

Education and transmission of knowledge in medieval India

Saiyid Zaheer Husain Jafri*

Abstract: The various regions of the Indian subcontinent came into contact with the Islamic cultural tradition in the seventh century CE. Indian scholars were able to leave a mark on the world of Islamic scholarship especially in the fields of *ḥadīth* and other connected disciplines, significantly underlining their recognition for contributions in the Islamic East. An attempt has been made to analyse and to understand the processes of transmission of knowledge through formal and informal means, including the transfer of accumulated experience to the next generation and even the passing of “intuitive knowledge” to the seeker of knowledge. It has been argued that the level of Indian scholarship in certain disciplines was *at par* with the level of scholarship in the Islamic East. It has also been examined that during the medieval period Sanskrit based studies flourished at important Hindu pilgrimage centres such as Benaras, often described by European travellers as the Athens of India. The Royal and private libraries functioned with firm footings. Finally, it is shown that education and transmission of knowledge was organized in a manner that owes much to the best of Greco-Arab tradition.

Keywords: Education in medieval India, Hindu sciences, Islamic learning, Mughal emperors, Sufism.

Abstrak: Beberapa wilayah di sub-benua India mula mengenali budaya dan tradisi Islam pada abad ke tujuh Masihi. Cendekiawan India telah meninggalkan kesan kepada dunia ilmuan Islam terutamanya dalam bidang hadis dan disiplin-disiplin lain yang berkaitan dengannya; justeru itu mengiktirafkan sumbangan mereka di negara-negara Islam di Timur dengan lebih ketara lagi. Satu percubaan telah dilaksanakan untuk menganalisis dan memahami proses-proses penyebaran ilmu melalui pendekatan pendidikan formal dan bukan

* Saiyid Zaheer Husain Jafri is Professor at the Department of History, University of Delhi, India. Email: szhusainjafri@gmail.com.

formal; termasuklah penyebaran pengalaman terkumpul kepada generasi seterusnya dan juga penurunan ilmu semula jadi (naluri) kepada pelajar. Turut dibincangkan adalah tahap kecendakawanan orang India dalam disiplin-disiplin tertentu setaraf dengan tahap kecendakawanan mereka yang berada di negara-negara Islam di Timur. Telah didapati juga pada tempoh zaman pertengahan lagi kajian-kajian berdasarkan Sanskrit berkembang di pusat-pusat jemaah Hindu yang penting seperti Benaras, yang sering digambarkan oleh pengembara Eropah sebagai Athens India. Perpustakaan agong dan persendirian berfungsi dengan landasan yang teguh. Akhir sekali, dapat dilihat bahawa pendidikan dan penyebaran ilmu disusun dalam cara yang banyak bergantung kepada tradisi Arab Yunani yang terbaik.

Kata kunci: Pendidikan dalam zaman pertengahan India, sains Hindu, pembelajaran Islam, maharaja-maharaja Mughal, Tasawuf.

Education, in the larger sense, is an act or experience that has a formative effect on the mind, character and physical ability of an individual or a group of people. It is a process by which a society as a whole formally or informally transmits its accumulated experience, knowledge, wisdom, skills and values from one generation to another. Modern English dictionaries also define the term education as bringing forth what is within. It thus becomes necessary, to look into formal as well as non-formal systems of education and different ways in which knowledge is passed on. This includes the idea of intuitive knowledge as well as artistic skills and the manner in which it is taught.

Education in medieval India was a domain that was largely confined to the few who managed its transmission, something technically within the reach of everyone. Therefore, whatever information is available to us is only in the languages of the elite. This paper examines the available data in Persian writings and in European travellers' accounts, focusing on the Upper Gangetic valley. In addition, the study attempts to understand the nature and range of Sanskrit-based studies at Benaras. This has been done to point out that during the Islamic phase of India's medieval past, Hindu sciences continued to flourish.

The educational set up established by the new Muslim settlers was initially meant for their religious and intellectual requirements, and also for locals who had commercial and social contacts with them. It was only when the Arabs and Turks acquired political power that their system of

education became dominant. This is not to say that the earlier system of education and transmission was obsolete or redundant; it was only the quantum of state patronage to individuals and institutions, in addition to the bureaucratic requirements of the new administrative system and prevalent cultural norms of the society which made the new system of education more visible. The survival of the earlier system of knowledge depended largely on the inner capacity of the previous tradition

Notion of knowledge in the Islamic East

The Indian subcontinent began to be influenced by the cultural world of Islam from the 7th century CE onwards. Various accounts suggest the presence of the Arabs and Muslims in Western coasts of India especially in the region of Ma'bar during the early Caliphate itself while Arab rule was being established under the Umayyids in the regions of Sindh and Multan. Similarly, there are accounts that suggest that Muslims had a substantial presence in the regions of Delhi, Kannauj, Kalpi, and Badaon prior to the establishment of Turkish rule. They also had the freedom to build masjids, and in large settlements they were allowed to have *Jama-masjid* as well. Shaykh Rizqullah Mushtaqi (n.d., p. 18) while writing about the reign of Sultan Sikandar Lodi (1489-1517 CE) states:

In each town and region (of the Indian subcontinent) where the forces of Islam have gained an upper hand and have become popular, *masajid*, *jam'at khana* and *khanqah* were established and capable peoples were appointed in the *maktabs* and the *madrasas* as *mu'allim* and *mudarris*. In these institutions, the *umra'* and their sons and the soldiers acquired knowledge and busied themselves in prayer and meditations. Those who could afford to do so, discharged their duties in the way of God (by managing these institutions of learning).

Since large territorial parts of India were merged with the cultural tradition of the Islamic East, it is necessary to examine the way education was perceived and treated in the Islamic tradition. The recognized basis of Islamic cultural traditions happens to be the Qur'ān. Incidentally, the first Revelation begins with "Read in the name of Thy Lord who has created" (96:1). There are innumerable references in the Qur'ān where believers are exhorted to acquire, disseminate and transmit all knowledge to others. Knowledge is defined as something which enlightens the man with that which was previously unknown to him

(Sufi, 1977, pp. 1-8). There are similar verses and themes in the *ḥadīth* (traditions of the Prophet) and early Arabic literature which call upon the people to acquire knowledge and to ponder over the mysteries of nature.

Education was, however, in practice, an activity that was mostly confined to elites, while the masses had limited access to it. This is seen after the Battle of Badr, (2/624) when a large number of Makkans belonging to the Quraysh tribes were captured as the war prisoners by Muslims, and were given the option that anyone who could teach ten Muslims could acquire his freedom without paying any ransom. The elite Makkan Quraysh were better educated, while the *Anṣārs* (early Islamic converts at Madina) had little or no access to the education.

