

Contribution of Medieval Muslim Central Asian Scholarship to the Renaissance: A Study

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ABSTRACT

Islamic Civilization delivered incredible accomplishments and the scholarly heritage of a buoyancy that changed the world. Traversing a more prominent geographic territory than some other does, over the eastern half of the globe from Spain and North Africa to the Middle East and Asia, it shaped a continuum between the Classical world and the European Renaissance. Muslims today are in an abnormal position of being seen through a perspective that for the most part portrays Muslim society as a retrogressive culture. The prominent recorded record is antagonized from reported reality that exhibits that Islamic civilization at its stature was the model of human advance and improvement. Islamic commitments to Medieval Europe were various, influencing such shifted territories as workmanship, design, solution, agribusiness, music, dialect, training, law, and innovation. From the eleventh to the thirteenth century, Europe consumed learning from the Islamic development. In the mid twentieth century the musicologist Henry George Farmer composed that a "developing number of researchers... recognize(d) that the impact of the Muslim human progress in general on medieval Europe was colossal in such fields as science, logic, religious philosophy, writing, style, than has been perceived." The paper is unobtrusive endeavour to think about the commitment of Muslim scholars with exceptional reference to Central Asia.

Key Words: *Islam, Central Asia, Scholarship*

I.BACKGROUND

Islam sculpted and shaped a inimitable bridge between the civilizations of the East and the West. Muslim scholars rescued knowledge that would have been lost for centuries, and brought something new to light each time. In these bursts of creativity, Muslims made their own contributions to the world over many centuries. Muslims saw the quest for knowledge as a religious duty. These contributions stemmed from the unique features of a religion that conferred dignity on human beings.

Islam made clear that people should enjoy earth's bounties within moral and ethical boundaries, and sought to delegitimize social distinctions between classes and races. Islamic civilization transcended geographical and temporal boundaries from Europe to Asia, and thus achieved unity among divergent peoples. The position of women improved in its communities. The Islamic way of life was responsible for the creation of Islamic civilization in all its achievements and influences.

Islam was one of the world's leading civilizations for a thousand years. Its language, Arabic, was the international language of science.¹ Yet many history books attribute achievements of Islamic civilization to borrowing from other civilizations. These historians prefer to devote their attention to the West as the only civilization of the middle Ages, with a primary focus on Europe.² Their descriptions and judgments derive from texts dating from the seventh century onward, attacking Islam, the Qur'an, and Prophet Muhammad (S.A.W). The historians dwell at length on Greece and Rome and the early development of Christianity, summarize the Islamic period, and make an enormous leap to the Renaissance.

Muslims borrowed from preceding cultures, as did all non-Muslim civilizations, then made their own contributions and created a unique civilization.³ In turn, other civilizations, especially the nascent civilization of Europe, borrowed ideas and materials from the Islamic civilization. Islam produced another historical continuation by supplementing the development of Judaism and Christianity, and provided the foundation of the next dominant civilization: the West.⁴

II.AL- QURAN ON SCIENCES

The Qur'an stalwartly accentuates the beauty of nature and presence of Allah's miracles in the physical world. In many places the Qur'an references nature and elements of science and connects these with God's creation, even encouraging scientific research.⁵ The Qur'an draws attention to evidence from the natural world and emphasizes taqdīr, or "measure": the balancing of the extremes of quantity and quality while neglecting neither.⁶

Early Muslim scholars had already concluded the earth was round, based on their interpretation of a description in the Qur'an. Europeans refused to accept this fact well into the Renaissance, insisting the earth was flat.⁷ In Muslim Spain, Muslim and Jewish astronomers rejected Ptolemy's theories outright in favor of Aristotle's works. Muslim astronomers corrected Ptolemy's planetary model to conform to Muslim almanac tables, and acknowledged the existence of other planetary systems.⁸ Muslims also calculated circumferences using a pi well before they knew of Greek geometry.

