V. RELIGIOUS AND CULTURAL DEVELOPMENTS:

(B). ISLAMIC INTELLECTUAL TRADITIONS: AL-BIRUNI; AL-HUJWIRI

AL-BIRUNI

The full name of Al-Biruni was Abu-Rayhan Mohammad ibn Aḥmad Al-Biruni popularly known as Al-Biruni. He was an Iranian scholar and polymath. Al-Biruni was well versed in physics, astronomy, mathematics, and natural sciences, and also distinguished himself as a historian, chronologist and linguist. He studied almost all fields of science and was compensated for his research and strenuous work. Royalty and powerful members of society sought out Al-Biruni to conduct research and study to uncover certain findings. In addition to this type of influence, Al-Biruni was also influenced by other nations, such as the Greeks, who he took inspiration from when he turned to studies of philosophy. He was conversant in Khwarezmian, Persian, Arabic, Sanskrit, and also knew Greek, Hebrew and Syriac. He spent much of his life in Ghazni, then capital of the Ghaznavid dynasty, in modern-day central-eastern Afghanistan. In 1017 CE he travelled to the Indian subcontinent and authored a study of Indian culture Tārīkh al-Hind (History of India) after exploring the Hindu faith practiced in India. He was an impartial writer on customs and creeds of various nations, and was given the title al-Ustadh ("The Master") for his remarkable description of early 11th century India.

He was born in the outer district (Birun) of Kath, the capital of the Afrighid dynasty of Khwarezm in Central Asia (or Chorasmia). Al-Biruni spent the first twenty-five years of his life in Khwarezm where he studied Islamic Jurisprudence, theology, grammar, mathematic, astronomy, medicine, philosophy and also dabbled in the field of physics and most other
sciences as well. He left his homeland for Bukhara, then under the Samanid ruler Mansur II the son of Nuh. There he corresponded with Avicenna and there are extant exchanges of views between these two scholars. In 998, he went to the court of the Ziyarid amir of Tabaristan, Shams al-Mo'ali Abol-hasan Ghaboos ibn WusHughir. There he wrote his first important work, al-Athar al-Baqiya 'an al-Qorun al-Khaliyya (literally: "The remaining traces of past centuries" and translated as "Chronology of ancient nations" or "Vestiges of the Past") on historical and scientific chronology, probably around 1000 A.D.

In 1017, Mahmud of Ghazni took Rey. Most scholars, including al-Biruni, were taken to Ghazni, the capital of the Ghaznavid dynasty. Biruni was made court astrologer and accompanied Mahmud on his invasions into India, living there for a few years. He was forty-four years old when he went on the journeys with Mahmud of Ghazni. Biruni became acquainted with all things related to India. During this time, he wrote his study of India, finishing it around 1030. Along with his writing, Al-Biruni also made sure to extend his study to science while on the expeditions. Al-Biruni was able to make much progress in his study over the frequent travels that he went on throughout the lands of India.

Ninety-five of 146 books known to have been written by Bīrūnī were devoted to astronomy, mathematics, and related subjects like mathematical geography. He lived during the Islamic Golden Age, when the Abbasid Caliphs promoted the research of astronomy. This contributed to his research of astronomy, since in Islam worship and prayer require knowing the precise directions of sacred locations, which can only be accurately found using astronomical data.

Al-Biruni contributed to the introduction of the scientific method to medieval mechanics. He developed experimental methods to determine density, using a particular type of hydrostatic balance.
Bīrūnī devised a novel method of determining the earth's radius by means of the observation of the height of a mountain. He carried it out at Nandana in Pind Dadan Khan (present-day Pakistan). He used trigonometry to calculate the radius of the Earth using measurements of the height of a hill and measurement of the dip in the horizon from the top of that hill.

Biruni wrote a pharmacopoeia, the "Kitab al-saydala fi al-tibb" (Book on the Pharmacopoeia of Medicine). It lists synonyms for drug names in Syriac, Persian, Greek, Baluchi, Afghan, Kurdi, and some Indian languages.

