

# AL-BIRUNI (973-1048 AH) AS A PIONEER OF INDOLOGY AND THE SCIENCE OF RELIGIONS

Mohamed Mihlar Abdul Muthaliff<sup>i</sup>

<sup>i</sup>(Corresponding author). Associate Professor, Programme of Akidah and Religions Studies, Faculty of Leadership and Management, Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia.  
mihlar@usim.edu.my

## Abstract

*This paper explains how the Persian Muslim scholar Abu al-Raihan Muhammad Bin Ahmad al-Biruni, who lived during the mediaeval Islamic era, played as a role model in the social sciences and humanities, particularly in the study of Indology and religions. It begins with the biography of Al-Biruni, and his thoughts as well as his methods in the study of Indology and religions. Then, it examines his encyclopaedic account of Indology in Arabic which is translated by Edward C. Sachau in two volumes as Al-Biruni's India. Descriptive method and textual approach are used to carry out the investigation of Al-Biruni's teachings and works. It concludes with reflection on his significant pioneering work in the disciplines of comparative religion and Indology.*

Keywords: Al-Biruni, Indology, Hinduism, Science of Religion.

## INTRODUCTION

Abu al-Raihan Muhammad Ahmad al-Biruni (973-1048 AH) was a prominent Muslim scholar in the Islamic Middle Ages and was well versed in Mathematics, Physics, Astronomy, Natural Sciences, History and Religions. He was fluent in Arabic, Persian, Greek, Hebrew and Sanskrit. Most of his works are in Arabic and Persian. He traveled to Afghanistan and the Indian Subcontinent, and spent a large part of his life there to introduce a'qli and naqli sciences such as Islamic history, tafseer, shariah and Indian and Persian religions to the other parts of the world. Since al-Biruni himself produced an index of his works up until he was about 60 years old, listing his works is quite simple. However, he survived well into his seventies, and since some of his surviving works aren't listed in this index, it is at most an incomplete list. His output adds up 146 titles, with each book averaging around 90 folios. Nearly half of the titles dealt with astronomical and mathematical subjects. Only 22 titles, a very small portion of his work, have been survived, and only about half of those have been published. (Lim & Scheppler, 2016).

Of all of his encyclopedic efforts, his book on Indian culture is by far the most significant. *Taḥqīq mā li-al-hind min maqūlah maqbūlah fī al-‘aqli aw mardhūlah* (Verifying all that the Indians Recount, the Reasonable and the Unreasonable) is the title of this creative work. It includes all the information that al-Biruni could gather about (Indology) India and its sciences, religions, literature, and customs. His only other encyclopaedic work that comes close to competing with it in terms of scope and depth of coverage is *The Chronology of Ancient Nations*, which is devoted to a comprehensive anthropological account of various cultures and even records the mythology of other cultures that were on the verge of extinction. These two manuscripts, when combined, provide the most accurate premodern account of the societies al-Biruni encountered. The latter work, for instance, has the most thorough analysis of the Jewish calendar to date. It is longer than any surviving mediaeval Hebrew source and much more scientifically backed up by research than any previous analysis of this calendar up to that time.

Al-Biruni has produced other scientific works, which could be listed as follows;

1. *The Elements of Astrology: A Manual of Instruction* (كتاب التفهيم لأوائل صناعة (التنجيم)).
2. *The Remaining Signs of Past Centuries* (Arabic الأثار الباقية عن القرون الخالية) – A comparison of calendars from many cultures and civilizations that incorporates mathematical, astronomical, and historical data.
3. *The Mas'udi Canon* (Persian قانون مسعودي) – A comprehensive encyclopedia of engineering, geography, and astronomy.
4. *Understanding Astrology* (Arabic التفهيم لصناعة التنجيم) – A book in Arabic and Persian that is written in the form of questions and answers and discusses mathematics and astronomy.
5. *Pharmacy* – About drugs and medications.
6. *Gems* (Arabic الجواهر في معرفة الجواهر) This book is about geology, minerals, and gems.
7. *Astrolabe*.
8. *A historical summary books*.
9. *History of Mahmud of Ghazni and his father*.
10. *History of Khwarezm*. (Khan,1982).

