

# “Ask to know in the farthest of lands” Islam and Chinese culture

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## I. Islam in China

The Islamic religion made its first entrance into Chinese territory in the year 651 CE, the most likely date judging by opinions of historians and scholars. The fourth part of the old book of the T'ang Royal dynasty reveals that on the 25th day of the eighth month in the second year of Emperor Kao Zu's rule (650-684), the state of Ta Zi sent its first ambassador to present his Majesty with gifts. This date is the second day of Muharram of the 31st Year in the Hijri calendar, i.e. during the caliphate of 'Uthman b. 'Affan. During the rule of the Han dynasty (206 BC-220 CE), Arabia was referred to in books as *tiao zi*--this name changed to *ta zi* under the Tang dynasty

(618-907 CE) The note about the aforementioned official ambassador's visit was the first reference to Sino-Islamic contacts of its kind in Chinese documents, and its date marked the first entry of Islam into Chinese territory. Islam later spread quickly under the T'ang dynasty and the Mongolian Yuwan dynasty (1271-1368 CE).

Today there are around twenty million followers of Islam spread across China. For the most part, they are Sunni Muslims, followers of the Hanafi school. A small number of Chinese Muslims, living in the remote areas of north-western China adjoining Iran and Afghanistan, are Shi'i. Also to be noted is the strong influence of different Sufi Schools in north-western China where major communities of Muslims reside.

Chinese Muslims are divided into two categories:

The first major category consists of Chinese-speaking Muslims who reside in the inner

districts and along the southeastern coast of China. They live in small communities around town mosques and are surrounded by non-Muslim Chinese.

The second category of Chinese Muslims is formed of the different ethnic minorities who speak several Turkic languages, and are the natives of the vast northwestern Chinese territories. There are about forty thousand mosques in China today.

## **II. Sino-Arabic Cultural Mix**

It is certain that Islam found its way to China through trade. Reports abound in the old official Chinese documents of Arab commercial activities, alongside popular tales and anecdotes. We also find traces of this in old Arabic historical, geographic and travel literature books. An old Chinese proverb even says: Islam came to China by boat and on camel back.

There were two roads of commerce joining China and Arabia: The first was a land road to the North, starting in the East at Chang An town, formerly the Chinese capital, and ending in Baghdad, the capital of the Abbasid caliphate at the time. The second was a maritime road to the South, from the seaports of Canton and Chuwang Chu on the Chinese Eastern coast. The Chinese exported silk, tea, textiles and China ware to the Arabs, importing from them perfumes, incense, precious stones, ivory, medicine, dried fruits, and nuts. The nature of the imports made the road known as the “Silk Road,” or the “Perfume road.”

These commercial activities were remarkable for the following reasons:

### **1. The great number of Arab traders**

In part 232 of “Across History,” it is said that in the year 778 CE a great number of

foreigners were present in the imperial guest house. They stayed there for an extended time, because they were unable to return to their homes after the long distance commercial road was cut due to the successive raids it suffered from Tibetan tribes. Some foreigners even stayed for 40 years. Many of them married Chinese women and owned houses and lands outside the imperial guesthouse. After investigating the matter thoroughly, the competent minister, Li Mi (in 987), instructed those who own houses outside the imperial guesthouse to move into them, and those who did not to be employed according to their respective fields of competence, i.e. either as servants in royal palaces, or soldiers in the Chinese army. After this decision, only a few dozen foreigners remained in the guesthouse, saving the Chinese state around half a million *min* (old Chinese currency).

The old book of the T'ang royal dynasty (*ju tang shu*), part 131, records of the biography of the ruler Li Mian. It is written:

Mr. Li Mian is a fair and honest ruler, appointed over the city of Canton. The commercial ships entering the south harbor did not exceed fifty ships yearly, but in the last year of his ruling, they amounted to more than forty thousand ships per year, because the ruler Mian did not impose taxes or compulsory searches of them. He was appointed to his post in the year 770.

The new book of the T'ang royal dynasty [Xin Tang Shu], part 144 mentions Tian Ching Kong. It says that, in the year 756, there was an outbreak which caused countless casualties in the population, among whom were a number of Persian and Arab traders whose death toll rose to thousands. This indicates that the Arab communities counted for a significant part of the population in the city.