The Arabs in Sindh and Islamic studies

The study of *ḥadīth* was the first to attract the attention of Muslim scholars in India. The contribution of scholars mainly from Arab controlled territories was so seminal as to merit inclusion into the general biographical dictionaries compiled on the subject in the Islamic East. For example, in his famous *Kitāb al-Ansāb*, Qazi ‘Abdul Karim Samani listed 70 scholars of Indian origin who participated in the development of Islamic learning in major cultural centres where they had gone for study and had acquired necessary expertise in the respective fields (Maclean, 1989, pp. 83-89; Jafri, 2008). Some of them remained in these centres of Islamic learning and earned a great respect of respect. One such scholar was Abu Mashar Najih Sindi who died in 70/786 at Madina whose funeral prayer was led by Hārūn al-Rashīd himself. He is considered by many as the one who shifted the branch of *maghāzī* and *siyar* studies to its proper track. Another scholar, Raja Sindhi Isfaraini who died in 321/932 is considered as one of the pillars of *ḥadīth* studies (Ikram, 1991, pp. 35-36).

The tradition of Islamic learning at the individual level as well as at the institutional level was always promoted by the local rulers, who tried to invite the experts and renowned scholars to teach in the *madrasa*. In fact, the ruler of Sindh, Multan Naseeruddin Qubacha (1206-1222 CE), appointed Qazi Minhaj Siraj Juzjani (the author of famous *Tabqat-i Nasiri*) as the Principal of the Madrasa-i Firozia at Uch. Furthermore, Prince Muhammad, also known as Khan-i Shaheed (the eldest son of Sultan Ghiyathuddin Balban), when he was the Governor of Multan

reportedly invited the famous Persian poet Sheikh Saadi Shirazi to Multan, and also kept the company of Amir Khusro as well as Amir Hasan Sijzi, while others returned to their place of origin and gave the study of *ḥadīth* a firm footing in the subcontinent (Arshad Islam, 2001, pp. 131-139).

Following the initial Umayyad conquest of Sindh, a number of Arab families had settled in various towns of Sindh. One of them was Musa b. Yaqub Thaqafi, a scholar of some repute whose title, as given in *Chachnama*, is *sayf al-sunnah wa-najm al-sharī‘ah* (the sword of the *sunnah* and star of the law). He was appointed *qāḍī* (judge) and *khaṭīb* (sermon-reader) of the township of Aror and Bhakhar, a position which continued in his family till at least the 13th century (Maclean, 1989, pp. 97-98; Nadvi, 1970, p. 99). It is interesting to note that one of his direct descendants Ismail b. Ali Thaqafi handed over the Arabic manuscript to ‘Ali b. Hamid Kufi who translated it as *Chachnama* (Irfan Habib, 1963, pp. 34-35). Similarly, a number of early Arab settlers were appointed to ecclesiastical positions in different towns of Sindh and Multan. These positions were hereditary. Ibn Battuta who visited Sindh in 1333 CE met an Arab named Shayban whose family had held the office of *khaṭīb* of Siwistan (Sehwan) since 771 CE. The post was hereditary till the time Ibn Baṭūṭah met him (Maclean, 1989, p. 123; see Hamilton, 1739, p. 308). The township of Thatta continued to be a major centre of learning till very late as Hamilton (1739, p. 308), who visited the town in 1699 CE, notes:

the city of Tatta is famous for learning in theology, philology & politics & they have above four hundred colleges for training. I was very intimate with a Seid [Saiyid], who was professor in theology, and was reckoned a good historian. He asked me one day, if I had heard of Alexander the Great in my country.

There are, however, a number of individuals who came to Sindh in the wake of the Umayyad conquest, but chose not to settle in the region. One such person was ‘Atiyah b. Sa‘d al-Awfi, the renowned *shīite* traditionalist. Zaid b. Umar al-Tai was also involved in the conquest of Multan. Their short stay in the area may have played a role in arousing interest in the study of *ḥadīth* literature (Hamilton, 1739, p. 308).

With the expansion of Ghaznavid power in Panjab during the 11th century, Lahore became an important centre of intellectual pursuits. In

fact, Samani described Lahore as “the blessed one” and a place “giving much benefit”, as it boasted having a large number of mystics and scholars (Ikram, 1991, pp. 75-76).

Islamic learning under the Sultans of Delhi and Mughal emperors

Following the havoc caused by the Mongol conquest of Central Asia and Iran, the city of Delhi became a place of asylum for refugees fleeing from cities devastated by the Mongols during the reign of Iluttmish. In *Futuh us Salatin*, Isami (1948, pp. 114-115) states that in the city of Delhi:

Many genuine Saiyids have arrived from Arabia, the traders of Khurasan, many learned men from Bukhara and a number of Sufis and ascetics from every town and every race have gathered here. Scholars well versed in the Unani system have also arrived from Rum. These people have gathered in the city of Delhi like moths gather around a candle.

People arriving from various Central Asian cities brought elements of an Islamic culture with them. Due to their presence in the city of Delhi and various parts of the Indian subcontinent a number of *maktabs* and *madrasas* were established in these towns and other centres to cater for the needs of the increasing Muslim population. The primary level of schooling was invariably conducted in numerous *maktabs* which were organized mostly inside the courtyard of a masjid or Sufi *khanqah*. The practice of the *maktabs* had become so popular and well known that the specific terms and practices used by the teachers there entered the literature of the time, especially in lexicons prepared by the scholars. *Miftah ul Fuzala* (Irfan Habib, 2012, pp. 268-269), a lexicon prepared in 1468-69 CE describes the term *nau amuz* as a child who starts going to school, and also has an illustration of a teacher holding a thin rod while sitting and instructing six children, two writing on wooden boards, one of whom is a girl. In another lexicon, *Farhang-i Jahangiri* (compiled in 1608-9) describes the term *aatun* as daughters going for study and for learning *kashida* (embroidery) (Irfan Habib, 2012, p. 268).

The fame of Delhi was such in the Islamic East that in the mid-14th century, Shahabuddin al-Umari (1943, pp. 23-24) the author of *Masālik al-Abşār* wrote “in Delhi there are 1000 *madrasas* out of which only one belongs to *Shafites* and the rest to *Hanafites*.” The reigning Sultans of the Delhi Sultanate were generous enough to support these

institutions of learning as the same author again remarks: “in the *maktabs* thousands of *faqih*s are appointed whose allowances are paid by the *diwans*. They teach the orphans and the children of people *qirat* and writing” (Shahabuddin al Umari, 1943, pp. 39 & 41). Some of these *maktabs* were exclusively for girls, and in places along coastal western India even many women committed the Qur’ān to memory. Ibn Battuta mentions the women of the township of Honawar (in the Kanara region):

One of their qualities is that they all know the great Qur’ān by heart. In the city I saw thirteen schools for girls and twenty three for boys; the likes of which I had not seen elsewhere (Ibn Battuta, 1976, p. 179).

