. Mount Etna (Ar. Jaban al-nar), famous for volcanic eruptions, is located on the island also.

Historic map of Sicily drawn by Pieri Reis, Turkish admiral

Muslims ruled the island from 832 to 1091 AD, when it was taken over by Normans, who occupied it until 1194. Though Muslims lost Sicily to Normans at the end of the 11th century, nonetheless, under Norman rulers, it became an even more vibrant center of Islamic learning. This article deals with these two periods of Sicilian history.

The first naval expedition to Sicily was sent in 652 by the careful planning of Hazrat Muawiya, then governor of Syria. During the governorship of Musa bin Nusayr, another Arab force raided Sicily.

Caliph Haroon al-Rasheed 's envoy to French emperor Charlemagne landed on the island in 801. Ibrahim ben Aghlab was appointed ruler of Sicily by Caliph Haroon al-Rasheed. Palermo was captured by Muslims on 12th September 831, Messina in 843, and Syracuse was occupied in 878. By 902, the island was in Muslim hands, which took almost 75 years. Greeks, Jews, Berbers, Persians, Negroes, and Arabs inhabited the island at this time. Palermo still has medieval architecture showing distinct Arab heritage. The island was ruled by three Muslim dynasties, Aghlabid, Fatimid, and Kalbite. Husayn al-Kalbi (d965) was appointed governor over Sicily by Fatimid Caliph al-Mansur. It was during the reign of Yusuf ibn Abdulla (989-998) that Sicily reached the height of cultural eminence and prosperity. After continuous civil wars, Muslim rule ended in 1091, when Count Roger became the new ruler.

One reason why Muslims were successful in capturing the Island was they were nearer to their home base, besides having more experience in this kind of warfare. Muslims were unified and single-minded. They used flame-throwing vessels and used the naphtha & sulfur deposits of Sicily effectively.

It is stated that an attack occurred in 835 on Sicily in which Arab ships threw combustible substances on enemy vessels. In 935, a Fatimid fleet from Egypt raided the coast of Sicily and burnt the ships it attacked. By 878, Muslims were the masters of the Mediterranean Sea, and all international trade fell into their hands.

Islamic naval power was a force to be reckoned with. Islamic Spain was a significant naval power that controlled the coasts of South France, North Africa, and Sicily. Naval fleets of Aghlabid and Fatimid rulers were constructed in regular arsenals, armed by the governments, and commanded by professionals from admirals to sea captains. The admiral in charge of the Omayyad fleet of Spain was one of the four officials of the Caliphate. Almeria was the chief naval base of Islamic Spain.

Ibn Hauqal, a geographer from Baghdad who visited the Island, found market gardens around Palermo. There were hundreds of mosques in the city, more than any other city except Cordoba. Palermo had a population of about 100,000 people. Muslims brought hydraulic techniques from Persia; the irrigation system was developed to have abundant springs and rivers.

Water sources obtained Arabic names, and so did weights and measurements acquired Arabic terminology.

Muslims planted lemons, bitter oranges, sugar cane, cotton, mulberries, date palms, silkworms, papyrus, flax, olives, pistachio nuts, and melons. Rice was first cultivated here by Muslims; a new variety of wheat was introduced. Henna and indigo were cultivated for coloring. Sicilian rock salt was in demand and exported to Spain, besides oranges and lemons. Sugarcane cultivation techniques and crushing it in mills were brought to Europe from Sicily. Ammonium was mined near Mount Etna and exported, silk was manufactured here and sold abroad. There were Tiraz (embroidered silk) factories producing silk for Spain and European countries.

There was active trade between Egypt, Spain, and all Islamic countries. Fortresses were built to guard 23 cities. In every district (Iqlim) there was a Jami mosque, and it was heavily fortified. Palermo was surrounded by a wall and a trench.

Intellectual life

Sicily was a haven for scholars from North Africa, Egypt, and al-Andalusia, conversely, local scholars traveled to these countries as well. Sicily was very much under the cultural influence of Islamic Spain when it was at the height of its power. Many poets left Sicily and settled in Spain, i.e.

Ibn Hamdis lived in Seville. As with other Islamic countries, mosques were centers of intellectual life where jurisprudence (Fiqh), tradition (Hadeeth), qiraat, grammar, and lexicography were taught. Teachers in these mosque schools were exempt from going to war.