The Arabic historian, Abu Zaid Hassan al-Sirafi, of the ninth century, related from Sulayman the trader, in his "history series"

that Canton was a prosperous commercial city with huge communities of Arabic traders. The Chinese government of the time imposed a tax on foreigners, whose exact number was one hundred and twenty thousand persons of Christian, Jewish and Muslim origins.

In his *Muruj al-dhahab wa ma'adin al-jawhar* [Pastures of Gold and Precious Stones], the Arabic historian Ali b. al-Hussain al-Mas'udi (d. 956) writes that the rebel leader Huang Chao entered the city of Canton in 879 and let his men go on a rampage in it, causing two hundred thousand deaths among Muslims, Christians and Zoroastrists. These exaggerating tales may differ, but they give an idea of the number of Arab traders in China during the T'ang dynasty (618-907).

## **2. The wealth and riches of Arab traders in China**

There were many well-known wealthy Arab traders in the land, some of whom were appointed in prominent positions. We cite

some official Chinese documents and give the following examples:

-Al-Bushimi, who presented the Emperor Tai Zong (976-998) of the Zong dynasty (960-1289), in the year 993, with numerous gifts among which were 50 horns of ivory, 1000 kilograms of the finest incense, 100 bottles of fine perfumes, and four kilograms in bars of gold, silver and copper. In 995, his son personally offered the emperor gifts of an even higher value than those given by his father. The detailed lists of these gifts show how wealthy he was.

-Saharian Omani Sangator, who lived in Canton for decades and whose fortune is estimated to several million *min*.

- Al-Buyari who arrived from Yemen before 1131 and married one of the local Chinese ruler's sisters. He is said to have brought from



his country at one time 209 horns of ivory and 39 horns of rhinoceros, weighing over 30 kilograms each. The royal palace is said to have chosen 100 horns of ivory and the whole of 35 rhino horns for personal use.

### **3. High-ranking Arab Traders**

Arab traders were among the most prominent and highly ranked foreign traders in China in regard to wealth and trade size. The Chinese emperors benefited from their import of foreign investments into the country. China's external trades were centered around the western capital (presently Thean) the Eastern capital (presently Luwaa Yang), Canton (presently Kwatgatnu), the olive city (presently Tchwa Ntchou), Mintchu (now Ningbo), Hangtchu, and Yangtchu all of which are coastal cities or riverside towns on the Yang Tse. The maritime route was the most preferred one because of the ease to travel on it, its low cost, big load capacity and safety.

## **4. Consequences of Arab Traders in China**

All the aforementioned has two consequences which the Arab Muslim traders had probably not intended: First, the spread of Islam; and second, the mixing of Arab and Chinese cultures.

Muslim traders were grouped in special neighborhoods of the city and were endowed with their own administrative system. The Chinese government was aware of this system and it chose the most fit to rule over the others and appointed him as president. His job was to handle matters of supervision, security and justice inside the neighborhood. His tasks also included helping the Chinese government collect taxes from the Arab traders, the sum of which was a considerable income for the treasury.

Muslim traders would build mosques in the areas where they reside to carry out their religious beliefs and duties. The oldest of these mosques were the Hway Ching mosque (the mosque of longing for the Prophet) in Canton

(Kwang tchu), the Ching Jing mosque, (mosque of purity and clarity) in the olive city (Kwangtchu), the Chiang Khe mosque (al-Kirki al-Malak mosque) in Yang Tchu, and the Jin Jiau mosque (mosque of the Muslim faith) in Hangtu.

## **5. Arabic**

Muslims would speak Arabic in their homes and when performing the religious rituals and speak Chinese in markets and on official occasions. Their offspring studied Arabic language and sciences at home and Chinese language and sciences at school. They involuntarily were the first Sino-Muslims who mixed the two cultures, the Arab Islamic culture and the traditional Chinese culture. This phenomenon was later to expand especially after the Mongols conquered the world and sat on the Chinese throne.

## **6. Mongols**

The Mongolian rampage through western Asia, the destruction of the Abbasid Caliphate (Khawarizmi rule) and the fall of Baghdad in 1258 had the biggest impact on Arab and Muslim countries, as well as on China since the Mongols continued their conquests and occupied its northern territories.