He used a hydrostatic balance to determine the density and purity of metals and precious stones. He classified gems by what he considered their primary physical properties, such as specific gravity and hardness, rather than the common practice of the time of classifying them by colour.

Biruni's main essay on political history, Kitab al-musamara fi aḵbar Kwarazm is now known only from quotations in Bayhaqi's Tarikh-e Mas'udi. In addition to this various discussion of historical events and methodology are found in connection with the lists of kings in his al-Athar al-baqiya and in the Qanun as well as elsewhere in the Athar, in India, and scattered throughout his other works Al-Biruni's “Chronology of Ancient Nations” attempted to accurately establish the length of various historical eras.

Bīrūnī is one of the most important Muslim authorities on the history of religion. Al-Biruni was a pioneer in the study of comparative religion. He studied Zoroastrianism, Judaism, Hinduism, Christianity, Buddhism, Islam, and other religions.

Al-Biruni wrote about the peoples, customs and religions of the Indian subcontinent. According to Akbar S. Ahmed, like modern anthropologists, he engaged in extensive participant observation with a given group of people,
learnt their language and studied their primary texts, presenting his findings with objectivity and neutrality using cross-cultural comparisons.

Al-Biruni's fame as an Indologist rests primarily on two texts. Al-Biruni wrote an encyclopedic work on India called Taḥqiq ma li-l-Hind min maqūlah maqbulah fi al-ʿaql aw mardhulah in which he explored nearly every aspect of Indian life, including religion, history, geography, geology, science, and mathematics. During his journey through India, military and political histories were not of Al-Biruni's main focus. Instead, he decided to document the more civilian and scholarly areas of Hindu life such as culture, science, and religion. Most of the works of Al-Biruni are in Arabic although he seemingly wrote the Kitab al-Tafhim in both Persian and Arabic, showing his mastery over both languages.

**AL-HUJWIRI**

Ali al-Hujwiri or al-Hujwiri for short, or reverentially as Shaykh Syed Ali al-Hujwiri or Data Ganj Bakhsh as known by Muslims of the Indian subcontinent, was an 11th-century Persian Sunni Muslim mystic, theologian, and preacher from Ghazna, who became famous for composing the Kashf al-mahjub (Unveiling of the Hidden), which is considered the "earliest formal treatise" on Sufism in Persian. Ali Hujwiri is believed to have contributed "significantly" to the spread of Islam in South Asia through his preaching, with one historian describing him as “one of the most important figures to have spread Islam in the Indian subcontinent.”

In the present day, Ali Hujwiri is venerated as the patron saint of Lahore, Pakistan by the traditional Sunni Muslims of the area. He is, moreover, one of the most widely venerated saints in the entire Indian
subcontinent, and his tomb-shrine in Lahore, popularly known as Data Darbar, is one of the most frequented shrines in South Asia.

Ali Hujwiri was born in Ghazni, in present-day Afghanistan, in around 1009 to Uthman ibn Ali or Bu Ali. As a Sunni Muslim, Ali Hujwiri believed it was a spiritual necessity to follow one of the orthodox schools of religious law, being himself a staunch follower of the Hanafi school of orthodox Sunni jurisprudence.

Ali Hujwiri is perhaps most famous for writing what has been described as "the earliest formal treatise on Ṣufism in Persian," the renowned Kashf al-mahjub (Unveiling of the Hidden). The work presents itself as an introduction to the various aspects of orthodox Sufism, and also provides biographies of the greatest saints of the Islamic community. The Kashf al-mahjūb is the only work of Ali Hujwiri that has remained until today.

Other works of Al-Hujwiri include Diwan (Songs of Hujwiri), a collection of the saint's poems, Minhāj al-Dīn (The Way of the Religion) among others.

REFERENCE

https://en.wikipedia.org/wiki/Al-Biruni