

ABU RAYHAN BERUNI'S CONTRIBUTION TO INTERCULTURAL UNDERSTANDING: THE ROLE OF LANGUAGE AND CULTURAL KNOWLEDGE IN HIS SCHOLARLY HERITAGE

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Annotation.

This article examines the scholarly heritage of Abu Rayhan al-Biruni (973–1048), an eleventh-century polymath from Khwarazm, with a focus on the role that language acquisition and cultural knowledge played in his contribution to intercultural understanding. Special attention is given to his major work, *Kitab al-Hind* (Researches on India), in which he combined firsthand observation, mastery of Sanskrit, and comparative analysis to present Indian religion, philosophy, and science to the Islamic world without prejudice. The article traces al-Biruni's multilingual competence in Khwarazmian, Arabic, Persian, Sanskrit, Syriac, and Hebrew, and shows how this competence enabled a methodologically rigorous, empirically grounded approach that anticipated modern comparative religion, anthropology, and translation studies. The study concludes that al-Biruni's legacy remains a valuable model for contemporary intercultural dialogue.

Key words:

Al-Biruni; intercultural understanding; comparative religion; multilingualism; *Kitab al-Hind*; Khwarazm; Islamic Golden Age; cross-cultural methodology; Sanskrit studies

Among the scholars of the Islamic Golden Age, few figures embody the ideal of cross-civilizational learning as fully as Abu Rayhan Muhammad ibn Ahmad al-Biruni. Born in the region of Khwarazm, in the territory of present-day Uzbekistan, al-Biruni became one of the most versatile minds of the eleventh century, producing original work in astronomy, mathematics, geodesy, physics, pharmacology, mineralogy, history, and chronology [3, 12, 8]. Yet alongside these exact sciences, he is remembered above all as a founder of comparative religion and Indology and, in the assessment of many later historians, “the first anthropologist” [1, 12]. This reputation rests almost entirely on his capacity to cross linguistic and cultural boundaries: to learn the language of a people before writing about them, and to let their own texts, rather than secondhand rumor, speak for their beliefs. The present article argues that al-Biruni's contribution to intercultural understanding cannot be separated from his practice as a linguist and translator, and that his methodology — grounded in direct textual access, comparative reasoning, and a deliberate suspension of confessional bias — still offers a coherent model for cross-cultural scholarship today.

Al-Biruni was born on 4 September 973 near Kath, the capital of the Afrighid dynasty of Khwarazm, a region bordering the Aral Sea that today lies within Uzbekistan and Karakalpakstan [3, 9]. From an early age he studied under the astronomer and mathematician Abu Nasr Mansur, who introduced him to geometry, astronomy, and the methods of precise observation that would

mark his entire career [9]. Political instability repeatedly interrupted his scholarly life: a coup in Khwarazm around 995 forced him into a decade of itinerant service at various Central Asian and Iranian courts before he returned home to work under the Ma'munid rulers of Gurganj [9, 11]. This unsettled career, ironically, broadened rather than narrowed his outlook, exposing him early to multiple courts, scholarly circles, and linguistic environments across the eastern Islamic world.

The decisive turn came in 1017, when Sultan Mahmud of Ghazna conquered Khwarazm and brought al-Biruni, along with other regional scholars, to his capital, Ghazni, in present-day Afghanistan [7, 11]. Although the move began as a form of political captivity, it placed al-Biruni within reach of northern India, which Mahmud's armies were then repeatedly invading. Over the following years al-Biruni traveled through the Punjab and neighboring regions, an opportunity he used not for conquest but for sustained ethnographic and linguistic research [7, 13]. He remained in the Ghaznavid domains for the rest of his life, continuing to write prolifically until his death around 1048–1050 in Ghazni [3, 4].

What distinguishes al-Biruni from most of his contemporaries is the conviction, stated repeatedly throughout his writings, that genuine knowledge of another people requires direct access to their language rather than reliance on interpreters or hostile secondary reports [10, 7]. He was raised speaking Khwarazmian, a Central Asian Iranian language, wrote his scholarly works chiefly in Arabic, the shared scientific language of the medieval Islamic world, and also commanded Persian [12, 5]. To this base he added a serious study of Syriac and Hebrew, which gave him access to Jewish and Christian chronological and astronomical traditions, and, most remarkably, Sanskrit, which he began to learn specifically in order to study Indian civilization on its own terms [12, 10]. Although he did not read classical Greek directly, he engaged closely with Greek philosophy and science through the Arabic and Syriac translation movement, so that his comparisons between Indian and Hellenistic thought were built on genuine textual familiarity rather than hearsay [7, 12].