The Mongolian king Khubilai Khan named his dynasty's rule "Ywan" in 1271, following the Chinese tradition of naming ruling dynasties. He declared Beijing his kingdom's capital, after having unified the Chinese territories. During the military operations for the unification of China, Mongols brought great numbers of Muslims from central Asia and Arabia to help them in their conquests. After the military operations in China, the Muslim armies settled in their appointed positions in inner Chinese provinces. The most distinctive elements were handed key governmental and provincial positions. Craftsmen and laborers were grouped in their relevant industrial and artistic fields. "During the eighty-year rule of

Mongols over China, forty eight Chinese Muslims were given key positions, ranging from minister to provincial ruler.”(2) There were a larger number of Muslims who occupied different posts in provincial governments, said to have reached between one fifth and one third of the total number of employees in certain regions. Thus the real interaction between traditional Chinese culture and Arabic Islamic culture came to life during this period. China’s vast territory saw the birth of an Islamic ethnic group--the *hui hui*--whose daily work language was Chinese while Arabic, the language of the Quran, with its sciences and culture was used as an inside language. These people, and the later generations following them had to study the Chinese language, sciences and culture for obligations of daily life and education (i.e., the earthly life) and the Arabic language and Islamic sciences to perform their religious duties (i.e., spiritual life). They became the carriers of Arabic and Chinese cultures and the symbol of the interaction of these two cultures; neither an easy nor simple task but rather hard

and arduous, especially during times of adversity. But we know that they fought and worked hard to make their own way, without ever giving up.

### **III. Transmitting Arabic Astrological Sciences to China**

1. The genealogy book of the Muslim “Ma” family in Chinese (An Ching) reveals that their first ancestor, Ma Yi Ze, was of Arab origin and his home was close to the holy city of Mecca. He first set foot in China in the year 961, during the Zong dynasty (960-1279 AD). The capital then was Pyan Lyang (presently known as Kai Fing). “Ma” was called on to participate in putting the almanac together, to which he greatly contributed and finished his work in two years’ time. He gave it to the Emperor Song Chay Zong who authorized it and bestowed upon Ma Yi Ze an honorary title, appointing him to be a supervisor of the royal observatory.(3)

Ma Yi Zi is considered to be the first Arabic astronomer to contribute to Chinese almanacs. Scholars believe that there are two reasons why he was called upon to work in this project:

First: The Arabic Islamic astrological system differs from the Chinese one. There are advanced scientific qualities in some fields of the Arabic system.

Second: The spread of Muslims in China during this era.

Ma Yi Ze truly transmitted advanced Arabic astrological sciences to China, among which were the weekly calendar, conforming to the calendar used to organized the Friday prayer. The Chinese had previously applied the ten-day calendar with a one-day weekend. He also introduced the Chinese to the method of calculating the dates of the twelve astrological signs, as well as their respective positions to

the virtual orbit of the sun, a novelty in the Chinese astronomical science of the time which had applied a different method of calculation. Arabs were endowed with much competence in this field, because of their expertise in observing the stars and the twelve signs to foretell the future. He also introduced them to the Arabic way of calculating the orbits of the five stars and the time of the sun and moon eclipses. The five stars have a special importance for the Chinese for they represent the five elements and five directions.

Jupiter: fire-South

Mercury: water, North

Saturn: earth, center

Chinese astronomy was based on these five elements and directions.

Ma Yi Ze was born in Arabia in 921 and he died in China in 1005. He worked in the



Chinese Royal Observatory and had three children.

2. The “History of the Yuan Dynasty” reported in its “employer” section that Emperor Cheng Zong summoned the Arabic Muslim Astronomer, Jamal al-Din, as well as others before he sat on the throne, so they could put their scientific skills and expertise at the disposition of the royal court. Emperor Cheng Zong is no other than Khubilai Khan (1214-1294), founder of the Mongol Yuan dynasty in China. Jamal al-Din first arrived in China before 1260 after he had contributed to the building of the observatory in the Iranian city of Maragheh. The famous mathematician-astronomer, Nasir al-Din Muhammad al-Tusi (1200-1273) had been dispatched by Hulegu, the Mongolian conqueror and founder of the Ilkhanid state in Iran, to Maragheh to supervise the construction of the observatory. Jamal al-Din most probably worked alongside Nasir al-Din on this project, and was sent among other scientists by Hulegu to China,

after Khubilai Khan requested it. The latter wanted Jamal al-Din to put together the Islamic almanac that was to be distributed in China so the Muslim Chinese could follow it to perform their religious duties. Jamal al-Din finished the task he had been assigned in 1267 and presented it to Khubilai Khan who approved and officially published it under the name of “Wannien li”, or “The ten thousand year calendar.”