It is obvious that Al-Biruni is committed to doing his investigations and research using a scientific method. He was an anthropologist, philosopher, historian, sociological researcher, mathematician, auditor, analyzer, and interpreter of all he observed. He believed that the information should be accurate in all aspects of social life.

## MEANING OF INDOLOGY

The word "Indology" refers to the scientific discipline of India, its people, culture, traditions, languages, and literature. Within Western academies, it is now more frequently referred to as South Asian or Indian studies. In other words, The study of the history, cultures, languages, and literature of Indian subcontinent is known as indology. The terms classical and modern Indology can also be distinguished from one another; the former is primarily concerned with historical languages and sources, whereas the latter takes into account modern India and its socio-political environment.

Al-Biruni made a contribution to indology with his scientific work "Taḥqīq mā li-al-hind min maqūlah maqbūlah fī al-‘aqli aw mardhūlah" (Verifying all that the Indians Recount, the Reasonable and the Unreasonable). It is noteworthy that he used both qualitative and quantitative methods to discuss the fundamentals and basics of Indology, encompassing geography, sociology, anthropology, history, religions, and other disciplines.

## **METHODS IN THE STUDY OF RELIGIONS AND INDOLOGY**

Al-Biruni is one of the most learned Muslims about Indian history and religions. He thoroughly investigated various religions, including the religions of India, Hinduism, Zoroastrianism, Judaism, Christianity, Buddhism, and Islam. In contrast to other scholars, Al-Biruni examined these religions impartially and made an effort to comprehend them in his research. He considered all cultures and communities distantly related because of being a part of humanity. According to Al-Biruni, despite how different they may appear to one another, all cultures are related by a common human element, making them all distant relatives. He used a historical perspective as his initial method of study.

### **Historical Approach**

The basis of historical approach lies in the systematic study of religion as a socio-cultural phenomenon according to the west in the modern era. It is a highly significant approach to study any religion because it has often shaped for civilizations their law and their moral codes (Stausberg & Engler, 2011).

Basically, it reflects how a historian has studied any religion in terms of its themes, sources and ideas. Historians typically focus on particular topics in all over history of religions, in terms of geographical area or of theological doctrines. Al-Biruni's investigation is an example of his deployment of the historical method with all its fundamental techniques. He explores true knowledge about other religions without any interference as a Muslim scholar. As a detailed explanation of his

methodological approaches, he suggests that there are mainly five tools of his method to collect information about Hinduism: - Sanskrit; Its language, religious attitudes, Hindu customs and the general Hindu attitude towards others Al-Biruni first divides the Hindu people into two groups; educated and illiterate Hindus. The educated Hindus he considers Monotheistic, they believe in one God, an eternal deity, omnipotent and eschewing all forms of idol worship. The uneducated Hindus are, according to Al-Biruni, worshippers of multiple idols, yet he points out that even some Muslims (i.e., Jabriyya) have adopted anthropomorphic concepts of God. He considers himself a scholar, dispassionate and un-biased, in the introductory comments on his book:- "This book is not a polemical one. It is nothing but a simple historic record of fact." (Sachau, 2015).

This dispassionate approach is the center of his work, what makes him a distinguished scholar and a religious historian. It is what he prides his work of. An example of this purely dispassionate and educational approach can be seen clearly in his remarks upon Hindu religion as a Muslim:- "I have done and written this book on the doctrine of the Hindus, never making any unfounded imputations against those, our religious antagonists, and at the same time not considering it inconsistent with my duties as a Muslim to quote their own word at full length when I thought they would contribute to elucidate a subject. If the contents of these quotations happen to be utterly heathenish, and the followers of the truth i.e the Muslims find them objectionable, we can only say that such is the belief of the Hindus and that they themselves are the best qualified to defend it." (Sachau, 2015).