The two most famous poets of Sicily were ibn Hamdis and al-Ballanabi. The collections of their poetry are extant. Ibn al-Qatta produced the Sicilian anthologies of poetry (diwans) containing a collection of 170 poems, and some 20,000 verses. The original is lost, only fragments have survived. (2)

Ibn Yunus (d1051) was a jurist, who wrote a commentary on al-Mudawwana, Atiq Ali as-Samantari was a noted theologian who traveled extensively in Islamic countries of the East. Al-Mazari was a renowned theologian who wrote a critique of al-Juwayni. Saeed bin Salam

traveled to Hijaz, Iran, and died at Nishapur, Iran, in 983. Atiq bin Muhammad was a Sicilian mystic who moved to Baghdad. Muhammad bin Khurasan was an eminent scholar of the Holy Quran who received his education in Egypt. Ismail bin Khalaf (d1063) migrated to Spain, his famous work is *Unwan fil Qiraat*, and its manuscript is preserved in Berlin, Istanbul, and Bankipore, India. Ibrahim al-Tamimi was a Hadith scholar who settled in Iraq. Asad bin al-Furat (b.759) was a scholar of Fiqh who moved to Medina al-Munawwarrah to receive education under Malik bin Annas. His famous book *Asadiyya* was written in 977.

Abdullah was an eminent Sicilian botanist who translated Dioscoride's treatise on botany for Caliph Abdur Rahman III of Spain. Abu Abdullah bin al-Qarani was a poet, astronomer, and mathematician. Among the noted physicians of Sicily was Abu Said Ibrahim, who wrote a work on pharmacology that has survived. Abu Bakr as-Siqqili was a teacher of world renown. Ahmad b. Abdus Salam wrote a commentary on one of the medical works of Abu Ali Sena.

In linguistic studies, Sicilians migrated abroad while others made Sicily their home. For instance, a poet and grammarian from Cordoba Musa b. Asbagh moved to Sicily, while al-Kattani (1035-1118) traveled through Iraq and India and died in Iran. Saeed b. Hassan, an Iraqi lexicographer, died in Sicily in 995. Ibn Rashiq (1000-1070), a linguist, who was born in North Africa, died on the Island. His famous work on poetics is *Kitab al-Umda*, published in Cairo in 1955. (3)

Ibn al-Birr was a philologist, who studied at Alexandria, returned to Palermo, and died here in 1068. The famous Arabic dictionary *as-Sihah* of Jawahri was transmitted through him. Ibn al-Qatta wrote an anthology *Durrat al-khatira* that includes extracts from several Sicilian poets. Ibn al-Khayyat was a poet at the court in Palermo. Abu Zayd al-Ghumari, a Berber, wrote a work on the history of Sicily. It should be mentioned that Sicily was the literary province of Islamic Spain during the tenth and eleventh centuries. The Arabic spoken in Sicily was similar to the North African dialect.

Islamic occupation of Sicily lasted over two centuries; in the third century, they occupied high positions at Palermo under Christian rulers. For two hundred years, Sicily remained a meeting point of Islam, European and Latin cultures. Many Islamic buildings and mosques were destroyed during the civil wars or as a result of Norman conquests. The Muslim legal system left few relics, as other citizens were allowed to keep and be governed by their laws. Arabic was the language of the government and remained so for another hundred years under Norman rulers in the 12th century. Cotton cultivation decreased under Norman rule because many Arab farmers emigrated from the Island. The silk industry, though, survived, and a delicate silk mantle still exists today in Vienna with an inscription embroidered in Arabic stating that it was woven in a royal factory at Palermo in 1133. Byzantine vestments were embroidered with Arabic lettering and worn by Anglo-Norman potentates. Arab workmen devised decorations for churches out of esoteric themes from Persian mythology.

The names of several Italian cities have their Arabic origins. Carini (Karinish), Caronia (al-Karuniya), Catania (Katania), Cefalu (Djul fudh), Cefala (Djafala), Corleone (Kurliyun),

Palermo (Balarm), Filicundi (Fikunda), Lipari (Libar), Bilici (al-Karib), Dittano (wadi al-Tin), Marsala (Mara ali), Kalsa (al-Khalisa), Sciacca (Shakka). Furthermore, eighty-two Arabic inscriptions can be seen on various buildings and tombstones on the island. By the year 1000, Sicily had 18 cities and 900 villages. The City of Palermo has 250,000 inhabitants, it has 500 mosques, and the largest mosque could accommodate 7000 worshippers. The wealthy had mosques in their palaces and mansions. (4)

Some of the later Christian writers were prejudiced about the golden period of Islam in Sicily and omitted to note its many achievements. Therefore, few things remain of the Islamic period today; what has survived is relics of Norman-Arab civilization.