Jamal al-Din introduced Arabic and Islamic astronomical tables, based on twelve constellations and 36 degrees, instead of the traditional 28 mansion tables the Chinese used to follow. The moon’s 28 mansions are the orbits according to which it revolves around the earth. Jamal al-Din had a different way to calculate the sun and moon eclipses than that of the Chinese, but both methods amounted to the same results.

In the same year, Jamal al-Din brought seven astronomical instruments he had invented and constructed himself as gifts to the Emperor. His contribution is regarded as a

major and precious addition from the Arabic and Islamic observatory to the Chinese one. Subsequently, Khubilai Khan ordered the establishment of an institute of Muslim astronomy in China over which Jamal al-Din was appointed supervising director. This Muslim observatory was established in 1271 AD in the first Mongolian capital, “in Chinese inner Mongolia presently.” Jamal al-Din operated it while continuing his research in astronomy on the Chinese territory which differs from Arabia in astronomical geography. He was assisted in his work by the Muslim scientists Kamal al-Din and Shams al-Din.

In 1285, Jamal al-Din proposed to the Chinese government drawing maps of unified China. His offer was welcomed and Khubilai Khan appointed him to supervise the whole map-drawing operation in 1286. The route to Arabia was introduced in these maps and 755 maps out of 1310 maps were made by the year 1291. Besides the sketched maps, these documents included written records, historical

and geographical information on the area, and the customs and traditions of the population. This was a significant and laborious effort, especially when one realizes the extent to which the Mongolian empire was spread. It is also the last task executed by Jamal al-Din, cited in the official Chinese documents. Both his birth and death dates are unknown.

**3.** The “Ma” family genealogy accounts of Nanjing city reveal that the first ancestor’s name is Dar al-Din. He is said to have been a mathematician-astronomer of Muslim and Arab origin who arrived in China in 1369. He was accompanied by his three sons: al-Sheikh, Hammad, and Hassan. The family had first resided in Jedda, a city located sixty kilometers to the south of Mecca. Dar al-Din was a Muslim from the Quraysh tribe.(4) His firstborn, al-Sheikh, is said to have married a princess, one of Emperor Ming Tai Zong’s daughter 1368-1399. This emperor was the founder of the Ming dynasty (1368-1644). He gave his son-in-law the family name “Ma”,

thus changing his name to “Ma al-Sheikh” (traditionally, Chinese family names precede first names, unlike the Arabic tradition where the contrary is done). “MA” was the family name of the Empress Ma La Mei and taking her name was a great honor. Ma Dar al-Din, Ma al-Sheikh, Ma Hammad and Ma Hassan had participated in the translation and writing of the new Islamic calendars, entitled “Hui Hui Li Fa” (Muslims’ calendar). There were four sections to this calendar:

1. The solar calendar
2. The lunar calendar
3. The five stars’ rotational orbits and the sun and moon rotational orbits
4. The sun and moon’s supposed eclipse dates.

The last two sections are the most scientifically significant. The calendars represented the highest scientific level in

astronomy that Chinese and Arab scientists had reached at the time.

“The calculations of the orbital year of the sun, or solar year of the “Muslim System of Calendrical Astronomy” were much more accurate than the ones in old traditional Chinese calendars. The same goes for the calculations of the distance separating the sun from the earth (farthest and closest positions in their orbits), which were absent in Chinese calendars. Muslim calendars are also extremely accurate when they precise the alignment of the five stars as well as the distance separating their orbits from the sun’s (farthest and closest position). It is safe to say that the Muslim calendar was the highest scientific level attained in the world, with the beginning of the Ming dynasty. It is a combination of Muslim Arabic and traditional Chinese astronomy. It was achieved on the Chinese lands.(5)

Ma Dar Eddine introduced the names of 20 stars and 30 fixed stars, with their orbital rotations and degrees to the Chinese. This basically meant that the European concept of degrees was introduced in China for the first time.(6)

Ma Dar Eddine passed away in 1374. His children resumed his work in astronomy and occupied different positions in the field of astronomy in China, but went different paths later. Their progeny lives on separate parts of the Chinese territory.

