



The Contribution of the Fatimid Dynasty to the Development of Knowledge in Islamic Civilization: A Historical Study

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ABSTRACT

The Fatimid Dynasty (909–1171 CE) was one of the Islamic dynasties that made significant contributions to the advancement of knowledge through the strengthening of the educational system, the establishment of scholarly institutions, and sustained support for the intellectual activities of scholars and scientists. However, these contributions have often been overshadowed by the predominance of studies on the Abbasid Dynasty, thereby necessitating a more comprehensive scholarly examination. This study aims to analyze the contributions of the Fatimid Dynasty to the development of knowledge in Islamic civilization, focusing on its educational policies, the establishment of Al-Azhar and Dār al-Ḥikmah, the advancement of various branches of knowledge, and its influence on both the Islamic world and Europe. This research employs a historical approach using library research as its primary research design. Data were collected from books, peer-reviewed journal articles, and other relevant historical sources and were analyzed qualitatively through content analysis, with particular emphasis on the historical interpretation of the development of educational institutions and intellectual traditions during the Fatimid period. The findings reveal that the Fatimid Dynasty successfully established a conducive intellectual ecosystem through the founding of Al-Azhar University as a center of higher Islamic learning and Dār al-Ḥikmah as a center for research, library services, and the advancement of scientific knowledge. In addition to promoting the development of Islamic religious sciences, the Fatimid Dynasty also contributed significantly to the advancement of philosophy, medicine, astronomy, and mathematics. The academic tradition that flourished during this period strengthened the intellectual networks of the Islamic world and played an important role in the transmission of knowledge that subsequently contributed to the intellectual development of Europe. Therefore, the Fatimid Dynasty occupied a strategic position in fostering



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the Islamic scholarly tradition, leaving a lasting legacy for the development of world civilization.

1. Introduction

The development of knowledge is one of the primary indicators of the advancement of a civilization. In Islamic history, the progress of knowledge was not solely influenced by the activities of scholars and scientists but was also shaped by political and economic support, as well as governmental policies that provided opportunities for the growth of intellectual traditions. Various Islamic dynasties made significant contributions to the advancement of knowledge, including the Abbasid Dynasty, the Umayyad Dynasty in Andalusia, and the Fatimid Dynasty. Although the Abbasid Dynasty has received greater attention in studies of Islamic civilization, the Fatimid Dynasty also played an important role in establishing centers of learning that became foundations for the development of knowledge in the Islamic world.

The Fatimid Dynasty (909–1171 CE) was one of the Islamic dynasties that successfully developed a stable system of governance and transformed Egypt into a prominent center of political power, economic activity, and intellectual advancement. (Yatim, 2017) Following the relocation of the capital to Cairo in 969 CE, the Fatimid administration developed a range of policies aimed at promoting the advancement of education and the development of scientific knowledge. (Supriyadi, 2008) The establishment of Al-Azhar Mosque and University, the establishment of Dar al-Hikmah (House of Wisdom), the development of libraries with vast manuscript collections, and the patronage of writing, translation, and scholarly debates demonstrate the Fatimid Dynasty's strong commitment to fostering an intellectual tradition. (Amin, 2010)

The advancement of knowledge during the Fatimid Dynasty extended beyond Islamic sciences, including jurisprudence, Qur'anic interpretation, hadith studies, and theology, to encompass a wide range of rational disciplines, such as medicine, astronomy, mathematics, philosophy, and pharmacology. (Yatim, 2017) The state's patronage of scholars stimulated the emergence of numerous scholarly works and intellectual innovations that significantly contributed to the development of knowledge, both across the Islamic world and beyond its boundaries. (Amin, 2010) Therefore, the Fatimid Dynasty should be recognized not merely as a political power, but also as one of the major catalysts for intellectual advancement during the medieval era. (Supriyadi, 2008)

Nevertheless, studies on the contribution of the Fatimid Dynasty to the development of scientific knowledge remain relatively limited compared to research on the Abbasid Dynasty. Much of the existing literature on Islamic history has primarily focused on the political aspects, sectarian conflicts, and territorial expansion of the Fatimid Dynasty, while its contributions to the establishment of educational institutions, the cultivation of a culture of literacy, and the advancement of scientific knowledge have received insufficient attention. However, a comprehensive understanding of the history of Islamic intellectual development requires an approach that does not merely concentrate on a single dynasty,

but also acknowledges the contributions of other dynasties that played significant roles in shaping the Islamic intellectual tradition.

Furthermore, the development of scientific knowledge during the Fatimid Dynasty demonstrates a close relationship between political stability, educational policies, state patronage, and the intellectual advancement of society. This phenomenon provides an important lesson for the contemporary development of Islamic education, highlighting that the advancement of knowledge requires institutional support, government policies, and a conducive scholarly culture. Therefore, revisiting the contributions of the Fatimid Dynasty is not only historically significant but also offers valuable perspectives for the development of scientific civilization in the modern era.