During their conquests Muslims preserved Byzantine and Persian scientific institutions. Jundishapur became a science center for the Muslim world and its scholars came to Damascus, the Umayyad capital. Islamic science dominated the world for centuries and flowered during the Abbasid period of rule. Scholars from India, the Byzantine empire, and Persia gathered in Baghdad to learn from Muslim scholars. All scholarly materials were

¹ J.M. Roberts, *The Penguin History of the World* (Harmondsworth, Middx, UK: Penguin Books, 1980), p.378.

² Ibid

³ Franz Rosenthal, *Knowledge Triumphant* (Leiden, The Netherlands: E.J. Brill, 1970), p.70

⁴ Philip Curtin, *Cross-Cultural Trade in World History* (Cambridge, UK: Cambridge University Press, 1984), p.107.

⁵ Al-Qur'an 21:30, 24:45, 25:53-54, 34:9, 41:11.

⁶ Al-Qur'an 25:2, 54:49

⁷ Colin A. Ronan, *Science: Its History and Development Among the World's Cultures* (New York: Facts on File Publications, 1982), p.203.

⁸ J. Casulleras and J. Samsó (eds.), *From Baghdad to Barcelona: Studies in the Islamic Exact Sciences in Honour of Prof. Juan Vernet*, 2 vols. (Barcelona: Barcelona University, 1996), vol. 1, p.479.

written in a language new to the sciences. Everything was translated into Arabic before it was interpreted, which led to new terminologies and greater creativity.

Advances in astronomy greatly assisted travelers, who needed to know the positions of constellations and movements of stars to establish a route to follow and to calculate the time. The moon was also significant in the lives of Arabs, who demarcated 28 successive groups of stars known as "lunar stages." The position of the moon against these stages revealed the season of the year.⁹ Muslim Spain taught the West that the earth is a sphere, and passed along other valuable work such as astronomical tables.

Muslim science of chemistry developed a century and a half after the advent of Islam. Muslims made significant advances in mathematics, as well, with Muhammad ibn Musa's algorithm and development of algebra, geometric solutions, degree measurements, and trigonometric tables.¹⁰ The Islamic sciences developed owing to the civilization's open-ness to the achievements of other civilizations, especially the sciences in Persia, India, and ancient Greece. The translation movement encouraged by Muslim rulers played a significant role, and the Islamic sciences went on to influence the Renaissance.

Medicine

During the first years of Islam, China, India, Greece, and Persia excelled in medicine. Greek scholars settled at Jundishapur, Persia's advanced learning center, which contributed physicians to the Arab and Persian worlds. Some of these physicians were contemporaries of the Prophet Muhammad, who also gave common sense advice regarding illnesses, healthy eating habits, and hygiene. As the study of medicine developed in the Muslim world, subsequent caliphates relied on physicians from Jundishapur for medical advice, such as court doctor Hunayn ibn Ishaq al-Ibadi (also Hunain or Hunein) from the 9th century ce. translated Greek works into Arabic, wrote a hundred or so medical works that were influential in the Muslim world, and taught future influential physicians.

In the Abbasid era, all scholars gained some medical knowledge and many became polymaths. The atmosphere was conducive to learning and the scholars were highly esteemed. In the early 9th century ce Baghdad had 860 licensed physicians and many hospitals and schools.¹¹ An important period in the history of Islamic medicine covered three great physicians, writers of major texts, and philosophers: al-Razi, Ali ibn al-'Abbas al-Majusi, and Ibn Sina. Al-Razi's work signalled the maturity of Arabian medicine, and his most significant contribution was to distinguish smallpox from measles. He produced over 200 books, half of them on medicine, including a 10-volume treatise on Greek medicine.

Abu 'Ali al-Husayn ibn Sina is better known in Europe by the Latinized name "Avicenna." He is probably the most significant philosopher in the Islamic tradition and arguably the most influential philosopher of the pre-modern era. Born in Afshana near Bukhara in Central Asia in about 980, was the most highly recognized of Muslim scholars and a prominent medieval philosopher. Muslim medicine reached its pinnacle of achievement

⁹ Akbar S. Ahmed, *Discovering Islam: Making Sense of Muslim History and Society* (London & New York: Routledge, 1988), pp.238–346

¹⁰ George Sarton, *Introduction to the History of Science*, 3 vols. Vol.1, *From Homer to Omar Khayyam* (Baltimore, MD: Williams & Wilkins for the Carnegie Institute of Washington, 1927; repr. 1962), p.666.