4. Fifteenth-century Chinese astronomer Bei Lin wrote “Steps in Astronomical Calculation” which was considered a revival and sequel to “Muslim Calendar.” In his introduction of the book, he describes the Muslim calendar as "an unprecedented book." At the beginning of the rule of the Ming dynasty, in 1379, foreigners from distant lands set foot on the Chinese soil and introduced the sand calculation of the

sun's, the moon's and stars' rotation. They called it the "longitude and latitude lines." Their book was translated into Chinese and distributed on the Chinese territory, but it faces the danger of extinction because it is an antique one. I was a deputy controller at the time and wrote a report that I presented to the high authorities where I suggested that we revive and complete it." "Steps in Astronomical Calculation" is a seven-part book and is in total harmony with what was said in the "Muslim System of Calendrical Astronomy." The former is indeed a revival and completion of the latter. Both books were printed at the same time, which helped the second book exist to this present day. The credit of this work is to be given to the Chinese astronomer Bei Lin whose efforts produced the new book in which he added new and important information, like detailed clarifications to what was vaguely mentioned in the Muslim calendar. These clarifications included information on the stars and the constellations. He also added ten fast-calculation tables to the pre-existing 29 tables



and a list of Chinese and foreign names of 277 fixed stars, along with their positions according to the latitude and longitude lines, and their degrees. This was the first attempt to put Chinese appellations of fixed stars opposing the foreign ones. The book was a positive push towards the scientific interaction of the Chinese, Arabic and western astronomical knowledge. The Muslim calendar was completed in 1385, while the “Steps to Astronomical Calculation” was completed in 1477, more than ninety years after the former.(7)

What is noteworthy is that Korean scientists transferred Arabic Muslim astronomy to Korea through China in the Middle Ages. The Korean “reports of the Li dynasty” mentioned, under the “astronomical calculations” that the book’s authors are Tsun Tse and Jin Djan. They both had studied astronomy in China between 1420 and 1432. They read the “Muslim System of Calendrical Astronomy,” reviewed, researched and used the main elements of the book to put theirs

together. The content of both books are similar, the only difference between them being the classification of the subjects and tables which are simpler, clearer and easier to learn in the Korean book.(8)

### **The six instruments that Jamal al-Din offered the Chinese observatory**

First instrument: *Dhatu Halag* was an armillary sphere, with several brass rings with annotated degrees to help define the positions and degrees of the constellations.

Second instrument: *Dhatu Shubat* was a fixed instrument made of three brass rulers, one of which contains indications of degrees to define angles and distances separating celestial bodies. The first is a two and a half meter long fixed ruler while the other two are mobile one meter and 85 centimeters long rulers. This instrument resembles the old Patlimos ruler.

Third instrument: *Ruham Imuwaji* was a marble-made instrument whose top surface is tilted with a half circular, 185-degree ruler fixed on it, to delimitate the spring and autumn equinoxes.

Fourth instrument: *Ruham Imutawi* was a flat-marbled instrument constituted of a four-meter high house, with a horizontal line dug into the ground, an opening in the ceiling and a half circular brass disk hanging on one of the walls. In the center of the disk a mobile needle is fixed to delimitate the summer and winter equinoxes.

1. half a circle with degrees
2. a pierced tube
3. a mobile needle

Fifth instrument: *Kura-i-Sama* was a celestial globe made of a ball which shows the positions of the constellations on it, endowed

with several brass rings on which are the degrees to measure the locations of celestial bodies.

Sixth instrument was an astrolabe made of a brass disk and two pointers to measure the altitude of the sun and stars and specify the day and night.

#### **IV. The Transfer of Muslim Arabic Medicinal Sciences to China**

1. The “Handbooks of Secrets and Wonders” by the Chinese poet Duan Cheng Shi 802-863 of the T’ang dynasty (618-907) tells us the names of plants which came from Arabia and the Persian lands to be used for medicinal purposes. He detailed under each plant’s name its description and the diseases it cures. The poet’s father being the court’s Chief Minister who always receives foreign delegations, Duan Cheng Shi had the opportunity to inquire on these plants from Arab and Persian guests and

gather information which he later recorded in the most accurate and precise of accounts. There is another book on the subject, by the Persian Chinese scientist and poet Li Xun (855-930), entitled “Imported Medicinal Plants.”