Based on the aforementioned discussion, this study aims to historically examine the contribution of the Fatimid Dynasty to the development of scientific knowledge within Islamic civilization. This study is expected to provide a more comprehensive understanding of the Fatimid Dynasty's policies in the fields of education and scholarship, the forms of its contributions to the advancement of various scientific disciplines, and its influence on the progress of Islamic civilization. Therefore, this research is expected to enrich the historiography of Islam while also serving as a reference for future studies on the history of scientific development in the Islamic world.

2. Research Method

This study employs a historical approach aimed at examining and reconstructing the contribution of the Fatimid Dynasty to the development of scientific knowledge within Islamic civilization based on accountable historical evidence. The historical approach was selected because the development of knowledge during the Fatimid period cannot be separated from the political, social, economic, and cultural dynamics that characterized the dynasty's rule. Through this approach, the study seeks to understand the relationship between Fatimid governmental policies and the growth and development of Islamic scholarly traditions, particularly in the fields of education, scientific institutions, and the advancement of various branches of knowledge.

This study employs a library research method, which utilizes various written sources as the primary data. The data were collected from both primary and secondary sources, including books on the history of Islamic civilization, scholarly articles, national and international journals, conference proceedings, encyclopedias, and classical works discussing the history of the Fatimid Dynasty, the development of Islamic scientific knowledge, and educational institutions during the Fatimid period. In addition, this study also draws upon relevant scholarly documents to strengthen the analysis of the Fatimid Dynasty's contribution to the development of Islamic intellectual traditions.

The data were analyzed using a qualitative-descriptive approach through content analysis techniques. The collected data were classified according to the research themes, including the Fatimid Dynasty's educational policies, the development of educational institutions and libraries, support for scholarly activities, and the contributions of scholars during the Fatimid period. Subsequently, the data were analyzed through several historical research stages, namely heuristics (source collection), source criticism to assess the authenticity and credibility of the data, interpretation of historical facts, and historiography

as the final stage of systematically presenting the research findings. Through these stages, this study is expected to provide a comprehensive understanding of the Fatimid Dynasty's contribution to the establishment of scholarly traditions and its influence on the development of knowledge within Islamic civilization

3. Results and Discussion

a. The Fatimid Dynasty's Educational Policies

The advancement of scientific knowledge during the Fatimid Dynasty cannot be separated from governmental policies that positioned education as an important instrument for strengthening political legitimacy while simultaneously fostering Islamic civilization. Since the establishment of the Fatimid Dynasty in 909 CE, and particularly after its successful conquest of Egypt in 969 CE, Fatimid caliphs demonstrated significant attention to the development of education through the establishment of scholarly institutions, the provision of educational facilities, the patronage of scholars and scientists, and the cultivation of a culture of literacy among society. These policies transformed Cairo into one of the greatest centers of knowledge in the Islamic world during the medieval period.(Yasin, 2024)

One of the most significant educational policies of the Fatimid Dynasty was the establishment of Al-Azhar Mosque in 970 CE by the commander Jawhar al-Siqilli under the instruction of Caliph al-Mu'izz li-Din Allah. Initially, Al-Azhar functioned as a state mosque as well as a center for the dissemination of Ismaili Shi'ite teachings, which served as the official ideology of the Fatimid Dynasty. However, over time, Al-Azhar developed beyond its initial function as a place for religious instruction and evolved into a higher educational institution that taught various branches of knowledge, including Arabic language, logic, philosophy, astronomy, medicine, and mathematics. This development demonstrates that the Fatimid Dynasty's educational policies were not solely oriented toward ideological interests but were also directed toward the establishment of a comprehensive intellectual tradition. (Amaliyah, 2013)

In addition to establishing Al-Azhar, the Fatimid Dynasty also developed the scholarly institution of Dar al-Hikmah or Dar al-'Ilm, which was founded by Caliph al-Hakim bi Amr Allah in 1005 CE. This institution functioned as a library, a research center, a venue for scholarly discussions, as well as an academy that housed extensive manuscript collections from various fields of knowledge. The government provided educational facilities free of charge, including ink, paper, and writing materials for students and scholars. This policy demonstrates that the state not only established educational institutions but also created an academic environment that encouraged the growth of research activities, manuscript reproduction, translation, and the advancement of knowledge.(Azza, 2024)

Another policy that contributed significantly to the acceleration of educational development was the provision of patronage to scholars, scientists, writers, and manuscript copyists. Scholars received various forms of support, including salaries, allowances, and research facilities, enabling them to focus on producing scholarly works. This financial support became an important factor in promoting the development of various disciplines, including both Islamic sciences and rational sciences. The scholarly tradition established

during the Fatimid period demonstrates that the advancement of knowledge did not solely depend on the individual abilities of scholars, but was also shaped by state policies that ensured the sustainability of academic activities.(Mursyada, 2024)