Teaching in the *maktab* was considered an extremely noble and virtuous act, as seen in one of the *majlis* of Shaykh Nasiruddin Mahmud (d. 1354) that a *danishmand* (intellectual) from Sahali (in Awadh) came to visit the Shaykh. The Shaykh recalled “the people at Sahali are pious and most of them have matrimonial alliances here, and the women of that place are more pious than men” the Shaykh inquired of the *danishmand* about his profession. On being told that he teaches the children, the Shaykh said:

This is a virtuous act, engagement with the sinless entities and engagement with the Qur’ān. In addition, since you remain in the mosque, you are with ablution for the entire day. It is a nice work and a good engagement (Hamid Qalandar, 1959, *majlis* no. 32, p. 107).

The prescribed age to begin the education was generally four years, four months and four days for everybody, where some sort of ceremony was also conducted, known as *bismillah* or *tasmiya khwani*. Abbas Khan Sharwani (MS, p. 7), wrote about Farid (the future Emperor Shershah, 1540-45 CE) when he left his father and came to join the service with Jamal Khan at Jaunpur, stating that Jaunpur was a great centre of the scholars, and that Farid joined a *madrassa* and read *kāfiyah* and its commentary by Qazi Shahabuddin. He also acquired proficiency in the Persian language by reading Shaykh Sadi’s *Gulistan*, *Bostan* and *Sikandarnama*. He became a knowledgeable scholar, and scholars (*makhadim*) would come to him for receiving the *madad-i ma’ash* grants, whereupon he would discuss academic matters with them, having not given up his regular habit of reading.

The study of *taṣawwuf* in the Indian subcontinent

The political renaissance in Persia during the 10th century led to the revival of the Persian language. Al-Hujwiri's (1991, p. 176) *Kashf al-Mahjūb* was the first treatise on the doctrine of Sufism. The orthodox reaction against the highly individualistic approach of some mystics is well reflected in the book when the author writing on the organization of the mystic orders says that the whole body of aspirants of Sufism is composed of twelve sects or schools, two of which are condemned, while the rest are approved. Among the former, the author has listed, the *hululis* or transmigrionists, who believed in the notion of the spirit of one preceptor passing into the body of his successor. The other condemned sect was the *hallajis*, who probably believed either in the extreme individualistic version of the "self" or in the validity of Mansur's proclamation of *anā al-ḥaqq*. *Kashf al-Mahjūb* had a readership in the Lahore itself, where there were enough people to understand the issues raised in the book (Bhandari, 1918, p. 73).

Among the sects approved by al-Hujwiri was that of the *Junaidis*, the followers of Shaykh Junaid Baghdadi (910 CE). They preferred the path of *saḥw* (sobriety) over that of *sukr* (intoxication) and avoided externalism. His influence on his contemporaries as well as on the succeeding generations was immense. The credit of consolidating the philosophy of Shaykh Junaid goes to Shaykh Shihabuddin Suharawardi (d. 1234) in his famous '*Awāriḥ al-Ma'āriḥ*', which is a measured, balanced and scholarly text. It was accepted by a majority of the mystics all over the world of Islam. Within a decade or two of its author's death, it was being taught at Delhi (Nizami, 1974, pp. 283-8).

Similarly, other important towns in Panjab also became major centres for the transmission of knowledge. The town of Sialkot was one of such major centres during the 17th century. Sujana Rai Bhandari specifically mentions that it attracted the scholars and the learned ever since Maulana Kamaluddin Husain Khan, one of the chief scholars from Kashmir migrated to the town during the reign of Emperor Akbar. Similarly, during the reign of Emperor Shahjahan, Maulvi Abdul Hakim wrote a number of commentaries on important texts, his fame reaching far and wide, with students continuously coming to him from far off places. Following his death, his son Maulvi Abdullah assumed the mantle of chief scholar of the city, and his *madrasa* became a centre for learning and scholarship (Bhandari, 1918, p. 73).

The early Indian scholarship on Islamic sciences

Razi al-Din Hasan al-Saghani, the compiler of important collections of *ḥadīth*, was born in 1181 CE in Badaun where he received his initial education and training. An early incident in his life revolves around how he once wanted to borrow a copy of *Mulakhkhaṣ* (a textbook of *ḥadīth*) from his teacher, who refused to give it to him. Irrespective of this, Saghani eventually rose to be an eminent scholar of *ḥadīth* in the entire Islamic East. His compilations of the collections of *ḥadīth*, were used as standard texts throughout the region. He used to describe his compilation of *Mashriq al-Anwār* as the ultimate proof between him and God. He was appointed to teach the son of the ruler of Kol (Aligarh) and used to receive a remuneration of 100 *tankas*. When he reached Baghdad and attended the lectures of the renowned scholar of *ḥadīth*, ‘Allama Ibn Zuhri, he impressed the audience so much with his erudite scholarship that when his fame reached the Caliph, he was invited by him and shown great respect (Sijzi, 1966, majlis no. 9, pp. 178-81; Muhammad Habib, 1970, pp. 24-28).

A similar intellectual milieu existed at Nagaur. It was there that, Sufi Hamiduddin established his *khanqah*, and due to his austerity and preference for a life of poverty, he came to be known as *Sultan ut-tarikin* (the prince of recluses) (Khan, 1994, pp. 231-40). The family of Qazi Hamiduddin also migrated from Central Asia and settled there. When Maulana Raziuddin Saghani reached Nagaur, Qazi Hamiduddin and Qazi Kamaluddin requested him to teach *ḥadīth*. He taught the *Miṣbāḥ al-Dujā* to scholars of Nagaur and also issued certificates (Muhammad Habib & Nizami, 1970, pp. 140-41).

