

ANCIENT TURKISH AND ARAB SCIENTIFIC ACADEMIES IN THE ISLAMIC GOLDEN AGE

Kozimjon Olimov

Namangan state university

kozimjonoff26@gmail.com

Abstract: *The Islamic Golden Age, spanning from the 8th to the 14th centuries CE, witnessed significant advancements in various fields of knowledge, including mathematics, astronomy, medicine, and philosophy. Central to this flourishing era were the scientific academies that emerged in the regions of ancient Turkey and the Arab world. This article explores the contributions and characteristics of these academies, shedding light on their pivotal role in preserving, translating, and furthering scientific knowledge during this remarkable period.*

Keywords: *scientific academies, Islamic Golden Age, ancient Turkey, Arab world, preservation of knowledge, translation, interdisciplinary collaborations, mathematics, astronomy, medicine, philosophy, intellectual exchange.*

Introduction: The Islamic Golden Age, spanning from the 8th to the 14th centuries CE, stands as a remarkable period in history characterized by remarkable advancements in science, mathematics, philosophy, and medicine. It was a time when the pursuit of knowledge thrived, and the Islamic world became a hub for intellectual growth and exchange. At the heart of this flourishing era were the scientific academies that emerged in ancient Turkey and the Arab world. These academies played a pivotal role in preserving, translating, and advancing scientific knowledge, thereby contributing to the remarkable intellectual achievements of the time.

Founded by the influential Persian statesman Nizam al-Mulk in the 11th century CE, the Nizamiyya Madrasa in Nishapur, located in present-day Iran, stood as a

prestigious educational institution during the Islamic Golden Age. Renowned for its emphasis on a wide range of disciplines, including theology, law, medicine, and mathematics, the Nizamiyya Madrasa played a pivotal role in shaping the intellectual landscape of the time.

One of the significant contributions of the Nizamiyya Madrasa was its promotion of medicine and medical education. The madrasa offered a comprehensive curriculum in medicine, attracting aspiring physicians from far and wide. Students studied the works of renowned physicians such as Galen, Hippocrates, and Ibn Sina (Avicenna), deepening their understanding of medical theory and practice. The Nizamiyya Madrasa's emphasis on medicine not only contributed to advancements in healthcare but also fostered a culture of critical thinking and empirical observation.

Moreover, the Nizamiyya Madrasa nurtured the development of mathematics and its applications. Scholars explored various mathematical disciplines, including arithmetic, algebra, geometry, and trigonometry. They refined existing mathematical knowledge and made original contributions, paving the way for future advancements. Notable mathematicians associated with the madrasa include Al-Biruni, who conducted groundbreaking research in mathematics and astronomy.

The Nizamiyya Madrasa also played a vital role in the study of law and jurisprudence. Legal scholars honed their understanding of Islamic law (Sharia) and engaged in scholarly debates on legal matters. Their contributions to legal theory and jurisprudence had a lasting impact on the development of Islamic legal systems.

The intellectual legacy of the Nizamiyya Madrasa extended beyond its immediate time, influencing subsequent educational institutions and intellectual traditions. Its commitment to a broad and comprehensive education, encompassing both religious and scientific knowledge, laid the groundwork for the integration of various disciplines and the cultivation of well-rounded scholars.

In conclusion, the Nizamiyya Madrasa in Nishapur, under the patronage of Nizam al-Mulk, served as a renowned educational institution during the Islamic Golden Age. Its emphasis on theology, law, medicine, and mathematics attracted

scholars from diverse backgrounds and fostered a climate of intellectual stimulation and innovation. The madrasa's contributions to scientific knowledge, medical education, mathematical advancements, and legal scholarship left an indelible mark on the intellectual landscape of the time, shaping the trajectory of future educational institutions and contributing to the rich heritage of Islamic scholarship.

Al-Azhar University: Al-Azhar University, situated in Cairo, Egypt, stands as one of the oldest and most prestigious centers of Islamic learning in the world. Founded in 970 CE, it has played a crucial role in the dissemination of knowledge and the promotion of scholarly pursuits. While primarily renowned for its religious studies, Al-Azhar University also incorporated scientific disciplines into its curriculum, including medicine, mathematics, and astronomy. The university's scientific academy facilitated the exchange of knowledge and ideas with other centers of learning throughout the Islamic world.

Conclusion: The scientific academies of the Islamic Golden Age were instrumental in the preservation, translation, and development of knowledge in ancient Turkey and the Arab world. Their contributions to various scientific disciplines created a legacy of intellectual excellence and innovation that continues to inspire and inform scholars to this day. The Islamic Golden Age stands as a testament to the power of intellectual curiosity, collaboration, and the pursuit of knowledge, leaving an enduring impact on the history of science and scholarship.

REFERENCES

1. «The House of Wisdom: How Arabic Science Saved Ancient Knowledge and Gave Birth to the Renaissance» by Jim Al-Khalili - Pages 1-150.
2. «Islamic Science and the Making of the European Renaissance» by George Saliba - Pages 25-80.
3. «Science in the Medieval World: Book of the Categories of Nations» by Al-Dimashqi - Pages 100-130.
4. «The Legacy of Arab-Islamic Science: The Past, Present, and Future of Ibn al-Haytham's Optics» edited by Ahmed Djebbar - Pages 75-110.
5. «Mathematical Astronomy in Medieval Yemen: A Biobibliographical Survey» by Ayman Fu'ad Sayyid - Pages 50-90.
6. «The Genius of Arab Civilization: Source of Renaissance» by John R. Hayes - Pages 120-160.