In terms of curriculum, education during the Fatimid Dynasty demonstrated an integration between religious sciences and general sciences. Although the initial orientation of education was directed toward strengthening Ismaili Shi'ite doctrines, the learning process also encompassed various rational disciplines, such as philosophy, astronomy, medicine, mathematics, literature, and Arabic grammar. This integration indicates that education during the Fatimid period had developed a scholarly paradigm that was relatively open to the advancement of knowledge. This condition transformed Cairo into a destination for students from various regions of the Islamic world seeking to deepen their intellectual knowledge.(Yasin, 2024)

The government's attention to the development of libraries was also an essential component of the Fatimid Dynasty's educational policies. The royal libraries housed extensive manuscript collections covering various fields of knowledge, both religious and non-religious. These libraries functioned not merely as repositories of books, but also as centers of intellectual activity that brought together scholars, scientists, and students through various scholarly activities, including study sessions, discussions, manuscript copying, and research. Through these policies, the government succeeded in cultivating a culture of literacy that became the foundation for the development of Islamic scholarly traditions during the Fatimid period.(Amaliyah, 2013)

Overall, the educational policies of the Fatimid Dynasty demonstrate that the advancement of knowledge was the result of synergy among political stability, governmental support, the establishment of educational institutions, the provision of academic facilities, and appreciation for scholars. The Fatimid Dynasty's success in transforming Al-Azhar and Dar al-Hikmah into centers of education and research made significant contributions to the development of Islamic knowledge during the medieval period. Moreover, this legacy continues to be felt today through the existence of Al-Azhar University as one of the oldest and most influential Islamic educational institutions in the world. Therefore, the educational policies of the Fatimid Dynasty can be regarded as one of the primary factors that fostered the emergence of intellectual traditions and the advancement of knowledge within Islamic civilization.(Azza, 2024)

b. The Establishment of Al-Azhar University as a Center for Scholarly and Intellectual Development

One of the greatest contributions of the Fatimid Dynasty to the development of knowledge within Islamic civilization was the establishment of Al-Azhar Mosque, which later evolved into the oldest higher educational institution that has continuously survived to the present day. The establishment of Al-Azhar not only demonstrates the Fatimid Dynasty's success in building an educational institution but also reflects the vision of the Fatimid government in positioning knowledge as a foundation for the development of civilization. From its inception, Al-Azhar was designed not merely as a place of worship, but also as a center for learning, scholarly inquiry, intellectual discussions, and the development of various branches of knowledge, attracting students and scholars from different regions of the Islamic world. (Yasin, 2024)

The construction of Al-Azhar began in 970 CE (359 AH) under the initiative of Commander Jawhar al-Siqilli after he successfully conquered Egypt on behalf of Caliph al-Mu'izz li-Din Allah. The establishment of this institution was part of the Fatimid Dynasty's political strategy to develop a new capital, Cairo, which was projected to become both the center of government and the intellectual hub of the Islamic world. The name 'Al-Azhar' is believed to have been derived from the title of Fatimah al-Zahra, the daughter of the Prophet Muhammad, as a form of reverence for the lineage that served as the foundation of the Fatimid Dynasty's legitimacy. Therefore, from the very beginning of its establishment, Al-Azhar embodied interconnected religious, political, and intellectual dimensions. (Amaliyah, 2013)

In its early phase, Al-Azhar functioned as a state mosque as well as a center for the dissemination of Ismaili Shi'ite teachings, which served as the official doctrine of the Fatimid Dynasty. Educational activities were conducted through the *halaqah* system, a learning method carried out in study circles with a teacher serving as the primary source of knowledge transmission. This system facilitated intensive scholarly interaction between teachers and students while encouraging the development of traditions of dialogue, argumentation, and critical inquiry into various religious and intellectual issues. As the institution continued to develop, the subjects of instruction were no longer limited to religious doctrines but expanded to encompass various disciplines required by society. (Ulya, 2022)

The development of Al-Azhar as a center of knowledge was inseparable from the strong support provided by the Fatimid government. The caliphs allocated operational funding through the waqf system, provided salaries for teachers, established dormitories for students, and equipped the institution with a library containing a large collection of manuscripts. This support demonstrates that the state viewed education as a long-term investment in the construction of civilization. This policy also illustrates that the advancement of knowledge requires active government involvement in creating a conducive academic environment for learning and research. (Azza, 2024)

In its development, Al-Azhar not only taught Islamic sciences, such as Qur'anic exegesis, hadith studies, jurisprudence, principles of Islamic jurisprudence, Islamic theology, and Arabic language, but also developed various rational disciplines (*al-'ulum al-'aqliyyah*). Among the disciplines that flourished were philosophy, logic, mathematics, astronomy, medicine, pharmacology, and literature. The integration between religious sciences and rational sciences demonstrates that the educational paradigm during the Fatimid Dynasty was holistic in nature. Knowledge was perceived as an interconnected whole that complemented one another in understanding the realities of life and strengthening Islamic civilization. This integrative approach became one of the significant characteristics of classical Islamic education, which later inspired the development of Islamic educational institutions in subsequent periods. (Yasin, 2024)