The intellectual and philosophical basis of all religious studies in Islam is undoubtedly the Qur’ān. For this purpose, the textual study of the Book was very crucial. This branch attained a high degree of sophistication following the compilation of the basic text on classical Arabic grammar, *al-Mufaṣṣal* by Imam Zamakhsharī (d. 1144 CE). He wrote the Qur’ānic commentary, the famous *Tafsīr al-Kashshāf*, from a *Mu‘tazalite* point of view. Theologians severely criticized him for his “heretical” views. In India, these works of Zamakhsharī have become immensely popular among scholars of higher learning. However, orthodox *Ash‘arite* sentiments have always led to his being denounced for his beliefs. Sheikh Nizamuddin Auliya (d. 1325 CE) expressed his

reservations about him in the following words, “despite the fact that he was extremely knowledgeable, he held false beliefs” and added, “there is unbelief (*kufir*), there is innovation (*bid‘ah*), and there is sin (*ma‘siyah*)” (Sijzi, 1966, vol 3, majlis no. 11, pp. 186-88). In addition to these harsh comments, he cited two anecdotes quite approvingly which describe the hostility and extreme hatred of Indian Sufis towards Zamakhsharī for his “heretical” views (Sijzi, 1966, vol. 3, pp. 186-88). Even *al-Mufaṣṣal* invited such harsh censors. Ironically enough, in spite of such ill reception of the works of Zamakhsharī, both his works, namely *Tafsīr al-Kashshāf* and the classical Arabic grammar, *al-Mufaṣṣal* continued to be taught throughout the Islamic World as the most standard and authentic text in a discipline (Khan, 1930, p. 258).

For Sheikh Nizamuddin Auliya, there exists have detailed information about his early education among the academic milieu at Badaon, the way he acquired knowledge, and the manner through which knowledge was transmitted during his lifetime. He spoke of three scholars of Badaon; namely, Maulana Raziuddin Saghani, and Shaykh Jalāl al-Dīn Tabrīzī, both of whom had predeceased him, as well as Maulana Alauddin Usuli, who was his teacher. He relates, that when he completed his early education with Maulana Alauddin Usuli, and finished with a text *Quduri*, he was asked by his teacher for the ceremony of *dastaarbandi*. Graphic details are provided by the author of *Siyar al-Awliyā’* regarding the manner of preparation of the ceremony by the mother of the Shaykh. The final ceremony of *dastaarbandi* was performed by a special invitee, ‘Ali Maula Buzurg, who was not his teacher (Amir Khurd Kirmani, 1885, pp. 95-98; Muhammad Habib, 1970, pp. 47-48). When he arrived at Delhi, he had already become a sort of celebrity and was nicknamed as Nizamuddin *bahath* and *mahfil shikan*. His friends considered him intellectually and academically superior. He was taught the famous collection of *ḥadīth*, namely, *Mashāriq al-Anwār* of Raziuddin Saghani by Maulana Kamaluddin Zahid, who issued his certificate on the 23rd July 1280. He was also permitted to carry on the teaching of this book (Amir Khurd Kirmani, 1885, pp. 104-105).

When he arrived at the *jam‘at khana* of Baba Farid at Pakpattan, he was taught a few more texts by his *pir*; notably enough, *Tamhid-ul Muhtadi* of Abu Shakur Salemi. Baba Farid accorded him a certificate

and permitted him to continue giving instruction of this book to his students (Amir Khurd Kirmani, 1885, pp. 187-188).

The *jam'at khana* of Shaykh Nizamuddin Auliya became a centre for the transmission of advance knowledge in the fields of theology, ethics and *taṣawwuf*. The historian Ziauddin Barani pays glowing tribute to the efforts of the Shaykh in furtherance of these studies (Barani, 1957, pp. 346-47).

In the *jam'at khana* of the Shaykh Nizamuddin Auliya there was great insistence on acquiring knowledge as a prerequisite for being initiated into the higher levels of mystic life. When it was suggested to the Shaykh that a senior disciple Sirajuddin Usman (known as *Akhi Siraj*) be given *khilafat nama* by him, he observed that “education is the first stage in the field of Sufism, and he has not received any education.” Thereupon, Maulana Fakruddin Zarradi, another senior inmate in the *jam'at khana* of the Shaykh, offered to educate him within six months in the required fields. Only after his formal education was complete, was he bestowed with the *khilafat nama* of the Shaykh. Amir Khurd (1885, pp. 288-89) mentions that Maulana Sirajuddin was able to acquire the required knowledge within six months in spite of his advanced age. His teacher, Fakruddin Zarradi, specially prepared a text for him and named it ‘*Usmani*. After the conferment of the *khilafat nama*, while going back to Lukhnauti, Maulana Siraj took some books from the *kutub khana* of Shaykh Nizamuddin Auliya for study and teaching. Hence, it is perhaps most appropriate to describe *taṣawwuf* as a sort of postgraduate creed of Islam.

Indian Muslim scholarships and other world religions

The inmates of the *khanqah/Sufi jama'at khana*, in addition to their acquiring knowledge in the tenets of theology and higher discipline of Islamic sciences, also acquired the knowledge of other religions and had interest in the natural sciences as well. It is said that Shaykh Badruddin Madar, the founder of the *Madariya* order, had memorized the *Tawrah* and *Injil* (Old and New Testament) and also learned chemistry and other natural sciences. In fact, it was said of him that he was the only expert in so many branches of knowledge in his times (Khan, 1994, p. 304).

This tradition of acquiring expertise in the religious scriptures of other Semitic religions survived into the Mughal times as well.

Khafi Khan says much the same with regards to Saiyid Saadullah (d. 1138/1725) of Salon, the grandson of Shaykh Pir Muhammad Saloni (d. 1687), who was his earliest teacher. Azad Bilgrami (d. 1761) says:

He acquired knowledge while he was very young, and in a very short time became an expert in the various disciplines. In his youth, he started teaching and could compare very well with senior scholars who have spent years in teaching and were worthy authors of scholarly works (Azad Bilgrami, 1910, pp. 217-18).

While Khafi Khan states:

He acquired expertise in the orthodox and spiritual sciences; Logic, Philosophy, *simiya*, *himiya wa kimiya* were sciences in which nobody could match him. He also acquired expertise in matters related to *Ingil* and *Taurah* so much so that even [Christian] monks took lectures from him (Khafi Khan, 1860-74, p. 559).

Saiyid Sa'adullah also established his *madrasa* at Surat in a *haveli* assigned to him by Emperor Aurangzeb and maintained the *madrasa* with the *madad-i ma'ash* amounting to some nine thousand rupees per annum. He was also held in high esteem by the emperor, but after some time migrated to the holy city of Madina and there established his seminary. He is described as one of the most "erudite scholars from the East" by latter contemporaries (Bahadur, 2005, pp. 83-86).

Curriculum development under the Mughals

It appears that changes were introduced in the syllabi during the reign of Mughal Emperor Akbar. He is said to have declared that "no one should be allowed to neglect those things which the present times required;" therefore, implying that the curricula of the day was wanting with the time. As such, he wished to revise it in order that it became more relevant, and, therefore, it was decided that:

Every boy ought to read books on morals, arithmetic, agriculture, menstruation, geometry, astronomy, physiognomy, household matters, and the rules of government; in addition to medicine, logic, *taba'i*, *riazi*, *elahi* sciences and history (Abul Fazl, 1878, p. 289; Nizami, 1996, p. 32).