Islamic influence in Norman Sicily

Roger I conquered the capital city of Palermo in 1072 and became effective ruler of Sicily in 1091. After ruling the Island with tolerance, he died in 1101. Roger II ruled from 1101-1154, he was succeeded by William I (1154-66), then William II (1166-89), who was succeeded by Frederick the Second (1194-1250).

Roger I : (d.1101) The royal court of Roger I was a center of science; he had a special interest in astronomy and astrology. An Arab engineer made for him a Clepsydra (timepiece) in which the hours were announced by the automatic dropping of balls into brass basins. He regulated medical teaching and compelled physicians to undergo an examination by experts in the presence of a royal official. It was at Palermo that Ptolemy's Almagest was first translated. Al-Idrisi was the leading figure in his scientific staff who worked for 15 years on his masterpiece in geography, 'Kitab al-Rujjar', the most significant production of Sicilian Arabic literature.

Roger I preferred to converse with Muslim scholars than with Christian monks. He was a geographer of distinction and surrounded himself with Muslim astronomers, physicians, and philosophers. Muslim officials held some of the highest positions in his administration. Christian ladies wore veils, white silk robes, and perfumes of their Muslim neighbors. Text of the Quran was painted on the walls of the churches, and coins were dated by the Hegira calendar, inscribed with the name of Allah. A paper document dated 1109 is supposed to be the earliest document in Greek and Arabic issued by his wife. A church he built had five red cupolas; it looked as much like a mosque as a church. He also built a fine chapel in his palace with Arabic pointed arches.

In Islamic Sicily, some writings were on science, medicine, jurisprudence, and Quranic studies. A list dated 1150 gives names of over 100 poets from Arab families. Ibn Hamdis (1055-1132), the best-known Sicilian poet, was born in Syracuse and lived in Spain and North Africa. Schiaparelli from Rome published his Divan in 1897. "Arabs had been too engrossed in their warfare and squabbles to develop the finer arts of peace, but now their genius attained its full fruition in a rich outburst of Arab-Norman art and culture" (5)

He had Muslim soldiers in his army, while Roger II used Arab engineers to build siege towers and mangonels. Sicilian converts to Islam had names like Ahmad B. Roma, Abdur Rahman bin Franco.

Constantine the African: (flourished- 1065-1085) He was born a Muslim in Qairawan, Tunisia, and later converted to Christianity. He was the first important personality in transmitting Arabic science to Europe. He brought with him from Carthage medical texts in Arabic to Salerno, Italy, in 1065. At the monastery in Monte Cassino, he translated into Latin medical texts of Ibn al-Jazzar's & Isaac Israeli.

His most famous production was Ali Ibn al-Abbas's (d994- Haly Abbas) Kitab al-Kamil as-sina at-tibia, entitled Pantegni in Latin. It was a comprehensive book on medicine of its time and also dealt with elementary physics. A MS is at Trinity College Library, Cambridge. (6) he did not give the author's name in the translation. Thus, he was charged with plagiarism. He was silent about his indebtedness to Islamic medical authors. He translated several works - on diets, stomach, forgetfulness, and melancholy - written by scholars of Qairawan, Tunisia. His works were the foundation of European medical teaching until the Renaissance.

Roger II: (1101-1154) He allowed religious freedom and cultural autonomy to Muslims, & Jews. He liked Muslim garb and Muslim morals and lived as a Latin king in an oriental court. (7) Al-Idrisi, his biographer, said that he accomplished more asleep than other men awake did.

The royal decrees at his court were issued in Greek, Latin, and Arabic. The documents he did not sign bore his motto, which referred to a Quranic verse (16:22). He called himself al-Malik al-Muazzam al-Qidees , the Great and Holy King. His coinage bore a date in Arabic numerals (1138) & an Arabic title al-Malik al-Muazzam al-Muateez billah (The revered King, exalted by the Grace of God), also, al-Naser al-Nasraniyya, defender of Christianity. (8) Ibn Jybayr, a geographer from Spain who visited the Island, saw Christian women wearing Muslim costumes. Roger built a chapel in Palermo; its ceiling was ornamented with Kufic inscriptions. Muslim emirs commanded his naval fleet.