Al-Biruni looked down upon all scholars who failed to engage primary sources in their treatment of Hinduism. He found existing sources on the religion both insufficient and dishonest. Guided solely by his sense of ethics and his craving of knowledge, he sought to explain the religious behaviors of all religious groups.

### **Comparative Approach**

Another approach deployed by Al-Biruni is comparison of religions. In this approach, he gives a systematic comparison of doctrines and practices of various religions. This method, in general, leads to a deeper comprehension of the core philosophical issues that underlie religions, such as ethics, metaphysics, and the character and mode of salvation, etc. Studying these disciplines helps us gain a deeper and more comprehensive understanding of how people view and interact with the sacred, numinous, spiritual, and divine. (Kamaruzzaman, 2003).

It is a highly significant approach to understand the world views of other religious communities, their culture, life style and psychology. It is this that Al-Biruni called "True Knowledge of the other religions". *Taḥqīq mā li-al-hind min maqūlah*

maqbulah fī al-‘aqli aw mardhūlah is an example of the utilization of this approach as he compares Hinduism to Islam, Christianity, Judaism and Greek Religions. For instance, he provides a comparison about the Words of confession in these religions: - "As a word of confession, 'There is no God but Mohammed is his Prophet,' is the Shibboleth of Islam, the Trinity that of Christianity and the Institute of Sabbath that of Judaism, so metempsychosis is the Shibboleth of Hinduism. Therefore, he who does not believe in it does not belong in them and is not reckoned as one of them". (Sachau, 2015). Al-Biruni had written *Taḥqīq mā li-al-hind* to give his readers an insight into the general Hindu mindset. To promote constructive dialogues with Hindus, since there were many intricate and obscure subjects which would be perfectly clear had there been more interaction between Muslims and Hindus. Abu-Sahl is one such person who requested Al-Biruni to compile his knowledge about Hinduism as an aid to those who wanted to discuss religious questions with them (or) wanted to associate with them. Therefore, in *Kitab-Ul-Hind*, he made a discourse between Jews, Persians, Christians, pre-Islamic Arab, Sabians in this way. He earned his fame as a pioneer Muslim scholar in the field of comparative study of religion. However, he also had a very noble reason behind the deployment of the Comparative approach; to remove the common misconceptions between adherents of different religions and mainly to promote a friendly relationship between Muslims and Hindus, as well as removing general misconceptions about Hinduism.

Al-Biruni has always had a very crucial insight, careful outlook and an accurate stance in studying religions. 30 Approaches of Al Beruni in Studying Religions in Context. Jefferey (1951), a famous biographer, witnesses these abilities of the scholar in his following statement about Al-Biruni:- "He will place before the readers the theories of Hindus exactly as they are and where there are similar theories among the Greeks or in the teachings of the Christian sects, or the Sufis... as, for example, pantheistic doctrines of the unity of God with his creatures, he will accurately report their theories also for comparison (Jefferey, 1951).

### **Anthropological Approach**

The third approach he applied in his studies of religions is the Anthropological method. This method consists of the study of a particular religion in relation to other social institutions, and the comparison of religious beliefs and practices across cultures. (Peter Connolly, 2004) In the eleventh century, there were two prominent Muslim scientists who could be counted upon as religious anthropologists. One was Ibn Khaldun, a Tunisian scholar, (1332-1406), and the other was Abu al-Raihan al Biruni. Although he is commonly known as a mathematician, astrologer and historian, he is also considered a good anthropologist. Al-Biruni founded this science even before it existed as a discipline, and therefore is considered the first anthropologist. As a scholar who was seeing one of the greatest times of Muslim

period unfolding before him, Al-Biruni concentrated on contemporary anthropological concerns such as caste, the class system, rituals and customs, cultural issue, and women's challenges in an effort to better apply his self-created approach to his research. He employed phenomenological observation, cross-cultural comparison, and intercultural conversation through this contemporary method. These ideas are now widely applied in anthropology.