Appealingly, this new syllabus accorded religious education and theological studies less space. This aspect may have led to severe censor by Badauni, when he remarked:

Reading and learning Arabic was looked upon as a crime, and Mohammadan law, Qur'ānic commentaries and the tradition and those who studied them were considered bad and deserving of disapproval. Astronomy, philosophy, medicine, mathematics, poetry, history and novels were cultivated and thought necessary (Badauni, 1973, p. 316; Nizami, 1996, p. 32; Irfan Habib, 1996, p. 165).

On the other hand, one notices the censor to the level of indictment by Abul Fazal on the domination of the orthodoxy on the educational system. This “domination” was considered by him as one possible reason for the decline of the intellectual tradition, and the opposition to the classical philosophy and theoretical sciences. Reflecting on this situation, he says:

The fifth [reason], the blowing of the heavy wind of *taqlīd* (tradition), and the dimming of the lamp of wisdom. Of old, the door of “how and why” has been closed; and questioning and enquiry have been deemed fruitless and an act of the pagan (*kufir*). Whatever one received from one's father, teacher, kinsman, friend and neighbor was considered the wherewithal of Divine Favors; and the holder of contrary opinion was accused of heresy and impiety. Though some of the enlightened have somewhat tried to pursue a different path, yet they have followed the path of (correct) conduct no more than half-way (Irfan Habib, 1996, p. 165).

The study of *ḥadīth*, using Persian as a medium began only during this period with Shaykh Abdul Haq Muhaddith taking a lead in this direction. His work was continued throughout the 17th-18th centuries. The level of the transmission of classical Greek knowledge in the Indian subcontinent has been in decline ever since al-Biruni wrote his *magnum opus Kitāb al-Hind*, where he mentioned almost all the major texts of the Greek philosophers and theorists. On the other hand, Abul Fazal could only cite two Greek texts, and among the Muslim scientists, he refers to only three namely, Fakhruddin Razi, Bu Ali Sina and al-Biruni (Irfan Habib, 1996, pp. 165-66).

Scientific ideas and concepts

It is interesting to note that during the highlighted period, scientific ideas and advances in the now modern concepts were also available in the corpus of Persian-Arabic studies; albeit in a limited manner. We know for certain that Ptolemy conceptualized the movement of planets in the cosmic order, arguing for a heliocentric model, that it is with the sun revolving around the earth (Copernicus questioned the thesis and in 1540 CE argued that the earth revolved around the sun), however, one finds Amir Khusro making an observation in *Qiran us Sadain* (composed 1287-1290 CE) that:

The movement of the earth has been linked with the time, hence the day and night, the seasons of spring and autumn; these changes constitute the source of life and comfort for the living beings (Siddiqui, 1994, p. 139).

Similarly, he makes an allusion in *Ijaz-i Khusravi*, asserting that “the people move around the man in authority as the earth moves around the sun” (Siddiqui, 1994, p. 139). Such advanced scientific notions (which might have been known to him through some Arabic work) were not confined to the observation of the genius like Amir Khusro, but we find the echo of the same level of the information in the works of seventeenth century theologian Shaykh Nurul Haque, who in his *Zubdat al-Tāwarīkh* says that “some of the *ḥukamā'* (scientists) hold that change in time is owing to the movement of the earth, the earth rotates from the west to the east” (Siddiqui, 1994, p. 139).

It will be seen that this statement relates to the explanation of the day-and-night cycle by the earth’s revolution around its axis. It should not be confused with the annual revolution of the earth around the sun, which Copernicus established. Amir Khusrau in *Ijaz-i Khusravi* seemed to think that the earth daily goes around the sun, which was a misunderstanding of its daily revolution around its axis (Siddiqui, 1994, p. 139).

It appears that such enlightened notions in Persian literature became totally unknown by the mid-nineteenth century; otherwise, Sir Syed Ahmad Khan (d. 1898) would have never written the treatise on the notion of the stability of the earth and rotation of the sun. It must be noted that within two years he had retracted from his argument by writing another treatise on the subject. It is apparent that by the time of

Sir Syed Ahmad Khan, Persian scholarship was becoming extremely limited; at least with respect to modern scientific notions as well as with classics such as the works of Amir Khusro (d. 1325).

Training in the art of calligraphy

So far as the transmission of accumulated experience to another generation is concerned, the best example is found in the study of the art of calligraphy and the *ways*, in which it was taught to novices. In the general biographical dictionaries, we come across names and career profiles of some of the top calligraphers in different periods of the time. For example, we know for certain that the entire planning for the construction of *Jami Masjid* of Shahjahanabad and Taj Mahal was entrusted to the chief architect, one Shaykh Ahmad who possessed no rival “in the fields of mathematics, trigonometry and astronomy among his contemporaries” and was also known for the mastery of the works of the famous scientist and philosopher Khwaja Nasir Tusi. Shahjahan bestowed on him the title of *Nadir-ul 'Asr*. The numerous inscriptions in beautiful calligraphy at the main arch of *Jami Masjid* were inscribed by Shaykh Nurullah, his son, the father of famous Chishti Sufi of Delhi during the 18th century, Shaykh Kalim Ullah Jahanbadi (Nizami, 1972, pp. 94-95).

We have little information as to the manner in which this art was transmitted from generation to generation. It appears, however, that beginners were made to practice the art of writing for forty days in the prescribed manner on a note book having blocks of four parallel lines of equal distance. A system was evolved over a period of time to the extent of the placing of every letter and dots between these four lines were concerned. The beginners would undertake these exercises in such a manner as to set their hands for each letter at the appropriate place. After this initial training, they would undertake further specialized training. This is how master calligraphers used to transmit their acquired expertise to apprentices. We have not come across any manual as to how the Qur’anic verses and quotations from the Persian poets were engraved on the different types of the stone by using different hands.

The city of Delhi had numerous famous calligraphers during the medieval period. This tradition was kept alive by families of calligraphers till quite late. We are told about one such famous calligrapher, Saiyid Mir Mohammad Amir, who was also known as *Meer Panjakash* and

was shot dead in 1857 when a general massacre took place at the Kucha Chelan. It is said that “the specimen of his calligraphy were exchanged with gold and silver and he used to distribute such specimens among the beggars and destitute who would, in turn, sell these specimens and earn a high price for it” (Chaghtai, 2007, p. 514).

Transmission of intuitive and spiritual knowledge

Our texts are replete with descriptions about the passing of spiritual and intuitive knowledge, which could neither be taught nor acquired in a formal manner. Such knowledge could only be gained through experience and through association.