¹¹ Edward G. Browne, *Arabian Medicine* (Lahore, Pakistan: Hijra International Publishers, 1990), p.48.

with his works and medical talents. Ibn Sina eminence in medical history rests on his masterpiece, (The Canon of Medicine), known in the West as the Canon, is divided in following in five: ¹²

- i. Anatomy, Physiology, Pathology, Etiology, Hygiene, Symptomatology, General Rules and Methods of Treatment, Regimen, General principles of Medicine etc.
- ii. Materic Medic
- iii. Particular disease
- iv. General therapy
- v. Formulation of compound drugs

Al-Qanun contains about 100 treatises. Some of them are tracts of a few pages; others are works extending through several volumes. He is said to have written 450 treatises on different subjects of which around 240 have survived. These include 150 treatises on philosophy and 40 dealing with medicine respectively.

During the early centuries of Muslim Spain, scholars aspiring to become physicians traveled to Baghdad, Cairo, Damascus, and Iran to acquire knowledge and experience at universities and hospitals. Later, Muslim Spain established its own universities with centres of medicine and philosophy, which facilitated the flow of Muslim expertise to the rest of Europe in the 12th century C.E. The most famous Andalusian Muslim scholar was Ibn Rushd, or Averroes. He influenced the West in philosophy but also excelled as a judge, physician, and author of a comprehensive medical encyclopaedia. Edward Browne writes that both Arab and non-Arab Muslims made the largest contribution to the body of scientific doctrine that they inherited from the Greeks regarding chemistry and medicine.¹³ As a result, Muslims considered chemistry and botany more useful in the preparation of medicines than as separate disciplines. Medical and pharmaceutical knowledge spread throughout the Muslim world owing to scholars traveling to the exceptional medical schools to learn from masters.

Muslims were noted for their hospitals and were the first to invent the kind of efficient hospital the world knows today. In addition to inventing the pharmacy, Islamic civilization produced pharmaceutical terminology and practices that transferred to European medicine, such as methods of medication preparation. Muslim medicine was influential and far-reaching, and the Islamic paradigm of knowledge of the medieval period was thorough and comprehensive in its focus.¹⁴

III.CENTRAL ASIAN SCHOLARSHIP

The region marked by a distinctive set of Islamic civilizations that began to emerge in the 8th century CE. By the ninth century Islam has become the dominant and governing religion, Bukhara, Samarkand, had become one of Islam's leading centres of learning and culture. Though the influence of Islam in Central Asia has waxed and waned over the past 1200 years, it has left a deep and indelible impression on its peoples and culture. The Central Asians population embraced Muslim philosophies and accepted their language for Islamic teachings and

¹² Ibid.p.56

¹³ Bernard Lewis, Islam and the West (New York, and Oxford, UK: Oxford University Press, 1993), pp.120–121.

¹⁴ Reynold A. Nicholson, A Literary History of the Arabs (Cambridge, UK: Cambridge University Press, 1966), p.323