The writer’s family had been living in China for many generations and his ancestors were apothecaries who were greatly versed in Chinese language and culture. LiXuan’s sister was the wife of one of Si Chuan’s princes, and his family was a very well reputed one. Li Xun wrote in his book of hundreds of kinds of medicinal drugs imported from Arabia and Persia. The majority of these drugs include aromatic plants and gums like rose perfume and gum Arabic, lac and tragacanth. He also specified the places where they grow, and are produced as well as describing them in detail and specifying the diseases which they cure. As trade between China and Arabia flourished, many Arabic medicines arrived in China by land and sea like chebulic myrobalan, gums, musk, aloe vera, myrrh, cumin, mercury,

mandrake, perfumed sticks, nutmeg, black pepper, ginger, camphor, castor-oil plant, eggplant and aniseed.

2. Chinese medicines were mostly in the form of a liquid extracted from different drugs soaked in water and boiled. This method of preparing medicines could not be applied to Arabic drugs which usually came in the form of aromatic plants and gums melting fast in water and evaporating; a process that deprives them of their medicinal qualities. Arabic and Persian doctors and apothecaries would change them into pills, powders and pastes instead of drinking liquids. Later, these forms were also adopted by the Chinese.

Old Chinese medicine was a general, non-specific one. The diseases in the court hospital were classified between 1078 and 1285 under nine categories: internal medicine, neurology, pediatrics, ophthalmology, medicine of tumor, obstetrics, dental medicine, laryngology, surgery and acupuncture. These

are probably the influences of Arabic Muslim medicine which replicated the Greek medicinal classification from Hippocrates' work (460-377 BC) to Arabia and from then on to China.

**3.** In the old book section of Beijing's National Library one can find the remnants of the book "Recipes of the Hui Hui" which is a collection of medicinal recipes from the Muslim Chinese. The work is divided into 36 volumes, only four of which still exist in the library: the second volume of the index, the twelfth, thirtieth and thirty-fourth volumes. The identity of the writer and date of publication remain a mystery. The remainder volumes (the four) have 485 pages, which almost make up two hundred thousand Chinese characters. Scholars and scientists have disagreed on its date of publication which is most likely to have been in the second half of the fourteenth century CE, corresponding with the late Mongolian Yuan dynasty and the early Ming rule. The book contains names of diseases,

their description, the names of cures and recipes transliterated from oral traditions of different foreign languages into Chinese. They were mostly transmitted from Arabic, Persian and old Greek, as well as some translations from Arami and Turkman languages. In order to understand them today, we need to read them in their Arabic, Persian or Greek contexts.

The remaining four of the 36 volumes contain 232 kinds of Arabic or Persian drugs, 170 of which Avicenna mentioned in his book “Canon of Medicine,” including several Chinese drugs. This may suggest that the “Recipes of the Hui Hui” is originally taken from Avicenna’s “Canon of Medicine.” There is a close relationship between the Chinese book and Avicenna’s when it comes to the use of medicines, detailed under the chapter “drugs and others.” The Chinese book also states many good Chinese substitutes for certain Arabic and Persian drugs, lest they be missing.



The Chinese book cites names of persons and medicines which can only be understood if they were taken back to their Arabic origin, like “Hermes’ Paste” [V.30], “Hippocrates’ Medicine” [V.34], “Aristoteles’ drugs for Alexander” [V. 30], “the philosophers’ paste” [V.30]. The same recipes can be found in Avicenna’s “Canon of Medicine”, such as “Drugs Aristoteles prescribed Alexander” [V.5, Section 3, p.360], “the Philosophers’ paste or the paste of life” [V.5, Section 3, p.318], and names of people Yahya b. Massaweih [Chinese book, V. 30], Yahya b. Sarafyon [V.30], Muhammad b. Zakaria [V. 2], Hanin b. Ishaq [V.30], Sabour b. Sahl [V.30], Sahhar Bakht [V.30], Abu Ali Ibn Sina [Avicenna, V.30].