One can question such narrations, but a prevalence of evidence is found in contemporary literature regarding this. We may recall the episode of Maulana Jalal ud din Rumi (d. 1254), the author of the famous *Masnavi*, and his encounter with Shams Tabrez, the supposedly unlettered mystic, who ultimately influenced Rumi enormously. We have records of similar encounters in the literature of India’s medieval past as well. It points to the notion of intuitive knowledge.

The example of the important Chishti Sufi from Awadh, namely, Shaykh Pir Muhammad of Salon (d. 1679) and his encounter with the famous Shaykh Abdul Karim of Manikpur (d. 1647), is repeatedly mentioned. The effect of this chance encounter has been described in the following manner:

*Masti-e Piram dar o diwar ra mastana kard,
Sad hazaran Alim-i Allama ra rindana kard;
Ibn Asif mast shud az deedan-i Pir Karim,
Masti-i ishqash ze sar ta pa wara deewana kard* (Jafri, 2005,
p. 226).

(The charm of my pir is manifested all over,
Scores of scholars and men of learning have been spoiled;
The son of Asif got intoxicated with the glimpse of Pir Karim;
Intoxicated in his love people have gone crazy.)

Similarly, we come across the encounter of Mulla Nizamuddin (d. 1748), the founder of a curriculum for Sunnis known as *Dasr-e Nizami* with Saiyid Abdul Razzaq (d. 1724) of Bansa, supposedly an unlettered Shaykh of the Qādirī order of the Sufis, who changed the entire life of Mulla Nizamuddin and his descendants (Ansari, 1986, pp. 194-9).

Such examples can be multiplied, the only argument one can advance is that, in addition to the formal ways of transmission of knowledge, we do come across another category of knowledge which can be described as intuitive knowledge, and also the ways in which such knowledge was understood and described and represented in our sources. Beyond this, one should not make any conjecture.

State patronage to Sanskrit based learning and Brahamans in medieval India

In the Persian works, there is enough data to see the progress of the transmission of Sanskrit-centred studies and the teaching of other Hindu sciences. It appears that the Brahman elite, largely based in the temple towns like Banaras, Vrindavan and Jagannath Puri, carried on the traditional learning with the support of their devotees and visitors uninterruptedly. They were less dependent on the state patronage for their sustenance.

Abu Rehan al-Biruni, while accessing the negative impact of the Turkish invasion in India is quite categorical in this regard:

Hindus became like atoms of dust scattered in all directions, and like a tale of old in the mouth of the people. Their scattered remains cherish, of course, the most inveterate aversion towards all Muslims. This is the reason, too, why Hindu sciences have retired far away from those parts of the country conquered by us, and have fled to places which our hand cannot yet reach, to Kashmir, Benares, and other places. And *there* the antagonism between them and all foreigners receive more and more nourishment both from political and religious sources (al-Biruni, 1983, p. 10; also see, Irfan Habib, 1996, pp. 165-166).

The city of Benaras remains a centre of Brahminical studies in Sanskrit grammar and religious sciences. In fact, al-Biruni, specifically mentions that a number of astronomical treatises were composed and the commentaries there were prepared by the people of Benaras (al-Biruni, 1983, p. 72). The origin of the Sanskrit alphabets called *Siddhmatrika* was scribed by the people of Kashmir and the people of Varanasi. In fact, Kashmir and Benaras were again thought to be the high schools of Hindu science. This art of writing which was invented here was also used in *Madhyadesha*, the country surrounding Kannauj also known as

Aryavarta. With a slight modification in the shape of the characters, the same alphabet was used in Malwa, though it was known as “*nagara*” (al-Biruni, 1983, p. 81).

The established tradition of higher learning among the Brahmans of Benaras continued uninterrupted throughout the medieval period as Tavernier (1640-67) took a detailed notice of the education and the transmission of knowledge through the Brahmans. He praises their knowledge on the field of astrology as “they do not make a mistake of a minute” in foretelling the eclipse of the sun and moon. He states, in order to preserve these sciences “they have a kind of university in a town called Benaras, where they study astrology and also have the experts to teach law.” He gives a unique description of the centres of higher learning at Benaras and refers to the building constructed by Mirza Raja Jai Singh as the most powerful Mughal *mansabdar*. It was established for the education of the children of the princes. They were taught to read and write Sanskrit, mathematics and had some knowledge of geography as well. In fact, he mentions the use of the globe by the Brahmans in this seminary (Tavernier, 1925, pp. 142-43 & 182-83).

Bernier (1658-67) later describes the entire township of Benaras as a general school of the Gentiles. He describes it as the Athens of India being the resort of the Brahmans and the other people devoted to religion. To Bernier, they were the only people who applied their minds to study and unlike the earlier European travellers, he speaks about the informal system of education in tune with “schools of the ancients.” The masters were based in the private houses and the gardens or the rich merchants, some of them “have four disciples others six or seven and the most eminent may have twelve to fifteen.” It was usual for the people to remain ten or twelve years under the respective preceptors. Bernier remarks that the pace of growth was quite slow, as the people entertain little hope for honours or emoluments as was the case in Europe. The free kitchen facilities were provided to students by the rich merchants of the place.

As far as the course of study is concerned, the students were first to learn Sanskrit, a language known only to the *Pendets* which was completely different from the spoken language. The expertise in the language was possible only through grammar (*vyakaran*). After they acquired their expertise, they were taught *Purane*, while only some of the

students pursued philosophy. Bernier again says that the students are of a “slow and indolent temper and strangers to excitement.” He compares the situation to the European universities where the possibilities of joining an honourable profession were immense (Bernier, 1916, pp. 334-336).

It should not be assumed that Sanskrit was only used for writing books of religion and theology. It must be noted that authors had compiled treatises on philosophy and medicine. Interestingly, some of these books were written in the versified forms, and these books were so numerous on the subject that Bernier remarks that a large hall at Benaras is entirely filled with them (Bernier, 1916, pp. 334-336). He had the occasion to visit one of such libraries which he describes as a university library, where he met with the chief *pendet* along with the six most learned *pendets* in the towns (Bernier, 1916, pp. 341-342).