culture. Islam gave new socio-religious system to Central Asian.¹⁵ Samanids (819 to 999 C.E) the first independent Muslim state in Central Asia was founded by an Iranian dynasty from Khurasan, with Bukhara as their capital. The Samanid state played a great role in the cultural history of the area. During this era Tajik-Persian language became widespread, and it was at this point that the great poets Abū 'Abd Allāh Ja'far ibn Muḥammad al-Rūdhakī, better known as Rudaki (858-941 C.E) also known as "Adam of Poets" and Abu 'l-Qasim Ferdowsi Tusi (940–1020) wrote their monumental works. The Arabic language, however, continued to be the language of science. The Samanids were of Iranian Stock. But the pious Samanid never ceased to acknowledge Caliphs as their suzerains, or to send regular tribute to Baghdad (seat of Caliph). In the late ninth and early tenth century's great literary upsurge occurred in Central Asia. Among the six scholars of *Sahah-i-sitta* (canonical collections of ahadith), five were from Central Asia. Some of them were Muhammad-bin-Ismail of Bukhara, (810-870 C.E), Muhammad b.Ismail of Tirmidh, (824/ 209 AH- 890/279 AH), Ahmad bin-Shuyab al-Nisai, (died 889). In fields of Geography, Astronomy, Mathematics and Philosophy, Central Asian scholars are at per of excellence, prominent scholars among them are Ahmad bin Muhammad al- Farghani (known to the Latin as Alfraganus, died 861) was astronomer/astrologer, Abu Ma'shar al-Balkhi (Abulmasar), who wrote a great work on astrology, *Al-Madkhal al Kabir*. Central Asia, produced two of the world's greatest medieval philosophers, Abu Nasar Tarhan al-Farabi (Alfarabius, died 915), is called the Aristotle of the East, Abu 'Ali al-Husayn ibn Sina is better known in Europe by the Latinized name "Avicenna." (980- 1037). The first, a *Compendium on the Soul (Maqala fi'l-nafs)*, is a short treatise dedicated to the Samanid ruler that establishes the incorporeality of the rational soul or intellect without resorting to Neoplatonic insistence upon its pre-existence.¹⁶ The second is his first major work on metaphysics, *Philosophy for the Prosodist (al-Hikma al-'Arudiya)* penned for a local scholar and his first systematic attempt at Aristotelian philosophy. In medicine, his encyclopedic book, *Al Qanun Fi Al-Tibb* (The Canon of Medicine)- was translated into Latin towards the end of the twelfth century CE, and became a reference source for medical studies in the universities of Europe until the end of the seventeenth century. In the field of mathematics, Muhammad Ibn Musa al-Khwarezmi is considered the founder of Arab mathematics and from the title of his works 'Al-Jabr', the term algebra is derived. The turn of the millennium coincided in Central Asia, with the collapse of the Samanid Empire, The Qarakhanids,(840-1212 C.E) who replaced the Samanids,in return Seljuks (1037-1194) replaced Qarakhanids Like the Samanids, Qarakhanids, the Seljuks (1037-1194) appeared in Central Asia during the tenth century. These dynasties like the Qarakhanids and Saljuqs came to share fully in the Islamic heritage, which had always been strong in Khurasan and Transoxania.

Historically, four Sufi orders had a significant presence in the region. Naqshbandiya (The Naqshbandiya movement was founded near Bukhara by Abd al-Khaliq Ghijduvani, who lived in Ghijduvan and died sometime between 1182 and 1221.) The Kubrawiya (The Kubrawiya brotherhood was founded by Najm ad-Din al-Kubra,

¹⁵ Bosworth, CE, The Political and Dynastic History of the Iranian World (A.D.1000-1217).In: Boyle J.A (ed) The Cambridge History of Iran, Vol.5.The Seljuk and Mongol Periods: Cambridge University Press.1968. 3

¹⁶ Haghnavaz , J,A Brief History of Islam: The Spread of Islam, International Journal of Business and Social Science- United States of America, 2013,Vol.4, No. 17, 213- 217

who died in 1221.), Yasawiya (Sufi orders (*turuq*) crystallized as institutions beginning around the 6th century AH/ 12th century CE. One of the first orders was the Yasawi order, named after Khwajah Ahmad Yasavi (d. 562 AH/ 1166 AD), from the city of Yasi, where his tomb is located. Today it is called Turkestan and is situated in Kazakhstan, about a six hour drive northwest from Tashkent, the capital of Uzbekistan.), and Khwajagan movements originated in Central Asia. Their histories are interwoven with that of Central Asia more generally. The Qadiriyya movement, which originated in Baghdad, also had followers in Central Asia. Its founder, Abd al-Qadir Jilani (1076–1166), was originally from the Iranian city of Jilan. Another order, the Qalandariya, which in Central Asia is known as the brotherhood of wandering dervishes, is of more obscure origins, but its followers too have been found in the region. In addition to organized Sufi orders, Central Asia has also had its share of selftaught Sufis—ascetics who preached their own personal messages of spiritual purification and who gathered followers around them. That of the four most influential Sufi tariqas practiced in central Asia, three are indigenous. They are Naqashbandayya (14th Century), Kubraviyya (‘13th century), and Yassawiyya (12th Century). Although, the most serious blow to Islam delivered by Genghis khan’s warriors in the thirteenth century. Nevertheless, the Islam’s power ultimately swallowed the invading armies and they too became Muslims. Infact, .the conversion of Mongols to Islam was indeed one of the few unpredictable events of history. Later, a division of the newly founded Mongol empire, - Transoxania, (Central Asia) with parts of Kashghar , - Badakhshan, Balkh, and Ghazna fell to the lot of Genghis Khan’s second son, Chaghtai, the founder of the Chaghtai Khanate, which existed for 146 years till 1370 .