This demonstrates that old Greek medicine was transmitted to Arabia during the Abbasid era, when it was being developed and enriched by Arabic and Persian doctors, Muslims, Christians, and Jews. It was later on fully transmitted, in its complete form and under special circumstances to the Chinese,

where the traditional medicine benefited of it. Examples of this are “The Recipes of the Hui Hui,” the Chinese equivalent of Avicenna’s “Canon of Medicine” in its content and form. Scholars from around the world have previously affirmed that Avicenna’s book reached Europe in the Middle Ages. The least of the confirmations we can give is that this book has had clear impacts on East, in old medieval China as well.

**4.** Traditional Chinese medicine was centered on one philosophical concept: the Ying and the Yang (positive and negative poles), as well as the five elements (metal, wood, water, fire and earth). Human beings find wellness and health in the harmony of the two poles with the elements, while any and all discord bring illness. Arabic Muslim medicine had, on the other hand, espoused the Greek philosophical concept of the four elements: earth, water, fire and air. Avicenna accepted this concept in his “Canon of Medicine.” He explained that the body is formed of four elements, two of which

are heavy (earth and water), while the other two are light (fire and air). Health is in the harmony of these elements, and all disharmonious proportion leads to illness.

The old famous Greek doctor Hippocrates (460-377 BC) had based his medical theory on four elements: blood, yellow bile, phlegm and black bile, from which he concluded the four humors of coldness, heat, dryness and moisture. They are each divided into four degrees: extremely light, light, severe and extremely severe. These four elements, liquids, humors and degrees are the philosophical bases of Arabic and Greek medicine.

They differ from Chinese medicine's bipolarity and five element theory which in fact are the philosophical bases of Chinese Taoism, not devoid of myth, witchcraft and wizardry. Muslim Chinese medicine and Arabic Muslim medicine were both very far from this concept. It was in fact a purely scientific medicine which spread among Muslims and the Chinese surrounding them, and became a part of old general Chinese

medicine. Its traces can be found in works by non-Muslim Chinese like the “Index of Medicinal Plants”, by the renowned Chinese pharmacist “Li Shi Zhen” (1518-1593), “Comprehensive Medicinal Recipes” written in 1406 and others. In these books, the Muslim recipes are transmitted without any alteration.

## **V. Transmission of the Canon Technologies to China**

1. The volume on “Craftsmen” of the “Records of the Yuan Dynasty” cites that Ala al-Din is the Arab Muslim who is a master of making cannons. He arrived to China in 1271, by invitation from Emperor Khulalai Khan. He made cannons and tested them under the watching eyes of the Emperor, the princes and the ministers in front of the gates of the forbidden city. When the test succeeded, the Emperor bestowed many a gift and honorary title upon Alaeddine and his companions. When the Mongols pursued their conquests farther South, in 1274, Ala al-Din was

dispatched with the cannons he made to help the Mongolian army hit the town of Tan Chu (presently Chang Cha) and other towns on the Southern riverbank of Yantse. Ala al-Din's cannons played a crucial role in making these cities fall. In 1278, he was appointed General, and later on General Leader of the Cannon forces (1285). He retired in 1300 and died in 1312. His son took over his position.

2. The same volume of the same record cited that Ishmael was the Arab Muslim who was a master craftsman of cannons. He arrived with Ala al-Din to China in 1271 and accompanied the Mongolian army when they struck the town of Chyang Yang in 1273. He had previously checked the battlefield to choose the best location outside of the city where the cannons should be placed. Every cannonball was 75 kilograms in weight and each made a crater of a two and a half meter diameter when it exploded. The enemy was terrorized and surrendered. After this, Ishmael was appointed leader of the Muslim cannons and died of

illness a year later in 1274. His son Buba took over his position. When the Mongolian army crossed the Yantse river, they were backed in the rear by the Muslim canons which struck and drowned all the enemy ships. Buba was then made General Leader of the Muslim Cannons in 1281 then he was promoted to minister of justice and governor. He retired and his son Hasan took over his offices.

Buba's brother, Ibrahim, was also a military leader. In 1328, Ibrahim moved with his fellow craftsmen soldiers to the capital by order of the High Commanders to help Mohammad, Ala al-Din's son's soldiers in making new cannons. Ibrahim died in 1330 and was replaced by his son Ya'qub.

