The Scientific Paradigm of Al-Ghazali and Its Contribution to Education in the Society Era 5.0

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Abstract. This article analyzes Al-Ghazali's concept of scientific thought and its contribution to various educational challenges in the Society 5.0 era. Among the challenges in this era is the widespread digitalization in various aspects of life, which not only has a positive impact but also negative consequences. The most dominant example of these negative impacts is the sharp polarization of knowledge and the occurrence of moral degradation. This study is analyzed through a literature study approach using primary and secondary sources. Based on this research, several results were found: first, that Al-Ghazali has a thought paradigm that prioritizes moral education as the basis for building knowledge. Second, Al-Ghazali's scientific paradigm is integrative by making religious knowledge the basis of science. Third, education in the Society 5.0 era is built through strong moral education and the development of religious and scientific knowledge in an integrative manner, thus producing outcomes that are competitive in the digital era and possess noble character.

1 Background

After World War II, in the 20th century, there was a phenomenon of the development of secular sciences, which were detached from religious foundations. As a result, there often arose conflicts between science and religion. Currently, we are confronted with both religious knowledge and general knowledge. Religious knowledge comes from Allah's revelation, hadith, or religious texts, while general knowledge is based on rational reasoning and empirical data, and this knowledge has developed more rapidly. Consequently, these two types of knowledge seem to operate independently and without connection, often referred to as the dichotomy of knowledge. [1]

The dichotomy between religion and science results in the perception that studying general sciences will not bring goodness in the eyes of Allah because it is not taught by Islam. Therefore, Muslims tend to focus more on religious studies and neglect general sciences.[2] It is no wonder then that Muslims lag behind in the fields of science and technology. Al-Ghazali argues that there is no dichotomy between religion and science; both should run in balance, harmony, and complement each other. [3]

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The dichotomous mindset between science and religion can lead to prioritizing religion alone and neglecting non-religious sciences. As a result, Muslims excel in textual civilization fields such as tafsir, hadith, kalam, usul fiqh, nahwu, and sharaf. However, both types of knowledge are necessary to build an advanced Islamic civilization. For instance, zakat can be studied from economic, social, and public welfare perspectives. If this concept is implemented, Muslims will rise with a progressive civilization. [4]

These challenges are increasingly felt by Islamic education thinkers when entering the era of digitalization and information era 4.0 and becoming more severe with the entry into the Society 5.0 era. This era shows how drastically the social order of life changes. Humans are interconnected without boundaries, allowing communication across regions, islands, countries, and even continents without any prerequisites. [5]

The rapid changes in science and technology require us to be prepared to face global changes, especially in education. One form of these changes is Society 5.0. Society 5.0 is humanity that can solve various social challenges and problems by utilizing various innovations born in the era of the Industrial Revolution 4.0 and centered on technology. Society 5.0 was first introduced by the Japanese government in 2019. Society 5.0 is a development of the Industrial Revolution 4.0. The Industrial Revolution 4.0 uses artificial intelligence, while Society 5.0 focuses on the technology and human components. [6]

The author sees the importance of placing religious education as the foundation for the development of science, which has long been dichotomized, especially in this era 5.0. Al-Ghazali's concept of knowledge can be one of the alternatives to be developed in this era. [7] Based on this background, the researcher is further interested in analyzing Al-Ghazali's scientific thought and how his concepts become a solution to educational challenges in the Society 5.0 era.

2 Research Methodology

In this study, the author uses a literature study. The author also conducts a literature review of several articles on Al-Ghazali's Islamic epistemology. Subsequently, the author analyzes the results of previous studies on Al-Ghazali and seeks the integration pattern of knowledge in Al-Ghazali's view and its contribution to education in the era of Society 5.0.

In this study, the primary data source comes from the books “Ihya Ulumudin and Muhtashor Ihya Ulumudin". Meanwhile, secondary data is obtained from several academic journals, such as: "Islam and Science. In The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science" dan "The Future with Industry 4.0 at the Core of Society 5.0: Open Issues, Future Opportunities, and Challenges” and other sources relevant to the research topic. The primary data from these books provides a strong theoretical foundation, while the secondary data from academic journals offers contemporary perspectives and supports a more comprehensive analysis.