Greek-speaking Sicilian Amir Eugene made the first translation of Almagest into Latin in 1160. He made a Latin version of Ptolemy's Optica and translated it from Arabic into a famous Greek Indian storybook, Kalilah wa Dimnah. In 1140, Roger set regulations for the practice of medicine. He decreed that everyone wishing to practice medicine must present himself before a magistrate to obtain a certificate.

Roger's fine silk mantle was that of an Islamic emir with embroidered Kufic inscriptions. This mantle is preserved in a museum in Vienna. He lived like a sultan with a harem, eunuchs, and large palaces. His court officials included Janibs (ide de camp), hajibs (chamberlain), Silahis (equerries), and Jamadars (wardrobe attendant). The highest dignitary in the bureaucracy was Amir ul-Umara (Chief Minister). There were FITYAN (pages) in the palace with direct access to

the King, similar to the courts of Baghdad. All his physicians were Muslims. He called himself 'am-Muatazz billah'

Abdullah al-Idrisi: (1100-1166) He was the resplendent jewel of the royal court of Roger II. He was, in fact, the most renowned geographer and cartographer of the Middle Ages. He was born in Ceuta, Morocco. His ancestors were nobles of Malaga, Spain. He was educated in Cordoba, the European center of learning. He started his travels when he was only 16 years of age. After traveling in Asia Minor, he traveled extensively in France, England, Spain, and Morocco.

He moved to Palermo in 1138 after receiving an invitation from King Roger II. He returned to Ceuta after the King's death in 1154. He made significant contributions to geography. With the assistance of technicians, scholars & reports submitted by observers sent to various lands, he constructed a map of the world, depicting on it seven climes, rivers, gulfs, seas, islands, towers, ports, and mountains. The map was destroyed during the sacking of the royal palace by rioters in 1161. (9)

As a compendium to this splendid map, he wrote Kitab Nuzhat al Mushtaq fee Ikhtiraq al-Afaq (Recreation of him who yearns to traverse the lands) - subtitled Kitab al-Rujjar - Book of King Roger, which is extant. An abridgment of the text with 71 maps was printed from Rome in 1592. Two scholars from Paris translated this treatise into Latin in 1619. It was famous for centuries as a textbook in European universities; a French translation appeared in 1836. It shows his grasp of such fundamental facts as the earth's sphericity. His knowledge of Europe, the Middle East, and the Mediterranean was reliable. It is a rich storehouse of geographical knowledge. All the material is cataloged and indexed by section. " For three hundred and fifty years," says French scholar Sedillot, " European cartographers did nothing but copy this treatise, with negligible variations." He also constructed a celestial sphere and disk-shaped world map for King Roger.

William I : (R1154-1166) He also patronized Islamic learning. He could speak Arabic fluently. His Arabic title was Hadi Biamrillah, which appeared on the coinage.

William II: (R 1166-1189) He lived like an oriental sovereign. He patronized Muslim poets, had Arab concubines, and kept a bodyguard of Negro Muslims. Muslims dominated the finance department during his reign; there were still mosques in Palermo, and there were Muslims judges and schools. Even the Christian women at Palermo assumed the dress of Muslim women, wore oriental ornaments, put henna on their fingers, and used oriental perfume. The King himself took pride in wearing Moorish costumes. He died in 1189 when he was only 36 years of age. A drawing of his deathbed shows a doctor and an astrologer with a turban and Muslim dress.

William II spoke Arabic fluently. Muslim soldiers in the army wore bright clothes. His motto bore the Arabic inscription Al-hamdolillah haqqa hamdihee - Praise to God; praising him is proper. He looked like a Muslim sultan; when his eunuchs offered Islamic salat in his palace, he overlooked it. The highest dignitary in his bureaucracy had the title of Amir ul-Umara. The finance department Divan al-Tahqiq was modeled after the Fatimid institution and Divan al-Mamur, the treasury department. The term Iqlim was used for a military district; other offices

were SAHIB (secretary), KATIB(scribe), and AMIL (controller). Records of cultivable and non-cultivable lands were kept in Defatri (Arabic dafatir). Friday prayer was banned, but assembly at two Eids was allowed. There was a Muslim quarter in Palermo where Muslim merchants carried brisk trade. Muslims had their own Qadis. Muslims preferred to give their daughters to travelers from Islamic countries. Trade flourished between Islamic Spain and Sicily. His Arabic title was 'al-Mustaez billah' which appeared on the coinage.