The success of Al-Azhar as an educational center was also supported by the presence of scholars and intellectuals with high levels of competence in various fields of knowledge. These scholars not only served as educators but also as authors, researchers, and intellectual mentors for students. The tradition of writing scholarly works, granting academic *ijazah* (certificates of scholarly authorization), conducting scholarly discussions, and copying manuscripts became important components of the academic culture that developed within

Al-Azhar. This tradition encouraged the emergence of an intellectual generation that possessed mastery of religious knowledge while also demonstrating rational and analytical thinking abilities.(Amaliyah, 2013)

In addition to functioning as an educational institution, Al-Azhar also served as a center for the dissemination of knowledge throughout various regions of the Islamic world. Students who came from North Africa, the Levant, the Hijaz, Yemen, Persia, and other parts of Asia later returned to their respective regions, bringing with them the scholarly traditions they had acquired at Al-Azhar. This process transformed Al-Azhar into a hub of the intellectual network of the Islamic world, contributing to the transmission of knowledge across geographical boundaries. Therefore, the influence of Al-Azhar was not only felt in Egypt but also shaped the development of Islamic education in various regions of the Muslim world.(Mursyada, 2024)

The existence of Al-Azhar also demonstrates that the Fatimid Dynasty succeeded in establishing a relatively well-organized educational system. The curriculum implemented at Al-Azhar developed in accordance with the needs of society and the dynamics of intellectual development. Although it was initially oriented toward the dissemination of Ismaili Shi'ite teachings, its subsequent development revealed an openness toward various disciplines and intellectual traditions. After the end of Fatimid rule in 1171 CE and the transition to the Ayyubid Dynasty, Al-Azhar underwent a transformation into a center of Sunni education without losing its established academic traditions. This demonstrates that the enduring strength of Al-Azhar lay not merely in the political orientation of its founders, but also in the scholarly culture that had been deeply rooted since the Fatimid period.(Jinan, 2026)

From the perspective of the history of Islamic education, the establishment of Al-Azhar represented a significant milestone in the development of Islamic higher educational institutions. The educational model developed at Al-Azhar demonstrated a close relationship between the state, scholars, educational institutions, and society in building a scholarly tradition. Government support through funding, the provision of facilities, library development, and appreciation for scholars created a productive academic environment. This model later served as an inspiration for the emergence of various Islamic madrasahs and higher educational institutions across different regions of the Islamic world in subsequent periods.(Isfayanti, 2025)

The greatest legacy of Al-Azhar lies in its ability to preserve the continuity of scholarly traditions for more than a thousand years. Unlike many classical educational institutions that experienced decline or even disappeared due to political transformations, Al-Azhar has continued to exist and develop as one of the most influential centers of Islamic education in the world. This continuity demonstrates that the institutional foundations established by the Fatimid Dynasty were remarkably strong, encompassing organizational structures, funding systems, academic traditions, and intellectual networks. Therefore, the establishment of Al-Azhar represents one of the most monumental contributions of the Fatimid Dynasty to the development of knowledge within Islamic civilization and serves as evidence that investment in education is a crucial factor in fostering the advancement of a civilization.(Yusuf, 2023)

c. The Role of Dar al-Hikmah as a Center of Intellectual and Scholarly Development during the Fatimid Dynasty

The development of knowledge during the Fatimid Dynasty was not only marked by the establishment of educational institutions such as Al-Azhar, but also by the establishment of Dar al-Hikmah or Dar al-'Ilm (House of Knowledge), which became one of the greatest intellectual centers of the period. This institution was founded by Caliph al-Hakim bi Amr Allah in 1005 CE in the city of Cairo. The establishment of Dar al-Hikmah was part of the Fatimid Dynasty's policy to cultivate a scholarly tradition and transform Egypt into a prominent center of Islamic civilization with significant influence in the fields of education, research, and the advancement of knowledge.(Yatim, 2017)

The establishment of Dar al-Hikmah demonstrates that the Fatimid Dynasty placed great emphasis on knowledge as a fundamental element in building the strength of its civilization. During the medieval Islamic period, the advancement of a government was not measured solely by the extent of its territorial authority or military power, but also by its ability to develop knowledge and produce intellectual figures. Therefore, the Fatimid caliphs provided substantial support for scholarly institutions in order to transform Cairo into a cultural and intellectual center capable of competing with Baghdad, which served as the center of learning under the Abbasid Dynasty.(Supriyadi, 2008)

Dar al-Hikmah possessed characteristics that distinguished it from earlier traditional educational institutions. While mosques primarily functioned as places for religious learning through the *halaqah* system, Dar al-Hikmah was designed as a more complex institution with multiple functions, including a library, a research center, a venue for scholarly discussions, and a space for the development of various branches of knowledge. The Fatimid government provided various facilities to support intellectual activities, including manuscript collections, study rooms, and resources for scholars conducting research within the institution.(Amin, 2010)