IV.CONCLUSION

In liu of conclusion Central Asian scholrs irrespective of their geographical distinctions contributed which was not only acknowledge by Muslim world but aslo western wold equally. Some of the greate cholars of central Asia are: Jabir Ibn al-Haytham (Alhazen) developed an early scientific method in his Book of Optics (1021). The most important development of the scientific method was the use of experiments to distinguish between competing scientific theories set within a generally empirical orientation, which began among Muslim scientists. Ibn al-Haytham is also regarded as the father of optics, especially for his empirical proof of the intromission theory of light.

Algebra was also pioneered by Persian Scientist Muhammad ibn Mūsā al-Khwārizmī during this time in his landmark text, *Kitab al-Jabr wa-l-Muqabala*, from which the term algebra is derived. He is thus considered to be the father of algebra. The terms algorism and algorithm are also derived from the name of al-Khwarizmi, who was responsible for introducing the Arabic numerals and Hindu-Arabic numeral system beyond the Indian Subcontinent.

Medicine was advanced particularly during the Abbasids' reign in Central Asia. During the ninth century, Baghdad contained over 800 doctors, and great discoveries in the understanding of anatomy and diseases were made. The clinical distinction between measles and smallpox was discovered during this time in Central Asia. Famous Persian scientist Ibn Sina produced thesis and works that summarized the vast amount of knowledge that scientists had accumulated, and is often known as the father of modern medicine for his encyclopaedias,

The Canon of Medicine and the Book of Healing. Some of his great works are: “Kitab Shifa al Nafs” (The book the healing of the soul); “Kitab al Najat al Nafs” (the book of the salvation of the soul); “Kitab al Isharat wal Tanbihahat” (The book of the hints and the Warnings).

Towards the end of 9th century, in Samarkand Al-Maturidi, a contemporary of Al Ash’ari established a school of Rational Theology or Kalam, which sought to effect a compromise between orthodoxy and Mutazilism.

In the 10th Century Abu Nasr Muhammad Al Farabi produced a book Aara Ahl al Madinah al Fadila. (the Opinins of the Virtuous City), and Al Siyasat al Madaniyya (Political Regimes’) he produced the concept of “Virtuous City” and “First Chief”.

Abul Barkat Al Baghdadi was an eminent philosopher of the twelfth century. His principal book is Kitab ul Mutahar (The Book of that which has been established by personal reflections). He held that the space is three-dimensional and infinite. He defined time as the measure of being. He held that there is no distinction between intellect and soul.

The accomplishments and positive commitments of Islamic Civilization to the world and the European Renaissance, have not gotten due acknowledgment. This oversight is clarified by an absence of important research, the unsatisfying current state of the Muslim world, and the Eurocentric approach in Western scholastic talk. The investigations relating to Islamic human advancement to date fall into two primary classes. The main pattern in modernday the scholarly community denies Islam's extraordinary and sweeping part in its support of medieval human progress and the resulting improvement in the West.

The scholastic pattern perceives Muslim commitments to the unfurling of Islamic and Western civic establishments. These researchers have performed clever and careful hands on work and have revealed a huge number of fortunes of medieval Islam. These researchers were certain that the Renaissance and present day Western human advancement owe considerably more to Islamic development than has been recognized. They have likewise noticed that Islamic human progress was neither opinionated nor selective in its dealings with non-Muslims.

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