Ibn Jubayr, the Muslim traveler from Granada who visited Sicily in the 12th century, described Muslim courtiers of King William II who prostrated themselves in prayer at the prescribed times while the King was looking on. " Another singular circumstance concerning these pages is that when in the presence of their Lord and the hour of prayer is at hand, they will leave the chamber one by one that they might make their prayers. They sometimes do so in a place where the eye of the king might follow them, but Almighty and Glorious God conceals them. Thus they continue to labor in their purpose, covertly advising the Muslims in their unending struggle for the faith" (Travels of Ibn Jubayr, page 343)

Kaiser Frederick II (1194-1250) was King of Sicily and Germany. He employed oriental dancers to entertain his royal guests. Muslims accompanied his retinue when he visited Palestine; the core of his army was Muslim garrisoned at Lucera, where muezzin called faithful to prayers five times a day. Upon his death, his body was wrapped in a garment embroidered with Kufic characters. The Pope in the Vatican referred to him as a baptized sultan. He was free of religious bigotry; he placed Jesus on a level with Moses and Muhammad.

The King had an inquisitive mind; he knew the works of Moses bin Maimoon. The Sultan of Egypt al-Kamil, nephew of chivalrous Salahuddin Ayubi, selected poets and scientists as ambassadors to Sicily. The Sultan loved to dispute with learned men about matters of Fiqh and grammar. He was a poet; in his mountain castle, "fifty scholars reclined on divans around his throne to provide evening conversation." He founded a school in Cairo for the study of Hadith.

"Frederick had an unstinted admiration for the Arab mind", observes a German historian, " For he lived in an age when the East was the source of all European knowledge and science, said Frederick, "far superior to the arrangement of the Christians who (the Pope) has no relationship to the Messiah."

Another time, they discussed why, according to holy books, only domestic animals, never wild animals, are offered for sacrifice. The Emperor explained that sacrifices are gifts to heaven, and a man can only give his own property, not the free beast of the field that belongs to no one.

Frederick II preferred to discuss intellectual matters with Muslim scholars. Once, he prepared a list of questions to determine how non-Christians viewed soul and immortality. Like Muslims, he used baths regularly, which was considered strange. He was a great patron of learning; he founded a university in Naples in 1224. Under his grandfather Roger II, Sicily was a meeting point of Greek and Islamic civilizations and a center of translations. Frederick invited eminent scholars to his court, Michael Scot, Master Theodore, and Leonardo Fibonacci, who dedicated

his book Liber Quadratorum to the Emperor. Leonardo had studied in Islamic Spain and was an eminent mathematician at his court. He introduced Arabic numerals to the West.

Michael Scot has left a questionnaire put to him by the Emperor (1) Precisely, where are heavens, hell, purgatory, and the several abysses concerning the earth and each other. (2) Why are there both sweet & salt waters on the earth & whence do they arise? (3) Why do objects partly immersed in water appear bent? He wrote a book on falconry, he determined by experiment that vultures locate their food by sight, not by smell; he even tried artificial incubation of eggs by sunlight. (11) In his childhood, he was exposed to the Arabic language and Islamic culture, he could speak 9 languages and write seven. He had a large number of Arabic books in his library. " Arabic," says an American author, " was not simply one of the languages of his court; it was one he mastered so well in a classical form that he was sometimes able to correct his official translators. There were no language barriers, and Frederick's court became a magnet for literati and intellectuals worldwide. "

" It was also at his court - a court teeming with luminaries from al-Andalus, ringing to the sounds of Arabic singing from the harem, and Arabic poetry from the many learned men, and resounding with the new learning of the day, the learning of Averroes, Maimonides, Fibonacci, and Scot - that the first school of lyric poetry in an Italian vernacular was born. Frederick's court rivaled Toledo as the seat of translation and many other European centers as a seat of great learning and culture. " (12)

Frederick was an author himself and wrote various treatises on various subjects. He wrote a treatise on falconry and used several Arabic treatises as reference works. He was unabashedly both a cultural convert and a proselytizing patron of Arabic culture. He employed Arab tutors to learn logic. (Menocal- page 63)

He extensively corresponded with Muslim savants and scientists from al-Andalus and the Middle East. He even referred problems of mathematics, physics, & philosophy to them. Egyptian Sultan al-Malik al-Kamil (1218-38) sent a noted mathematician Alamuddin al-Hanafi to his court. Then, in 1226 Fakhruddin al-Shaikh, a renowned astronomer, arrived at his court. Frederick II sent a questionnaire to Sultan al-Kamil with seven questions, three of which were on optics & have been preserved along with the answers. The same questionnaire was sent to Andalusian scholar Ibn Sabin.