This linguistic investment was neither incidental nor purely instrumental; it functioned as al-Biruni's chief safeguard against distortion. In the introduction to his study of India, he explains that earlier Arabic accounts of Indian belief were unreliable precisely because their authors had never learned Sanskrit and depended on secondhand, often garbled, oral reports [10]. By contrast, he undertook years of study with Brahmin scholars, read Sanskrit philosophical and scientific texts, and translated several of them into Arabic while rendering works such as Euclid's *Elements* into Sanskrit for his Indian interlocutors [7, 1]. Language, in his practice, was not a neutral tool but the very precondition for intercultural understanding: without it, a scholar could describe only the surface of a foreign culture, never its internal logic.

Al-Biruni's principal contribution to intercultural understanding is his monumental *Kitab Tahqiq ma li-l-Hind* (commonly known as *Kitab al-Hind*, or *Alberuni's India*), completed around 1030 in Arabic [10, 5]. The work offers a systematic account of Indian religion, philosophy, caste structure, mathematics, astronomy, geography, chronology, law, and social custom, based on years of direct observation and textual study rather than travelers' anecdotes [1, 7]. Modern historians regard it as one of the earliest attempts by an outside scholar to describe another civilization descriptively rather than polemically, and as a founding text of both Indology and comparative religion [12, 1].

Two methodological choices make the *Kitab al-Hind* especially significant for the study of intercultural understanding. First, al-Biruni deliberately separated what he had verified through direct study of Sanskrit sources from what he had merely been told, flagging uncertain or secondhand information as such [10, 2]. Second, he used systematic comparison — setting Hindu philosophical concepts alongside Greek Neo-Platonic and Sufi ideas familiar to his Muslim readers — not to collapse the two traditions into one another, but to make an unfamiliar system of thought intelligible without misrepresenting it [5, 7]. He was also candid about the limits of his own access: because his travels were largely confined to the regions under Ghaznavid control, and because Brahmanical learning was itself restricted along caste lines, he acknowledged that his account, however careful, remained partial [1, 7]. This self-aware humility, unusual for the

period, is itself part of his intercultural method: understanding another culture, for al-Biruni, was a continuing discipline rather than a finished claim to authority.

Al-Biruni's broader body of work reinforces the same commitment to cross-cultural objectivity visible in the *Kitab al-Hind*. In his earlier *Chronology of Ancient Nations* (*al-Athar al-Baqiya*), composed before his Indian travels, he had already undertaken a comparative study of the calendars, festivals, and eras of Persians, Arabs, Jews, Christians, Sogdians, and Khwarazmians, treating each system on its own terms while noting points of convergence and divergence [12, 3]. Scholars of the history of social science have credited al-Biruni with an early form of comparative sociology and empirical field method, describing his willingness to test reported information against direct observation and internal textual consistency as a precursor to modern ethnographic practice [2, 1]. Later historians of religion have likewise called him "the father of comparative religion," noting that his treatment of Hinduism avoided the apologetic or polemical framing common among both Muslim and later European writers on India [5, 12].

This objectivity was not the product of indifference to his own religious and cultural identity, but of a deliberate scholarly discipline: al-Biruni distinguished sharply between describing a belief system accurately and endorsing it, a distinction that allowed him to present Indian cosmology, mathematics, and religious practice with precision even where he personally disagreed with them [10, 7]. It is this combination — linguistic competence, direct textual engagement, and a disciplined separation of description from judgment — that later commentators identify as the core of his intercultural method [1, 2].

Al-Biruni's influence extended well beyond his own century. His astronomical and geodetic work, including the *Canon Mas'udicus*, was transmitted through later Islamic scholarship and remains a standard reference point in the history of medieval astronomy [6], while his *Kitab al-Hind* became, centuries later, one of the principal sources used by European Orientalists — most notably through Edward Sachau's nineteenth-century English translation — to reconstruct the intellectual and religious history of medieval India [10, 12]. In his native Central Asia, al-Biruni is honored today as one of the region's foremost scholars, and modern Uzbekistan, the country of his birth, continues to commemorate his work as part of its cultural and scientific heritage [11, 9].