One of the primary functions of Dar al-Hikmah was to serve as a library center and a repository of scholarly manuscripts. During the Fatimid Dynasty, books held a highly significant position as the primary sources in the process of knowledge transmission. The collection of Dar al-Hikmah encompassed various fields of knowledge, including both religious and rational sciences, such as Qur'anic exegesis, hadith studies, jurisprudence, philosophy, medicine, astronomy, mathematics, and literature. The existence of this extensive library provided scholars with opportunities to access diverse sources of knowledge and conduct research based on previous scholarly works.(Yatim, 2017)

In addition to serving as a repository of books, Dar al-Hikmah also functioned as a center for the development of a culture of reading, writing, and research. Scholars who gathered at the institution engaged in various academic activities, including the study of scholarly works, intellectual discussions, the production of written works, and the development of new ideas. The scholarly tradition that emerged demonstrates that Muslim society during the Fatimid period was not merely a recipient of knowledge inherited from previous civilizations, but also an active contributor to the advancement of knowledge and the progress of world civilization.(Syalabi, 1994)

In the field of religious studies, Dar al-Hikmah served as a center for the study of Islamic thought, particularly those related to Ismaili Shi'ite teachings as the official ideology of the Fatimid Dynasty. The scholars and intellectuals at the institution developed studies

in the theology, religious philosophy, and various aspects of Islamic thought. Although the institution possessed a particular ideological orientation, its existence nevertheless contributed to the development of Islamic intellectual traditions by encouraging scholarly discussions, argumentation, and the cultivation of critical thought.(Nasution, 2002)

In addition to religious sciences, Dar al-Hikmah also made significant contributions to the development of rational sciences. During the Fatimid period, disciplines such as medicine, astronomy, mathematics, and philosophy received considerable attention. Scholars were provided with opportunities to conduct research and produce scholarly works. Advances in astronomy, for instance, were closely related to the needs of Muslims in determining prayer times and the Islamic calendar, while the development of medicine was supported by a research tradition that had already flourished in the Islamic world since earlier periods.(Hitti, 2010)

Another significant role of Dar al-Hikmah was as a center for the translation and study of scholarly works from various civilizations. The intellectual tradition of Islam since the Abbasid period had created opportunities for the translation of Greek, Persian, and Indian works into Arabic. This tradition continued to develop during the Fatimid period through scholarly institutions such as Dar al-Hikmah. Through this process, knowledge derived from other civilizations was not only studied but also further developed through the research and intellectual contributions of Muslim scholars.(Yatim, 2017)

Political support from the Fatimid government was an important factor in the success of Dar al-Hikmah. The caliphs demonstrated their commitment to scholars by providing facilities and recognition for their contributions. The relationship between rulers and scholars during this period indicates that the advancement of knowledge requires the support of state institutions. The government functioned not only as a political authority but also as a patron and promoter of culture and knowledge.(Amin, 2010)

Nevertheless, the development of Dar al-Hikmah cannot be separated from the political and religious interests of the Fatimid Dynasty. As an institution operating within the royal sphere, some of its scholarly activities were directed toward strengthening the legitimacy of Fatimid rule and disseminating Ismaili thought. However, this context does not diminish the historical significance of the institution as a center of knowledge. On the contrary, the existence of Dar al-Hikmah demonstrates that the development of knowledge in Islam often occurred through a close relationship between political power, education, and culture.(Supriyadi, 2008)

Thus, Dar al-Hikmah represents one of the tangible evidences of the Fatimid Dynasty's contribution to the development of Islamic scientific civilization. This institution functioned not only as an educational center but also as a center for research, a library, and a hub of intellectual development. Through Dar al-Hikmah, the Fatimid Dynasty succeeded in creating an academic environment that supported the emergence of scholars and the advancement of various disciplines. This intellectual legacy constitutes an important part of the history of Islamic civilization's achievements and demonstrates that the Fatimid Dynasty played a significant role in the development of knowledge within the Islamic world.

d. *The Fatimid Dynasty's Contributions to the Development of Religious Sciences, Philosophy, Medicine, Astronomy, and Mathematics*

The glory of the Fatimid Dynasty (909–1171 CE) was reflected not only in its success in establishing a stable governmental system and transforming Cairo into a center of Islamic authority, but also in its significant contributions to the advancement of knowledge. The various policies implemented by the Fatimid caliphs demonstrate that the development of knowledge was an integral part of their civilizational project. Through the establishment of educational institutions, libraries, research centers, and the provision of support for scholars, the Fatimid Dynasty succeeded in creating an academic environment that encouraged the growth of various disciplines, ranging from religious sciences to rational sciences such as philosophy, medicine, astronomy, and mathematics.(Yatim, 2017)