Sicilian Questions: #1. What proof was offered to Aristotle's view that worlds exist from eternity? #2. What is the scope of theological science and its primary postulates? #3. What is the validity of the ten categories? #4. Give proof for the immortality of the soul. #5. Explain the Hadith 'heart of the believer is between the two fingers of God'. These questions were answered by a young Murcian philosopher, Ibn Sabin, under the title al-Ajwiba an al-Aseela as-Saqalliya. During my visit to the Bodleian Library at Oxford in July 1999, I had the privilege of browsing this book.

In reply to the question, what is the proof of the immortality of the soul, and is her existence eternal, Ibn Sabin smilingly replied, " O prince thou who seekest truth, thou hast posed thy question about the nature of the soul, without exactly indicating what type of soul is the object of

thy questioning. Thou hast neglected the essential and regrettably confused many things that should have been treated separately. It is thine inexperience in treating speculative matters and instituting inquiries in an independent branch of science that has led thee into such confusion. Hadst thou but know the number of separate types comprised under the one word 'soul'? Hadst thou but been acquainted with Dialectics and the manner of distinguishing the Finite from the Infinite, between the Particular and the General, between the conception and ambiguous homonyms and that which is consecrated by the terminology of speech - thou wouldst never have so phrased thy question. For when thou askest: What is the proof for immortality of the soul? This question may be understood to apply to the vegetable soul, the animal soul, the rational soul, the soul of wisdom, and the soul of prophecy. To which of these souls does thy question apply?

He was also interested in zoology, medicine, mathematics, and cosmology. Michael Scot translated Arabic works of zoology for him. He traveled with a retinue of animals, even when he went to Italy and Germany. In 1231 he went to the city of Ravenna in Italy with animals unknown to Italy: elephants, camels, panthers, falcons, apes, bears, lions, leopards, bearded owls, Indian parakeets, white peacocks led on a chain by slaves'. In 1245 Germans saw for the first time camels, monkeys, and leopards when they visited Germany. A giraffe (Ar, zarrafa) was given as a gift to him by Sultan al-Kamil of Egypt; this was the first time it appeared in Europe. People came to see these animals from miles around, besides these exotic animals, there were Saracen veiled women, and bodyguards wearing silken tunics and linen gear. These bodyguards were taught to read and write Arabic.

The Emperor had an experimental bent of mind, he had a strong desire to see and know for himself. For example, to study the chick's emergence from the egg, and the embryo's position in the egg, he built artificial incubating ovens. On hearing that ostrich eggs were hatched in Egypt by the sun in hot sand, he procured them and experts from al-Kamil and tried to hatch them out in the heat of Sicilian summer. Whether vultures find their food by smell or sight, he ascertained by stitching their eyelids, while their nostrils were left open. To settle the question, of whether children speak Hebrew, their mother tongue, or Greek or Latin, or Arabic, he decided to have children brought up in silence. Unfortunately, the children died. (13)

The crusade he led against Muslims deepened the Islamic influence on his mind. He studied the octagonal Mosque of the Umar in Jerusalem, with the cupola of green and gold and the artistic pulpit, which he mounted with admiration. The Dome of the Rock was a model for his palace in Sicily. He gave himself endless titles in imitation of Arab custom: Frederick, son of Kaiser Henry, son of Kaiser Frederick. He learned the art of falconry from Muslims. His Arab falconer Momin wrote a book on falconry; it was translated into Latin. Frederick made use of this work in writing his work. He followed the Arab custom of giving gifts, al-Kamil presented him with an elephant, and Frederick sent him in return a polar bear which to the amazement of the Egyptians, ate nothing but fish.

In 1232 the Sultan Al-Ashraf of Damascus sent him a tent planetarium in which astral bodies moved in their orbits by a hidden mechanism. Frederick, in return, sent to the Sultan a white bear and a peacock. On his death, his body was wrapped in Arabian draperies. Muslim historians called him al-Anbaratur, the Emperor, while Michael Scot wrote: 'O fortunate Emperor I verily believe if ever a man in this world could escape death by his learning, you would be the one.'