Al-Biruni, along with giving a deep analysis of the Middle-Eastern folk and the inhabitants of the Mediterranean region, studied the Indian people in detail. He discussed impartially their customs and religions. Being the model anthropologist, He only wrote his books on India after he had spent thirteen (or according to some historians, twenty) years in India, among these people. He himself admitted, that to study the Hindus he became their student, looking on as a silent audience as they went about their day-to-day activities. He watched them as they attended to their religious rituals. He accompanied them as they went to and from their places of worship. He mingled with the general Hindu public with great patience, love for knowledge and unparalleled efforts. He learned their language, culture, religion and their life. He is said to be the Pioneer anthropological Muslim (Nasr, 1968).

Moreover, he never let his personal convictions or the beliefs of his own religion bar him from conveying the beliefs of the Hindus honestly and without any negative sentiment. He was, as a scholar, empathizing and neutral, with unbiased conclusions of his studies. The anthropological approach helped him in the interpretation of social, philosophical and religious issues of Hinduism, stating his own opinion without committing or intending to commit any offence towards the believers of Hinduism. For instance, when addressing the issue of idol worship, he writes: - "It is well known that the popular mind leans towards the sensible word, and has an aversion to the world of abstract thought which is only understood by highly educated people, of whom in every time and every place there are only few." (Sachau, 2015). He then notes: - "... if for example, a picture of the Prophet was made, or of Makkah and the Ka'aba, and were shown to some uneducated men or women, their joy in seeing the picture would bring them to kiss it, to rub their cheeks against it... As if they were seeing not the picture but the original, and were in this way as if they were present in the holy places, performing the rites of pilgrimage, the great and the small ones... (Sachau, 2015). Thus, Al-Biruni tried to present a true picture of Hindu religion, its tradition and concepts for the Muslim world, to develop a positive and constructive relationship between the two communities.

The critical perspective with which Al-Biruni presented his ideas revealed his extensive knowledge and mastery of the various parts of applied research, particularly in Indology and study of religions, as well as his desire to go beyond

simple research and investigation and concentrate on putting the information and results into practice so they can be used effectively.

## DISCUSSION

### Indology And Al-Biruni's Scientific Works

Al-Biruni travelled to many places throughout India for his analytical work (تحقيق ما (للهند من مقولة مقبولة في العقل أم مردولة). which Edward C. Sachau translated as "AlBeruni's India" in two volumes. Al-Biruni presented his extensive analysis of Indology in this work. (An account of Indian religions, philosophy, literature, geography, history, chronology, astronomy, customs, laws, and astrology up as of the year 1030 AD). He translated a number of Sanskrit works into Arabic such as selections from Patañjali's Yogasūtras, the Bhagavad Gīta, Upanishads and Puranas (Khan,2001).

Al-Biruni's India is authored in Arabic and is divided into 80 chapters that cover a wide range of topics, including Indian metrology, legislation, festivals, astronomy, alchemy, measurement techniques, iconography, and customs and manners. Al-Biruni used a certain format for each chapter, starting with an enquiry, then moving on to a description based on Sanskrit teachings, and then concluding with a comparison to other cultures.

He presented numerous studies on the peoples of the Indian Peninsula (Indology) in his scholarly works. "The Remaining Signs of Past Centuries", also known as "Chronology of Past Ancient Nations" (Kitāb al-āthār al-bāqiyah `an al-qurūn al-khāliyah), is another systematic book by Al-Biruni that investigates Indology and the study of religions. It is a comparative study of various cultures and civilizations that explores the traditions and ideologies of various peoples around the world, especially India. It also weaves together mathematical, astronomical, and historical facts. The Hindu calendar was one of the particular aspects of Indian religions that Al-Biruni examined in this book. He developed a mechanism for converting Hindu calendar dates to those of the Greek, Arab/Muslim, and Persian calendars, three of which were widely utilized by the Islamic countries of his day.