The development of religious sciences was one of the primary priorities of the Fatimid Dynasty's administration. As a dynasty adhering to the Ismaili Shi'ite doctrine, the Fatimid caliphs sought to strengthen religious understanding through the establishment of well-organized educational institutions. The founding of Al-Azhar Mosque in 970 CE represented a significant milestone in the development of Islamic education, as the institution functioned not only as a place of worship but also as a center for the study of religious sciences. Various disciplines were taught there, including Qur'anic exegesis, hadith studies, jurisprudence, principles of Islamic jurisprudence, Islamic theology, Qur'anic recitation (*qira'ah*), and Arabic language.(Supriyadi, 2008)

The learning system implemented through the *halaqah* method facilitated direct interaction between teachers and students, enabling the effective transmission of knowledge. Scholars not only delivered religious instruction but also encouraged scholarly discussions and critical examinations of various Islamic issues. This tradition produced numerous scholars with strong academic capabilities and enriched the intellectual heritage of Islam. Although education at Al-Azhar was initially directed toward strengthening Ismaili Shi'ite teachings, the institution later developed into an Islamic educational center that was open to various schools of thought and became one of the most influential Islamic educational institutions that continues to exist to the present day.(Amin, 2010)

In addition to Al-Azhar, Dar al-Hikmah also played an important role in the development of religious sciences. Various Islamic manuscripts were collected, reproduced, and studied by scholars, thereby strengthening the tradition of Islamic literacy. These activities demonstrate that the Fatimid Dynasty placed great emphasis on both the preservation and advancement of Islamic sciences as a foundation for social life.(Yatim, 2017)

In addition to religious sciences, the Fatimid Dynasty also provided extensive opportunities for the development of philosophy. The philosophical tradition that had flourished during the Abbasid period was preserved and further developed through scholarly institutions in Cairo. The government granted scholars considerable freedom to study logic, metaphysics, ethics, and natural philosophy as part of an effort to understand the essence of life and the relationship between reason and revelation.(Nasution, 2002)

The development of philosophy during the Fatimid period was influenced by the Greek intellectual tradition that had been translated into Arabic since earlier periods. However, Muslim scholars did not merely translate these works; rather, they engaged in critical examination, interpretation, and synthesis with Islamic teachings. Through this

process, a distinctive form of Islamic philosophy emerged with its own intellectual characteristics. Philosophical studies developed alongside *ilm al-kalam* (Islamic theology), generating dynamic intellectual discussions on issues related to divinity, prophethood, the soul, and the nature of human beings. (Syalabi, 1994)

The academic environment that developed within Al-Azhar and Dar al-Hikmah enabled scholars and philosophers to engage in dialogue on various intellectual issues. This demonstrates that the Fatimid Dynasty did not perceive philosophy as a threat to religion, but rather as an instrument for strengthening rational arguments in understanding Islamic teachings. Such an approach made a significant contribution to the development of critical thinking traditions within Islamic civilization. (Nasution, 2002)

The Fatimid Dynasty's attention to the development of medicine was reflected in the government's support for physicians and the establishment of healthcare facilities. Medicine during the Fatimid period developed through the integration of Greek and Persian medical theories with the empirical experiences of Muslim scholars. Physicians were provided with opportunities to conduct research, engage in medical practices, and produce various scholarly works related to disease diagnosis, pharmacology, anatomy, and treatment. (Amin, 2010)

The libraries and research centers established by the government provided various medical literature that served as references for physicians. The existence of Dar al-Hikmah also strengthened the development of medical science, as scholars were able to access numerous medical manuscripts for study and further development. The tradition of manuscript reproduction enabled medical knowledge to be disseminated across various regions of the Islamic world, thereby providing broader benefits for society. (Hitti, 2010)

The development of medicine during the Fatimid period demonstrates that knowledge possessed a practical orientation aimed at improving the welfare of society. Physicians not only served as scholars but also as healthcare providers who offered medical treatment to the community. The government's support for the healthcare sector demonstrates that the Fatimid Dynasty recognized the importance of knowledge in enhancing the quality of human life. (Yatim, 2017)

Astronomy was one of the branches of knowledge that experienced significant development during the Fatimid Dynasty. Its advancement was driven by the practical needs of Muslims, such as determining the beginning of the Hijri months, the direction of the *qiblah*, prayer times, and the compilation of calendars. Therefore, the government paid considerable attention to the development of astronomical observations and the preparation of more accurate calculation tables. (Supriyadi, 2008)

Fatimid astronomers utilized scientific instruments such as the astrolabe to observe the movements of celestial bodies. These activities demonstrate that astronomy during the Fatimid period developed through the integration of theoretical knowledge and empirical observation. Mastery of astronomy also contributed to the advancement of navigation, geography, and maritime activities, which supported Egypt's international trade networks as one of the major economic centers of the Islamic world. (Hitti, 2010)

The advancement of astronomy during the Fatimid period demonstrates that scientific knowledge flourished due to strong institutional support. The existence of libraries, research centers, and a conducive academic environment enabled scholars to

conduct systematic observations and produce new knowledge that benefited society.(Amin, 2010)