Michael Scot (1200-1235) He was a colorful and enigmatic Scottish astrologer, mathematician, & philosopher who made his name through translations of Arabic scientific and philosophical works. He was a canon in the cathedral of Toledo in 1215; here, he translated al-Bitruji's *On the Sphere* in 1217 and some works of Aristotle from Arabic. In 1221, he moved to Bologna and in 1224, became a priest. Kaiser Frederick appointed him his scientific advisor. He was the first translator of commentaries by Ibn Rushd; all his translations were made in Palermo, Sicily, at the court of Frederick II Hohenstaufen. He predicted the manner of his death; hence, he always wore an iron cap; despite this, he was killed by a falling stone while he was accompanying the Emperor to Germany. (14)

In 1232, he dedicated to the Emperor his translation of Aristotle's treatise on animals *De animalibus*, with Ibn Sena's commentary, published from Venice in 1500, entitled *Abbreviatio Avicenne*.

His original works are *Liber introductoris*, *Liber Particularis*, and *Physionomica*, and a treatise in medicine *Description of a Tumor*, Cambridge 1907. Through him, Ibn Rushd's commentaries and expositions on Aristotle came into circulation in Latin. *De Anima* is preserved in more than 50 manuscripts, commentaries on physics *Parva Naturalia* is in 50 manuscripts, *De generatione* 40 MSS, and *Meteorologica* in 20 MSS. He also translated Ibn al-Bitriq's Arabic version of Aristotle's *De animalibus*, preserved in 60 MSS. Frederick used it for his study.

Master Theodore succeeded Michael Scot as court philosopher of Frederick the Second. He was born in Antioch, studied in Baghdad and Mosul, and was sent to the Emperor in 1236 by Sultan al-Kamil. He conducted correspondence with Muslim rulers, was sent to Tunis as ambassador, & translated an Arabic treatise on hunting written by Frederick's imperial falconer Momin. As an astrologer, he cast Frederick's horoscope.

Transmission of knowledge to Europe

Though Islamic Spain played a significant role in transmitting scientific knowledge to Europe, Sicily's role was no less significant. "The size and opulence of 10th century Cordoba far outstripped any city in the Latin west, and the contrast between the scientific cultures of al-Andalus and Europe was just an extreme". (15). Europeans viewed Islamic learning with admiration & astonishment but the faith with fear and suspicion. This admiration was generated by advance learning of al-Andalus and Sicily. "Al-Andalus was very much at the heart of the Renaissance of the twelfth century. It was a center of Europe, the locus from which radiated so much of what was the new, the exciting, the dangerous, and the controversial". (16)

Sicily was a meeting point of Greek, Latin, and Arab cultures, it acted as a medium for transmission of knowledge to Europe. The people of Palermo spoke three languages. The splendor of the Norman Kingdom in Sicily in the 12th century coincided with the Italian Renaissance. This renaissance acquired scientific impetus from the Arabs of Spain and Sicily. In the 12th century, the language of science was not Greek, Latin, or English but Arabic. Arabic heritage was transmitted to Europe through translations of these Arabic scientific works. Islamic influence from Sicily reached Italy, Germany, and France. Works on logic and physics were translated from Arabic and, on King's orders, sent to the University of Bologna. When Frederick founded the University of Naples, a large collection of Arabic books was deposited here. It was Frederick who started the anatomy department at the medical school of Salerno.

At one time, Muslim intellectuals came to Sicily from North Africa, Spain, and the Middle East. After the Norman, many scholars migrated to their countries of origin. A list of some prominent scholars, poets, and scientists of Islamic Sicily will demonstrate that though their stay was short, their intellectual output was considerable.

Ibn Zafar as-Siqilli : (d1165) He held the honorific title of Hujjat udin and Burhan al-Islam. His important work is Sulwan al-Muta, translated into English, Italian, and Turkish. He wrote a commentary on the Quran, Tafseer Kabir. Of the 32 works he produced on grammar, philology, and other subjects, following are noteworthy: Yanbu al-Hayat, Fawaid Wahyee, Fee Sharh Asmai al-Husna. Khairul Bashar, and Ilam al-Nabuawa.

Abu Taher Ismaeel as-Siqqili : (d1065) He wrote a book al-Unwan feel Qirat, and another Kitab al-Iktifa feel Qiraat. He was a grammarian and reader of the Quran. He died in Syria in 1170.

Ibn Al-Qatta: (1041-1121) His family migrated from Portugal. He studied philology and grammar from Ibn al-Birr. He migrated to Spain, then Egypt, where he taught grammar. He wrote a history of Sicily, Tarikh al-Siqliyya, which is lost. He wrote an anthology of 170 Sicilian poets al-Durrah al-Khateera min Shuara al-Jazira. His other two books are Kitab al-Saif and Kitab al-Uruz.