Book-craft, scribes and libraries in the pre-colonial period

Besides oral instruction, books were the major means of transmission of knowledge. Before the advent of modern printing, the books were mostly hand written, multiple copies of each volume were prepared. Bayazid Bayat, the author of *Tazkirat Humayun o Akbar* made nine copies of the book. Bayazid Byat (1941, p. 377) kept two copies in his own library, out of three copies. He gave one each to the princes and one volume to the library of Gulbadan Begum, and two copies for the library of Abul Fazl and the last one he kept in the custody of *tahvildaar*. Hence, the art of writing and calligraphy developed in the Islamic civilization as a rather noble profession. In fact, Ovington, the English factor at Surat in 1693 CE, observed:

Neither have they endeavoured to transcribe our art of printing: that would diminish the repute and livelihood of their scrivans, who maintain numerous families by the pen but they can imitate a little the English manner of binding books (Ovington, 1929, pp. 149-150).

The people with means employed scribes and book binders to copy the volumes their patrons were interested in. The books collected were considered as prized possession of the family which was divided after the death of the head of the family as part of inheritance. Badauni mentions that Faizi (d. 1595-96), the *malik-u shu'ara*, during the reign of Akbar had left, at the time of his death, 4,600 volumes with very fine

binding, most of them were scribed by the authors of the respective volumes or were written during their lifetimes. They were all deposited in the imperial library under three categories. This collection contained 101 copies of the great Indian epic *Naldaman* (Badauni, 1864-69, pp. 305-6; also see, Badauni, 1973, vol. 2, p. 202). Badauni (1973, vol. 2, p. 220) also informs us that innumerable fine volumes were deposited in the royal library following the conquest of Gujarat in 1573. Also records point to the fact that books were divided among sons (not among the daughters) after the death of the head of the family.

Nobles, scholars and kings were equally interested in enriching and maintaining the collection of the books. Allowing somebody to read the books of the individual collections and to make copies of some of the volumes was generally done. Depending on time constrains which the scribe was under and the number of the pages in the volume, the scribes used different hand writings and decorative motifs using gold. Otherwise, the scribes used the *shikasta* script to rapidly transcribe the entire volume in the limited time without using the decorative motifs. Similarly, the art of book binding was also developed to its ultimate perfection. Leather jackets of superior quality with golden embossing of the name of the volume and name of the author in various designs were traits mastered by the respective book binders.

The early Sufi texts are replete with the themes that if one is able to arrange the papers the scribe (to copy the manuscript) is scarce; and that when the scribe is available the paper is scarce or the honorarium cannot be arranged for the copyist (Sijzi, 1966, pp. 45-46). Shaykh Nizamuddin Auliya mentions in one of his *majlis* (on 4th March 1309) about the Shaykh Najibuddin Mutawakkil who wished to have a copy of the book, *Jami' al-Hikāyāt*, but due to his pecuniary position, he could neither arrange the paper or the payment for the scribe; when he could arrange for the paper, he could not arrange money to pay the honorarium (Sijzi, 1966, pp. 45-6).

The royal libraries contained numerous volumes on the principles of astronomy and astrology and numerous astrolabes prepared on the basis of these principles. The scholars apparently had full excess to these royal repositories ("*Sirat-i Firozshahi*," MS, p. 320). The books from the royal libraries were sometimes presented as a gift to theologians and scholars by the monarchs. When Jahangir went to the Gujarat and the

prominent Sufi called upon him, they were given the robes of honour, land by way of *madad-e ma'ash grants* and books such as *Tafsir-e Kashshaf*, *Tafsir-e Husaini* and *Rauzat-ul Ahabab*. Jahangir also placed his signature along with the date of his arrival in the city (Jahangir, 1909-14, p. 218).

The maintenance of royal libraries by the Mughal emperor and nobles was very strong. Zaheer Dehlavi specifically mentions the library maintained by the Mughal emperor Bahadur Shah II prior to the 1857 Sepoy mutiny. He also graphically describes the destruction of his own personal library with its priceless collections containing twenty very good copies of the Qur'ān, transcribed by his grandfather along with seven copies of the holy Qur'ān which were transcribed by his father on expensive paper made at Yazd and Kashan, and about a thousand volumes related to other disciplines, the collection also included books of history, which his father had specially purchased for him spending three hundred rupees, some of which included *Rauzat us Safa*, *Tarikh-i-Farishta* and *Shah Namah* (Zaheer Dehlavi, 2007).

Conclusions

It is quite obvious that education and transmission of knowledge during the medieval Indian history was organized in a manner that owed much to the Greco-Arab tradition. Though unsystematic in some respects, being based more on individuals and less on institutions, it nonetheless produced, over the centuries, intellectuals and ideologues of the caliber of famous *muhaddiths* such as Raziuddin Hasan Saghani (d. 1252), and the celebrated sufi Shaykh Nizamuddin Auliya (d. 1325 CE) as well as his disciples such as Amir Khusro (d. 1325 CE), and the poet Amir Hasan Sijzi (d. 1330s) as well as historian Ziaud din Barni (d. 1360s). This was, of course, in addition to people representing the tradition of rational sciences such as scientist Shaykh Fatehullah Shirazi (d. 1589), the famous ideologue of Mughal Empire, Abul Fazl 'Allami (d. 1602), the astronomer Mirza Raja Jai Singh (d. 1667), the socio-religious reformer Raja Ram Mohan Roy (d. 1833) and the famous poet Mirza Asadullah Ghalib (d. 1869).

It is not only the tradition of Muslim learning which flourished throughout this period, the Sanskrit based studies at Benaras were on equally firm footing. The system of having public and royal libraries was also placed on a respectable footing. How careful the scribes and

the calligraphers were can be clearly seen through their surviving works in museums and libraries in the Indian subcontinent and the Western world.