Mathematics was another discipline that received considerable attention during the Fatimid Dynasty. Its development was closely related to the needs of governmental administration, trade, astronomy, architecture, and the calculation of inheritance according to Islamic law. Therefore, mastery of mathematical knowledge became one of the essential skills taught within Islamic educational institution.(Syalabi, 1994)

Fatimid scholars developed the mathematical traditions inherited from earlier Muslim scholars, particularly in the fields of algebra, geometry, and arithmetic. These sciences were not only studied as theoretical disciplines but were also applied to various aspects of life, such as urban development, irrigation planning, and calendar calculation. The integration of mathematics with astronomy demonstrates that the advancement of knowledge during the Fatimid period was multidisciplinary in nature and that different fields of science complemented and supported one another.(Nasution, 2002)

The attention given to mathematics also demonstrates that the educational system of the Fatimid Dynasty recognized a balance between religious sciences and rational sciences. Education was not merely aimed at producing individuals who understood religious teachings, but also at cultivating scholars capable of providing solutions to various societal challenges through scientific approaches. This integrative paradigm became one of the significant characteristics of Islamic intellectual flourishing during the medieval period.(Yatim, 2017)

Overall, the contributions of the Fatimid Dynasty to the development of religious sciences, philosophy, medicine, astronomy, and mathematics demonstrate that the advancement of a civilization is greatly influenced by the government's commitment to fostering a scholarly culture. Support for educational institutions, libraries, research activities, and scholars succeeded in creating a productive intellectual ecosystem. This legacy not only influenced the development of the Islamic world but also became one of the foundations for the advancement of knowledge that later developed in Europe during the Renaissance. Therefore, the Fatimid Dynasty deserves to be regarded as one of the dynasties that made significant contributions to the history of intellectual and scientific development within Islamic civilization

e. The Impact of the Fatimid Dynasty on the Development of Knowledge in the Islamic World and Europe

The advancement of knowledge achieved during the Fatimid Dynasty not only influenced intellectual development in Egypt but also shaped scholarly dynamics across various regions of the Islamic world and even Europe. Through policies that supported education, the establishment of scholarly institutions, the development of libraries, and the recognition of scholars and intellectuals, the Fatimid Dynasty succeeded in creating an academic environment that encouraged the growth of various disciplines. The existence of institutions such as Al-Azhar and Dar al-Hikmah became important mediums in the process of knowledge transmission, which subsequently spread to various regions through educational activities, trade, diplomacy, and the mobility of scholars.(Rofiqoh, 2022)

In the Islamic world, the influence of the Fatimid Dynasty can be observed in the development of a more organized educational tradition. Prior to the establishment of Al-Azhar, learning activities generally took place informally in mosques or the residences of

scholars. However, the Fatimid Dynasty introduced a more established institutional system through the founding of Al-Azhar as a center of higher education and Dar al-Hikmah as a research center and library. This institutional model later inspired the development of various Islamic educational institutions in subsequent periods, including during the Ayyubid and Mamluk dynasties, which continued to preserve Al-Azhar's function as a center for the advancement of knowledge.(Mursyada, 2024)

This influence was also evident in the development of scholarly and student networks that made Cairo one of the major destinations for seeking knowledge. Students came from various regions, including North Africa, the Hijaz, Syria, Yemen, Persia, and even Central Asia. After completing their studies, they returned to their respective regions carrying the intellectual traditions they had acquired in Cairo. This process accelerated the dissemination of various disciplines, ranging from Qur'anic exegesis, hadith studies, jurisprudence, and Arabic language to rational sciences such as philosophy, astronomy, medicine, and mathematics. Thus, the Fatimid Dynasty played an important role in establishing transregional intellectual networks that strengthened the intellectual integration of the Islamic world.(Yasin, 2024)

The contribution of the Fatimid Dynasty was also evident in the development of a culture of literacy. The government paid significant attention to the collection, reproduction, and preservation of manuscripts. Libraries established during the Fatimid period housed thousands of manuscripts from various fields of knowledge, making them important reference centers for scholars. The culture of reading, writing, and scholarly discussion that developed within these institutions fostered a productive academic tradition. This tradition was subsequently inherited by later dynasties, enabling the continuity of intellectual development within the Islamic world.(Azza, 2024)

In addition to strengthening the Islamic intellectual tradition, the Fatimid Dynasty also exerted an indirect influence on the development of knowledge in Europe. During the medieval period, the Mediterranean region served as an important route for trade and cultural exchange between the Islamic world and the West. Through commercial relations, diplomacy, and scholarly interactions, various scientific works developed in Egypt and other Islamic regions became known among European societies. Arabic manuscripts on medicine, mathematics, astronomy, philosophy, and natural sciences were translated into Latin, particularly through translation centers in Sicily and Andalusia. Although many translation activities took place in Western Islamic regions, the intellectual developments that occurred in Egypt during the Fatimid period also contributed to enriching the body of knowledge that was later transmitted to Europe.(Rofiqoh, 2022)