Muhammad bin Abi al-Faraj: (d1122) He was a scholar of Quran recitation and Arabic grammar. He wrote a book on recitation Kitab al-Isteela (Qirat). He hailed from Mazara.

Muhammad b. Ali at-Tamimi: (d1142) He was a Maliki law and theology scholar. His famous work was Kitab al-Muallim, a commentary on the Hadith book Sahih Muslim. The founder of the Almohad movement, Ibn Tumart, was his disciple.

Usman bin Ali as-Sarqoosi: He wrote a book, Kitab Makharij al-Harroof. He was from Syracuse.

Ibn Rasheeq: (d1061) He wrote four books Kitab fee Lughah, Deewan, Kitab al-Masawi, and Meezanul Amal.

Ali b. Dawood Samantari: (d1072) He wrote a book al-Mudawana al-Kubra. Several scholars like Ibn Yunus and Ibn al-Hakar wrote commentaries on this book.

Umar b. Khalaf Ibn Makki: He was a jurist and a lexicographer. He was a Qadi in Sicily, later moved to Tunis. His famous work is Saqeef al-Lisan.

Usman al-Hajjaz : (d1149) He was a jurist who moved to Alexandria. He wrote several books on Maliki law.

Ibn Hamdis : (1055-1133) He was the most illustrious poet of Sicily. He wrote a book on history of Sicily, Tarikh al-Jazeera al-Khizra. He migrated to Spain in 1078 and joined the entourage of al-Mutamid of Seville. He celebrated the victory of Yousuf ibn Tashafin against Alfonso VI of Castile in a panegyric. He used rare words in his poetry, & his vocabulary was pictorial. He depicted the life and landscape of Sicily with deep nostalgia. His Diwan was edited by Sciaparelli, published from Rome in 1897, and from Beirut in 1960 entitled al-Arab fee Siqiliyya.

Ibn Bashrun as-Siqqili : He came to Sicily from North Africa. He wrote a book al-Mukhtar fee Nazm wa Nasr which is an anthology of poetry. He also compiled a work on chemistry, Sirr al-Kimiya.

Abul Farraj al-Kattani: (1036-1118) was a distinguished grammarian and lexicographer.

Jacob Aba Mari: He translated commentaries of Averroes into Hebrew in 1232 & al-Farghani's work on astronomy.

Yahuda Cohen: He came to Italy in 1247 from al-Andalus. He wrote an encyclopedia in Arabic, and later translated the same into Hebrew. Four Italian translations works of Arabic works, i.e., Plato of Tivoli translated works of al-Battani & al-Farghani in astronomy. Stephen of Pisa, translated the medical works of Ali Abbas al-Majusi (Haly Abbas). Bancossa was an Italian Jew who translated in 1255 Ibn Rushd's Kulliyat fee al-Tibb (Colliget). Paravicious translated in Venice ibn Zuhr's Tayseer in 1290.

Faraj bin Salim was a Jew from Girgenti, Sicily, who, in 1279, translated Zakariyya al-Razi's encyclopedia in medicine al-Hawi entitled Liber Continens. This translation was done under the patronage of King Charles of Anjou (1220-85). Later, Ferrari da Grado of Italy, steeped in Islamic medicine, wrote a commentary on the 9th part of al-Hawi. This was the first medical book printed in Europe.

References:

1. A. Lewis, Islamic World and the West, page 25, NY 1970
2. Menocal, Arabic role in medieval literary History, page 118, Philadelphia 1987
3. Aziz Ahmad , History of Islamic Sicily, page 44
4. Encyclopedia of Islam, page 590, volume 9, 1997

5. P. Hitti, History of the Arabs, page 607, 1946
6. C. Burnett, Introduction of Arabic learning into England, page 23, 1997
7. W. Durant, Age of Faith, page 704
8. G. Crespi, The Arabis in Europe, page 297, NY 1979
9. James Powell, Muslims under Latin rule, page 122, NJ 1990
10. E. Kantorowicz, Frederick the second, page 186, 1931
11. Dictionary of Scientific Biography, page 146, Vol 5, 1972
12. Menocal, Arabic role in medieval literature, pages 61 & 62, Philadelphia
13. C.H. Haskin, Renaissance of 12th century, page 334, 1957 OHIO, USA
14. C .Butterwoth, Introduction of Arabic philosophy into Europe, page 54, 1993
- 15 C. Burnett, Introduction of Arabic learning, page 3, 1997
16. Menocal, Arabic role, page 66