References

- Abul Fazl. (1878). *Ain-i Akbari* (Vol. 1, H. Blochmann, Trans.). Calcutta: Bibliotheca Indica.
- Al-Hujwiri, A. U. (1991). *The Kashf ul-Mahjub* (R. A. Nicholson, Trans.). Delhi: Taj Company.
- Al-Biruni. (1983). *India* (Qeyamuddin Ahmad, Ed.). India: National Book Trust.
- Amir Khurd Kirmani. (1885). *Siyar al-Awliyā'*. Delhi: Muhibbul Hind Press.
- Ansari, M. R. (1986). *Tazakra Hazarat Saiyyed Sahib Banswi*. Lucknow: Mohammad Raza Ansari.
- Arshad Islam. (2001). *Islam in Sindh*. Kuala Lumpur: IIUM Press.
- Azad Bilgrami, G. A. (1910). *Ma'athiru-l Kiram*. Hyderabad: Dakkan Kutub Khane Asifiyah.
- Badauni, A. Q. (1864-69). *Muntakhab-ut Tawarikh*. (Ed.). Ahmad Ali & Lees. Calcutta: Bibliotheca Indica.
- Badauni, A. Q. (1973). *Muntakhab ut-Tawarikh*. (Trans.). W.H. Lowe. Patna: Bibliotheca Indica.
- Bahadur, S. (2005). *Haqiqat e Surat/Guldasta Sulha e Surat*. (Urdu trans.). Mahbub Husain Ahmad Husain Abbasi. Gandhinagar.
- Bayazid Bayat. (1941). *Tazkira-i Humayun o Abkbar* (M. Hidayat Hosain, Ed.). Calcutta: Bibliotheca Indica.
- Bernier, F. (1916). *Travels in the Mogul empire: 1656-68* (2nd ed. revised by V.A. Smith). London: Humprey Milford, Oxford University Press.
- Bhandari, S. R. (1918). *Khulasat-ut Twarikh* (Zafar Hasan Dehlavi, Ed.). Calcutta: Bibliotheca Indica.
- Chughtai, M. I. (Ed.). (2007). *1857: Majmua Khwaja Hasan Nizami. Dehli ki Jaan kani*. Lahore: Sang e Meel Publications.
- Hamilton, A. (1739). *A new account of the East Indies from the year: 1688-1723* (2nd ed., vols. 1-2). London, (photo reprint, Delhi, 1995).
- Ibn Battuta. (1976). *The Rehla of Ibn Battuta* (Mehdi Husain, Trans.). Baroda: Oriental Institute.
- Ikram, S. M. (1991). *Aab-i Kauthar*. Matia Mahal, Delhi: Adabi Duniya.

- Irfan Habib. (1963). A study of Hajjaj bin Yusuf's outlook and policies in the light of the Chachnama. *Bulletin of the Institute of Islamic Studies*, 7-8, 31-45.
- Irfan Habib (1996) Reason and science in medieval India. In D.N. Jha (Ed.). *Society and ideology in India: Essays in honour of Professor R. S. Sharma*. Delhi: Munshiram Manoharlal.
- Irfan Habib. (2012). Exploring medieval gender history. In S. Z. H. Jafri (Ed.). *Recording the progress of Indian history: Symposia papers of the Indian history congress, 1992-2010* (263-276). New Delhi: Primus Books.
- Isami. (1948). *Futuh us Salatin* (A.S. Usha Ed.). Madras: n.p.
- Jafri, S. Z. H. (2005). Religious plurality in Chishti tradition: A case study of Khanqah at Salon in Awadh. In Jamal, M. & Helmut, R. (Eds.). *Religious pluralism in South Asian and Europe*, (219-244). Delhi: OUP.
- Jafri, S. Z. H. (2008). Islam. In R.S Sharma & K.M. Shrimali. (Eds.). *A comprehensive history of India* (Vol. 4, part II), (170 –187). Delhi: Manohar Publishing and Distribution.
- Jahangir. (1909-14). *Tuzuk-I Jahangiri* (Vols. 1-2, A. Rogers A & H. Beveridge, Trans.). London: London Royal Asiatic Society.
- Khan, A. M. (1928). *Mirat-i Ahmadi* (Vol. 1, Nawab Ali & Caharles N. Seldon Eds.). Vol. 1. Baroda: Oriental Institute.
- Khafi Khan. (1860-74). *Muntakhab ul Lubab* (Vol. 2, Ahmad, K & W. Haig Eds.). Calcutta: Bibliotheca Indica.
- Khan, M. A. (1994). *Surur-us Sudur wa Nur ul-Budur*. In PIHC, 54th Session (Mysore). New Delhi: Indian History Congress.
- Khan, M. A. (1994). Chronicling the miraculous: Hagiology in the Mirat-i Madari. In PIHC, 55th Session (Aligarh). New Delhi: Indian History Congress.
- Maclean, D. N. (1989). *Religion and society in Arab Sind*. Leiden: E. J. Brill.
- Muhammad Habib. (1970). *Hazrat Nizamuddin Auliya: Hayat aur Ta'alimat*. Delhi: Department of Urdu, University of Delhi.
- Muhammad Habib and Nizami, K. A. (Eds.). (1970). *A comprehensive history of India, V: The Delhi sultanate, 1206-1526*. Delhi: Indian History Congress.
- Mushtaqi, Shaykh Rizqullah (n.d.). *Waq'iat Mushtaqi*, Additional Collection no. 11633, p. 18s & Oriental Collection no. 1929, British Museum, British Library.
- Nadvi, S. A. (1970). *Tarikh e Sindh* ((2nd ed, Vols. 1-2). Azamgarh: Darul Musannifin.
- Nizami, K. A. (1972). *Auraq-e Mussawir: Ahd-e wusta ki Delhi*. Nizam Urdu Lecture Series Department of Urdu. Delhi: University of Delhi.

- Nizami, K. A. (1996). Development of the Muslim educational system in medieval India. *Islamic Culture*, 70(4), 27-52.
- Nizami, K. A. (Ed.). (1974). *Collected works of Muhammad Habib: Politics and society during the early medieval period* (Vol. 1). Delhi: Peoples's Publishing House.
- Ovington, J. (1929). *A voyage to Surat in the 1689* (H.G. Rawlinson, Ed.). London: H. Milford, Oxford University Press.
- Qalandar, Hamid. (1959). *Khair-ul- Majalis* (K. A Nizami, Ed.). Aligarh: Department of History, Muslim University Aligarh.
- Shahabuddin al Umari. (1943). *Masalik ul Absar fi Mamalik ul Amsar* (O. Spies, S. A. Rashid, & S. Moinul Haque, Eds. & Trans.). Aligarh: Aligarh Muslim University.
- Sirat-i Firozshahi*. MS in Khuda Baksh, Oriental Public Library, Patna.
- Sharwani, Abbas Khan. *Tarikh-i Shershahi*. Manuscript No. 218, India Office Library, London.
- Siddiqui, I. H. (1994). Science and scientific instrument in the Sultanate of Delhi. *PIHC*. Address in Proceedings of the Indian History Congress, 54th Session (Mysore). Delhi: Indian History Congress.
- Sijzi, Amir Hasan (1966). *Fawaidul-Fawad*. Ed. M. Latif Malik, Lahore.
- Sufi, G. M. D. (1977). *Al-Minhaj: Being the evolution of curriculum in the Muslim educational institution of Indi*. Delhi: Sh Muhammad Ashraf.
- Tavernier, J. (1925). *Travels in India 1640-67* (Vols. 1-2, V. Ball, Trans). London: Oxford University Press.
- Zaheer Dehlavi. (2007). *Dastan-i Ghadar*. Lahore: Sang-e Meel Publications.
- Ziauddin Barani (1957). *Tarikh-I Firuz shahi* (Vol. 2, Shaykh Abdul Rashid, Ed.). Aligarh: Department of History, Muslim University Aligarh.