In the field of medicine, for example, the scholarly traditions that developed in the Islamic world contributed to the advancement of medical knowledge in Europe. Hospitals, libraries, and research centers that flourished during the Fatimid period became part of an intellectual ecosystem that produced various scholarly works in the field of healthcare. Likewise, in astronomy and mathematics, the development of observations, calendar calculations, and the application of scientific methods influenced the advancement of sciences that were later studied by European scholars. Therefore, the progress of knowledge in the Islamic world, including during the Fatimid period, constituted an important link connecting classical knowledge with the intellectual revival in Europe.(Susmihara, 2016)

Another equally significant influence is the continuity of Al-Azhar as an institution of learning into the modern era. Following the end of Fatimid rule, Al-Azhar did not decline as a center of knowledge; rather, it continued to develop under the Ayyubid and Mamluk dynasties and into the modern period. The transformation of its doctrinal orientation from Ismaili Shi'ism to Sunni Islam did not diminish Al-Azhar's primary function as a center of Islamic education. The survival of this institution demonstrates that the academic foundations established during the Fatimid period possessed remarkable resilience and were capable of adapting to political and social changes. Until the present day, Al-Azhar remains one of the most influential Islamic universities in the world and has produced thousands of scholars, intellectuals, and religious leaders from various countries.(Yasin, 2024)

From the perspective of the history of knowledge, the success of the Fatimid Dynasty in establishing educational institutions demonstrates that intellectual advancement was not determined solely by the individual abilities of scholars, but was also influenced by state support for education and research. The development of libraries, the provision of academic facilities, the recognition of scholars, and the establishment of educational networks were among the factors that accelerated the emergence of scientific innovations. This model later became one of the important characteristics of the development of classical Islamic civilization and inspired the establishment of educational institutions in subsequent periods.(Azza, 2024)

Nevertheless, it should be acknowledged that the influence of the Fatimid Dynasty on Europe did not occur directly. The transmission of knowledge took place through a long and complex process involving various other centers of Islamic civilization, such as Baghdad, Damascus, Cairo, Sicily, and Andalusia. Therefore, the contribution of the Fatimid Dynasty is more appropriately understood as part of the broader network of Islamic intellectual development that later became one of the foundations for the emergence of the European Renaissance. In other words, the Fatimid Dynasty served as one of the important links in the process of knowledge transmission from the Islamic world to the Western world.(Rama, 2024)

Based on the foregoing discussion, it can be understood that the contribution of the Fatimid Dynasty to the development of knowledge did not end with the period of its rule but continued to exert a long-term influence on the development of world civilization. Through the establishment of Al-Azhar, Dar al-Hikmah, libraries, and a strong academic culture, the Fatimid Dynasty succeeded in creating an intellectual environment that fostered the emergence of Islamic scholarly traditions. These traditions were subsequently inherited by later generations and became one of the factors that enriched the development of knowledge in the Islamic world while also making an important contribution to the intellectual revival of Europe in the late medieval period.

4. Conclusion

The Fatimid Dynasty made a highly significant contribution to the development of knowledge in the history of Islamic civilization through policies that prioritized educational advancement, the establishment of scholarly institutions, and support for the intellectual activities of scholars and scientists. This commitment was manifested through the founding of Al-Azhar as a center of higher Islamic education and Dar al-Hikmah as a center for

research, a library, and the development of knowledge. These two institutions became important foundations in building an academic tradition that not only promoted the development of Islamic religious sciences but also rational sciences, such as philosophy, medicine, astronomy, mathematics, and literature.

The advancement of knowledge during the Fatimid Dynasty was supported by state policies that demonstrated strong commitment to education through the provision of learning facilities, the development of libraries, the establishment of the waqf system, the recognition of scholars, and the cultivation of a strong culture of literacy. These conditions created an intellectual environment that encouraged research, the production of scholarly works, academic discussions, and the transmission of knowledge to various regions of the Islamic world. Thus, the Fatimid Dynasty succeeded in establishing an educational ecosystem that played an important role in strengthening Islamic scholarly traditions during the medieval period.

The contribution of the Fatimid Dynasty also had a long-term impact on the development of knowledge beyond the Islamic world. Through scholarly networks, commercial activities, diplomatic relations, and the translation of Arabic scientific works into Latin, various intellectual achievements that emerged during the Fatimid period became part of the broader process of knowledge transmission to Europe. Although this process occurred through various other centers of Islamic civilization, the Fatimid Dynasty remained one of the important links that enriched the global intellectual heritage and contributed to the foundations of the development of knowledge that later supported the intellectual revival of Europe.

Therefore, the Fatimid Dynasty should not only be regarded as a dynasty that achieved success in the fields of politics and governance, but also as one of the pioneers in the development of a knowledge-based civilization. The intellectual legacy it left behind, particularly through Al-Azhar and Dar al-Hikmah, demonstrates that the advancement of a civilization is largely determined by its commitment to the development of education, research, and scholarly culture. These values remain relevant as a source of inspiration for the advancement of educational systems and the strengthening of intellectual traditions in the Islamic world today..

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