The Yoga Sutras of Patanjali, is one more authentic work of Al-Biruni in the areas of Indology and study of Hinduism. Millions of yoga students and practitioners throughout the world still consider it as their primary source of knowledge on Hindu philosophy of Yoga. The Yoga Sutras of Patanjali, according to Hindus, deals with the philosophy and practice of Yoga as well as the psychological issue of the liberation of the soul from attachments. Using his knowledge of Sanskrit, Al-Buruni produced this work in a question-and-answer format. In this academic work, al-Biruni presents the several historical variants of the Yoga Sutras since they are crucial for the study of

yoga. This work is regarded as the first translation from Sanskrit. As an Arabic text, it also has special significance in Islamic studies.

He was considered "the first human scientist" and "one of the very greatest minds of Islam, and, all considered, one of the greatest of all times" as defined by the Belgian historian George Sarton for his thorough research and studies in the human and social sciences, including Indology and the study of religions. (Sarton, 1927).

As Professor Annemaria Schimmel (1992) affirms, Al-Biruni's *Book, India*, is believed to take the pride as the first objective book ever written on the history of religion. Moreover, Lawrence (1976) states that Al-Biruni's view on Hinduism was more informative compared to the other Muslim authors of Arabic books on sects and religions. For example, Al-Shahrastani (d. 1153), allocated only a few pages for Hinduism in his work *al-Milal wa al-Nihal*.

Al-Biruni's works on Indology were not polemical or apologetic. He was only interested in stating the facts as they are presented by the Hindus themselves. He says that he shall not produce the arguments of his antagonists in order to refute such of them, as he believes to be in the wrong. He further adds that his book is nothing but a simple historic record of facts. And he shall place before the reader the theories of the Hindus exactly as they are, and he shall mention in connection with them similar theories of the Greeks in order to show the relationship existing between them (Sachu, 2015).

Additionally, he basically presented the phenomena he wanted to examine in Indian civilization and culture in the way that he had personally experienced them, then went on to analyse and interpret them and draw analogies between what he had witnessed and its analogue in other cultures, particularly Arab, Persian, and Greek.

## CONCLUSION

Al-Biruni is well known for his contributions to the natural sciences, but his vital work in Indology and the study of religions, particularly Hinduism, cannot be overwhelmed by his other achievements. In fact, he should be called as the best representative of the pioneers who initiated Indology and the comparative study of religious traditions. Moreover, the intellectual world will remember him as great comparative religionist due to his scrupulous and objective research that served as a big boost in the methodological aspects of comparative religion. An accurate man, a

neutral scholar, a hard worker and a craving student, Al-Biruni was an exemplary figure for all those who study religions and comparative religions.

He is a creative thinker who carefully gathered a significant amount of data about other religions, providing the Muslim world with accurate knowledge of their ideologies. His approaches were applied by the west in its studies. His special and profound result in Indology and Hinduism enabled him to compare this religion with other religions like Greek and Islam. He opened a new horizon of knowledge for human thought to search the reality. He was a scholar with multi-dimensional knowledge that was of encyclopedic magnitude. By using the anthropological approach, he was able to objectively study Hinduism, despite the fact that this religion's beliefs are contradictory to his own doctrine. His use of the comparative method also served a beneficial mean for enhancing cross-cultural understanding.

The comprehensive empirical methods used by Al-Biruni demonstrate that he was, in fact, a pioneer in the fields of Indology and comparative religions. His commitment to objectivity is still a difficult strategy since it requires such a high level of honesty, correctness, and impartiality.

Finally, Al-Biruni's crucial contribution to comparative study of religion, especially Indology and Hinduism as a role model for human and social sciences shows that inter-disciplinary studies such as studying religion, culture and society can lead to very original research, positive and constructive relationships between different communities that can lead to healthy interfaith dialogue, religious harmony and peaceful co-existence.

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