3 Finding and Discussion

3.1 The Biography of Al-Ghazali

Al-Ghazali was born in 450 AH / 1058 AD, in the village of Tus, in the Khorasan region of Iran. He was a prominent Islamic thinker, earning the title "Defender of Islam" (hujjatul Islam). In his youth, he studied in Nishapur, also in Khorasan, which at that time was one of the important centers of knowledge in the Islamic world. He then became a student of Imam Al-Haramain Al-Juwaini, a professor at the Al-Nizamiah madrasah in Nishapur. Among the

subjects taught at this madrasah were: Theology, Islamic Law, Philosophy, Logic, Sufism, and Natural Sciences. [8]

In 1091 AD / 484 AH, Al-Ghazali was appointed as a lecturer at Nizamiah University, Baghdad. Due to his increasing achievements, at the age of 34, Al-Ghazali was appointed as the rector of the university. Al-Ghazali served as the rector of Nizamiah University for only four years. [9] After that, he began to experience a spiritual crisis, a crisis of doubt that encompassed faith and all types of knowledge. He then left all his positions and worldly matters to seclude himself, worship, and perform i'tikaf for almost two years in a mosque in Damascus, continuing to Jerusalem, performing Hajj, and visiting the tombs of the Prophet Muhammad SAW and Prophet Ibrahim AS. Eventually, he overcame the crisis through Sufism. [10]

After wandering for approximately 10 years, at the urging of Fakhrul Muluk, Al-Ghazali returned to teach at Nizamiah University again. At the age of 55, Al-Ghazali passed away in Tus on 14 Jumadil Akhir 550 AH, December 19, 1111 AD. His body was buried to the east of the fortress in the Thaberran cemetery, alongside the tomb of the great poet Firdausi. [11]

3.2 Al-Ghazali's Concept of Knowledge

The word "ilm" (knowledge) is a translation of the English word "science." The word "science" comes from the Latin word "scientia," which means knowledge. The word "scientia" comes from the verb "scire," which means to learn or to know. Knowledge has two meanings: first, the denotative meaning, which refers to organized bodies of knowledge, systematic studies, and theoretical knowledge.[12] Thus, the denotative meaning of knowledge encompasses a wide scope, including both the knowledge possessed by all humans and the scientific knowledge organized and developed through specific procedures. Second, the connotative meaning, which refers to a series of human activities that are purposeful and cognitive.[13]

Before discussing Al-Ghazali's views on the relationship between knowledge and religion, it is essential to understand his perspective on knowledge. In his book "Minhajul Abidin," Al-Ghazali states that knowledge is the imam (leader), and action is the makmum (follower). Knowledge is the leader, and practice is its follower. Knowledge is like a gem that must be mined and continually sought by everyone. [14]

From a rational perspective, knowledge is a virtue that must be possessed and achieved by humans to draw closer to their God. Knowledge will guide a person toward the path of truth and happiness in both this world and the hereafter. [15]

The author builds Al-Ghazali's conceptual framework based on epistemology, ontology, and axiology. First, epistemology: Al-Ghazali acknowledges the validity of knowledge derived from both metaphysical and rational sources. This is evident in the importance of studying religion, which is metaphysical and aims to recognize the Oneness of God. Al-Ghazali also accepts rational knowledge, emphasizing the importance of studying worldly sciences. [16]

Second, ontology: Al-Ghazali divides the reality of existence into two parts: the physical world (`alam al-shahadah) and the metaphysical world (`alam al-ghaib). These two realities differ in quality. The linkage between the physical and metaphysical realms in Islam is seen as an inseparable unity. Third, axiology: Axiology relates to the purpose of developing knowledge and its application in individuals and society. In Islam, the principle of knowledge development is not only for practical use but also to understand the true existence of the universe and humanity. Knowledge will lead to an increase in faith. Science and technology must provide the greatest benefit to human life. [17]

Based on this foundational structure, Al-Ghazali categorizes knowledge from various perspectives. He divides knowledge that students must study into three groups:

Condemned knowledge, whether extensive or minimal. This knowledge has no benefit for humans in this world or the hereafter, such as magic, astrology, and witchcraft. Studying this knowledge brings harm and doubt about the existence of God. Therefore, it must be avoided.

- Praiseworthy knowledge, whether extensive or minimal, such as theology and religious sciences. Studying this knowledge purifies and cleanses the soul from baseness and evil and brings one closer to Allah.
- Praiseworthy knowledge to a certain extent, which should not be deeply explored as it can lead to faith crises and atheism, like philosophy [18]

From the perspective of its importance, Al-Ghazali classifies knowledge into two:

- Obligatory knowledge for everyone, which is religious knowledge based on Allah's book.
- Knowledge whose study is fardhu kifayah (communal obligation), which is used to facilitate worldly affairs such as arithmetic, medicine, engineering, agriculture, and industry [19]

In another work, Imam Al-Ghazali divides knowledge into five parts:

- Fundamental knowledge (ilmu usul) that must be known, such as faith in Allah's existence, the angels, the prophets, the scriptures, and the Day of Judgment.
- Knowledge of worship related to body and wealth.
- Knowledge related to the senses, speech, modesty, consumption, hearing, and vision.
- Knowledge of condemnable morals that must be eradicated from the heart.
- Knowledge of praiseworthy morals that must adorn the heart [20]

Imam Al-Ghazali also divides knowledge from a logical perspective into three parts:

First level: Mathematics, architecture, astronomy, and geography. Logical knowledge (ilmu al-manthiqi) studies the precise and accurate formulation of definitions and descriptions.