## **VI. Muslim Cultural Accomplishments in China**

Anyone going to the Chinese capital of Beijing, whether he be Chinese or a foreigner, must visit the old royal palaces in the forbidden city, as well as the royal gardens

adjoining the palaces (Bi Hay presently). Visitors will marvel at the lavish grandeur and magnificence of the palaces and gardens and the mastery of architecture in them. These landmarks were built eight centuries ago during the rule of the Yuan dynasty, when Khubalai Khan first made Beijing capital of his kingdom in 1279. The Arab Muslim architect, Ikhtiyar al-Din planned and executed both projects under the rule of Khubalai Khan (1215-1294 and 1260-1294).

Prominent Chinese professor, former head professor in Beijing University and expert on contemporary Chinese history, Chin Yuan (1880-1971) wrote in his study, “Two Chinese Studies of Arabia and Persia” that:

Our biggest negligence is that we are unconcerned with mentioning who designed and executed the project of the palaces and adjoining forbidden city today, when an Arab Muslim architect is responsible for these accomplishments. The reason for this is our indifference

with architecture and technology when we record the events of a century in our history books. The designer and executive manager of this project is the Arab Muslim Ikhtiyar al-Din. I have just recently read this reference in “Anthology”, by O Yang Shwan [1274-1358] whose job it was to write and review history books at the court. He said in one of his essays on the document pertaining to the gravestone of Mr. Muhammad, that this person is in fact the Arab Ikhtiyar al-Din’s son who had been present since the T’ang era. When Khubalai Khan sat on the Chinese throne he appointed Ikhtiyar al-Din manager of Houses and Camps, Mongolian for Architecture and Construction, in 1267. Since the Yuan rule was at its peak, the palaces had to be magnificent, luxurious and wonderful to be a good representation of this might and glory. Ikhtiyar al-Din worked relentlessly to plan and design, and later to execute the project with the ministers of finance and



labor. After the project was implemented, it received great praise and admiration from the emperor who bestowed even more precious gifts and honors upon Ikhtiyar al-Din, who had overworked himself so much that he was old before his time.

Prior to building the palaces and the Forbidden City, Ikhtiyar al-Din had presented a proposal to build the gardens in 1263. He executed the project in 1264. Certain parts of the old gardens still remain, notably the island in the middle of the lake and the white tower above it.

The scholar Ma Ming Dao (1908-1991) published an article entitled “Who Built Beijing?” in the book *The Islamic Influences on Chinese Culture*, published in 1982 by the section of publications in the Chinese Culture University of Taiwan. In this essay, he says that Beijing was designed by the Arab Muslim who modeled it after the capital of the Abbasid empire in the Middle Ages, adding that the

present Sky Temple in Beijing was designed by the Arab Muslim architect.

2. There were many prominent men of arts and literature among the Muslim Chinese in the Middle Ages like Shams al-Din (1211-1279) who was a prominent politician and governor of the province of Yunnan in China. He was also a wise man in his agricultural, economic and educational policies. Under him, the province knew unprecedented prosperity. Islam spread fast and wide in it as well, and many mosques were built. There was also Saad Allah (1272- 1348), the grand poet under the Yuan rule. He wrote a poetry book with more than 800 poems on diverse subjects, including description of Nature, the sufferings of the people and the damages of ongoing wars...

Also, Kao Ke Kong (1248-1310), a painter, poet and minister of justice at the same time. He was also well known for his mastery in painting natural landscapes like

mountains, rivers, forests and trees. His poetry is known for its description of rural life scenes.

Lastly, Ma Jiu Kao who lived between the late thirteenth and the early fourteenth centuries was an calligrapher, a prominent musician and a holder of a high ranking position in the land. He was of Arab and Muslim origins and has more than 28 registered musical pieces to his name in the old “songs of Ty Bing,”

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[1] - Professor in the Beijing Language and Culture University, China

2 - *The Islamic History Documents*, p.180.

2 - *Islam and Chinese Culture*, p. 158

4 - “Islam and Chinese culture”, p. 190.

5 - JYO JING Ching, Dr. "Research on Astronomy for the Muslim Chinese, Hwa Hwa" p.117.

6 - Ibid, p.121.

7 - Ibid.

8 - Ibid, 134-139.