Beyond his historical reputation, al-Biruni's approach anticipates several principles now central to intercultural and area studies: that language learning is a prerequisite, not an accessory, to cultural understanding; that primary sources should be privileged over intermediaries; that comparison across traditions is valuable only when it respects the internal coherence of each system; and that scholarly humility about the limits of one's access is itself part of rigorous method [1, 5, 10]. For contemporary discussions of intercultural dialogue, translation ethics, and comparative religion, al-Biruni's eleventh-century practice remains a striking early demonstration that sustained linguistic and cultural investment — not superficial contact — is what makes genuine understanding between civilizations possible.

Abu Rayhan al-Biruni's scholarly heritage demonstrates that intercultural understanding, in any era, depends less on the volume of contact between civilizations than on the depth of linguistic and cultural preparation brought to that contact. His mastery of Khwarazmian, Arabic, Persian, Sanskrit, Syriac, and Hebrew was not a peripheral biographical detail but the very instrument that made his description of Indian religion, philosophy, and science possible without recourse to prejudice or hearsay. Through *Kitab al-Hind* and his broader comparative and chronological studies, al-Biruni established a method — direct textual access, careful comparison, and honest acknowledgment of the limits of one's knowledge — that continues to inform how scholars approach the study of unfamiliar cultures. His legacy, rooted in Khwarazm and matured in the intellectual world of Ghazni, remains a lasting reminder that language is the foundation on which genuine intercultural understanding is built.

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Annotatsiya.

Ushbu maqolada XI asr xorazmlik qomusiy olimi Abu Rayhon Beruniy (973–1048)ning ilmiy merosi, xususan til o'rganish va madaniy bilimning turli xalqlar o'rtasidagi o'zaro tushunishga qo'shgan hissasi tahlil qilinadi. Alohida e'tibor uning "Kitob ul-Hind" ("Hindiston tadqiqi") asariga qaratiladi, unda u bevosita kuzatuv, sanskrit tilini mukammal bilishi va qiyosiy tahlil orqali hind dini, falsafasi va fanini xolisona tarzda islom dunyosiga taqdim etgan. Maqolada Beruniyning xorazmiy, arab, fors, sanskrit, suryoniy va ibroniy tillaridagi ko'p tilliligi ko'rib chiqiladi hamda bu bilim uning zamonaviy qiyosiy dinshunoslik, antropologiya va tarjimashunoslikka asos solgan ilmiy metodologiyasini qanday shakllantirganligi ko'rsatiladi. Tadqiqot xulosasiga ko'ra, Beruniy merosi bugungi kunda ham madaniyatlararo muloqot uchun qimmatli namuna bo'lib xizmat qiladi.

Kalit so'zlar:

Abu Rayhon Beruniy, madaniyatlararo tushunish, qiyosiy dinshunoslik, ko'p tillilik, "Kitob ul-Hind", Xorazm, Islom oltin davri, sanskrit tilshunosligi.

Аннотация.

В статье рассматривается научное наследие Абу Райхана Беруни (973–1048) — хорезмийского учёного-энциклопедиста XI века — с акцентом на роль владения языками и культурных знаний в его вкладе в межкультурное понимание. Особое внимание уделяется его труду «Китаб аль-Хинд» («Индия»), в котором он на основе личных наблюдений, знания санскрита и сравнительного анализа объективно представил религию, философию и науку Индии исламскому миру. В статье прослеживается многоязычие Беруни — хорезмийский, арабский, персидский, санскрит, сирийский и иврит, — и показывается, как оно способствовало формированию эмпирически обоснованной методологии, предвосхитившей современное сравнительное религиоведение, антропологию и переводоведение. Делается вывод, что наследие Беруни остаётся ценной моделью для современного межкультурного диалога.

Ключевые слова:

Аль-Бируни, межкультурное понимание, сравнительное религиоведение, многоязычие, «Китаб аль-Хинд», Хорезм, исламский золотой век, санскритология.