Intermediate level: Natural science (ilmu al-thabi'i) studies human and animal bodies, elements of the universe, and celestial objects, leading to knowledge in medicine, mining, and chemistry.

Highest level: Contemplation of existence, leading to the knowledge of the Creator, His attributes, actions, wisdom, and decrees [21].

Al-Ghazali does not stop at the categorization of knowledge but also assesses the importance of knowledge based on its closeness to the afterlife. For Al-Ghazali, Sharia knowledge is superior to other types because all knowledge, including Allah's actions and attributes, falls under His domain. Al-Ghazali believes that the knowledge derived from the Qur'an is innumerable. He strives to make the Qur'an the source of all knowledge, whether worldly or spiritual, claiming that all types of knowledge can be extracted from it. [22]

The long-term goal of education, according to Al-Ghazali, is to draw closer to Allah SWT and seek His pleasure, not to seek status, grandeur, pride, or lucrative positions. If education is not aimed at drawing closer to Allah, it can lead to envy, hatred, and hostility [23].

3.3 Contribution of Al-Ghazali's Integration of Knowledge to Education in Era 5.0

The challenges of education in Era 4.0 continue into the society of Era 5.0. The emergence of Era 5.0, as a response to the negative impacts of Era 4.0, has not fully brought about significant positive influences, particularly in the field of education. The world of education faces many challenges resulting from digitalization and the rapid flow of information. [24]

The emergence of fast-paced information technology often becomes a medium for spreading various harmful understandings. Religious radicalism has become a serious challenge recently in this country. Another equally serious issue is the rise of technology-based criminal acts and the moral degradation of students. [25] The author sees that the root of these problems is the separation of modern science from religion, leading to an increase in knowledge without accompanying education of the heart and spirituality.

Through the analysis of Al-Ghazali's scholarly thoughts, the author constructs solutions to various challenges of the society in Era 5.0. *First*, Al-Ghazali proposes that the primary intention or goal of life is to seek the pleasure of Allah. This instillation is very important in Era 5.0 because the focus of this era is technology, digitalization, and human centrism, which often neglects the involvement of God in life. The fundamental solution to the challenges of this era is to make God the goal of life, so all knowledge and behavior are based on the concept of divinity. [26]

Second, Al-Ghazali's concept of dividing knowledge into fardhu 'ain (obligation for each individual) and fardhu kifayah (collective obligation) shows the importance of religion. [27] Religion must be possessed by every individual as a tool or means to worship vertically with their God. Therefore, in Era 5.0, it is important for every student to delve into religion, for teachers to teach religion in detail, and for policymakers to take political steps to establish policies requiring mastery of religious knowledge for every citizen. [28]

Religious knowledge, which is an individual obligation, should not stand alone but must intersect with science, which is a fardhu kifayah (collective obligation) for Muslims. [29]Science is important to face this digital era, so students are not oppressed and colonized by technology. Students and teachers must be able to use technology to enhance education, such as using online learning platforms, mobile applications, and innovative learning software. Therefore, the phenomenon of the Education Revolution in the Society Era 5.0 involves changes in the way students learn and interact with teachers and classmates, and the need for understanding and adjustment in facing these changes. [30]

The correlation between religion and science is very clear, namely uncovering the secrets of the Existent Being, explaining the true relationship between humans and God, and clarifying the purpose of knowing something and the true purpose of life. This classification of knowledge reflects the existence of proper conduct in knowledge. Consequently, the first category of knowledge must guide the second. If not, the second category of knowledge will confuse people and continuously trap them in a state of searching for the purpose and meaning of life. Those who deliberately choose certain branches of the second category of knowledge to improve their quality and that of their society must be guided by the true knowledge of the first category. [31]

Based on the above explanation, it can be concluded that education in Era 5.0 must place God as the ultimate reality and build an awareness that the source of the rapid advancement of knowledge is Allah. This understanding will lead a person to learn and utilize their knowledge according to Allah's commands and guidance.

4 Conclusion

In facing the rapid changes and developments in science and technology in the era society 5.0, Muslims can reorganize their educational priorities for the future. Based on the discussion above, the author offers solutions to various educational problems in the 5.0 era based on Al-Ghozali's thoughts. It is important to integrate religious knowledge (fardhu ain) and science (fardhu kifayah). Religious knowledge functions as a worldview that serves as the foundation and provides values for the development of science and technology. In turn, science functions to advance religion, thereby making life easier for humanity. The integration of religion and knowledge will result in technological progress while simultaneously improving human morals and character.

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