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Exploring the foundations of knowledge: Islamic and Western perspectives

Erdiansyah*, Ahmad Syukri, Mohd. Arifullah
Universitas Islam Negeri Sulthan Thaha Saifuddin Jambi, Indonesia
*Correspondence author: erdiansyah.math@gmail.com
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ABSTRACT

Purpose: to examine and compare the foundations of knowledge in Islamic and Western perspectives, focusing on their concepts, sources, classifications, and epistemological differences.
Method: this study uses a qualitative library research design. Data were collected from primary and secondary literature sources and analyzed descriptively to compare Islamic and Western perspectives on the foundations of knowledge.
Findings: both Islamic and Western perspectives recognize reason and experience as important sources of knowledge. However, Islamic epistemology integrates revelation, reason, experience, and intuition as interconnected sources of knowledge with spiritual and moral dimensions, while Western epistemology primarily emphasizes rationalism and empiricism. The study also reveals differences in the classification, orientation, and purpose of knowledge, where Islam links knowledge to ethical and spiritual values, whereas Western thought focuses on objectivity, verification, and empirical validity.
Implications: integrating Islamic epistemology and Western scientific approaches can contribute to a more holistic understanding of knowledge. Such integration combines methodological rigor and empirical validity with ethical and spiritual values, offering a more balanced framework for addressing contemporary scientific and social challenges.
Originality: this study offers a comparative and integrative framework of Islamic and Western epistemology, highlighting their key similarities and differences in a concise and structured way.

Introduction

Science is one of the main foundations of human civilization. Through science, humans can understand reality, solve various life problems, and develop technology and culture that support societal progress (Tegegn, 2024). Conceptually, science is a body of knowledge used to seek, discover, and improve understanding of an object of study through the use of objective, systematic, methodological, and universal scientific

concepts, theories, and methods (Ridwan et al., 2021). As an organized system of knowledge, science not only discusses the object of study (ontology), but also concerns the sources and processes of acquiring knowledge (epistemology), its value and benefits for human life (axiology), and the methods used in its development (methodology). Thus, science is a form of knowledge obtained through a rigorous testing process and can be empirically verified (Rahman, 2020).

In its development, the understanding of science is inseparable from the intellectual traditions that underlie it. In general, two major paradigms have significantly influenced the construction of global science: the Islamic paradigm and the Western paradigm. The modern Western scientific tradition tends to place rationality and empirical experience as the primary sources of knowledge. In contrast, the Islamic tradition views science not only as originating from reason and experience, but also from revelation as a fundamental source of truth (Fadillah et al., 2023). In Islam, the pursuit of knowledge holds a very important position, as reflected in the command to recite the *iqra'* in the first revelation revealed to the Prophet Muhammad (Pauspaus et al., 2025). This command indicates that the activities of reading, studying, and seeking knowledge are integral parts of a Muslim's life. In fact, Al-Ghazali categorized science into *fardlu 'ain* (obligatory) and *fardlu kifayah* (obligatory), which encompass both religious sciences and sciences acquired through rational reasoning and empirical experience, such as medicine, mathematics, economics, and astronomy (Maulana et al., 2025).

The current phenomenon of scientific globalization demonstrates a tendency toward the dominance of Western paradigms in various disciplines (McKinley, 2022). In contrast, Islamic scientific perspectives are often placed in a separate field of study or even deemed less relevant to the development of modern science (Solihah et al., 2025). This situation has given rise to various debates regarding the nature of knowledge, the source of truth, and the purpose of knowledge development. On the other hand, developments in higher education and contemporary research still demonstrate conceptual confusion in distinguishing between knowledge and science, as well as a lack of comprehensive understanding of the relationship between Islamic and Western epistemologies. Consequently, a dichotomy has emerged between religious and general sciences, which can hinder the integration of knowledge and the development of a more holistic scientific paradigm.

Many researchers have conducted studies on the philosophy of science. Philosophy of science is understood as a discipline that critically examines the nature of science, including its basic assumptions, methods, and the validity of the knowledge produced (Boon et al., 2022; Hangel & ChoGlueck, 2023). Philosophy of science serves not only to understand science but also to critically evaluate various evolving scientific ideas, thus enabling the development and renewal of scientific concepts. Milasari et al. (2021); Pradeu et al. (2024) assert that philosophy of science is the formulation of views on science based on scientific study and in-depth philosophical reflection. Meanwhile, the ability to think as a human intellectual strength plays a central role in the formation of culture, civilization, and the advancement of science (Putri, 2024; Selçuk & Çetinkaya, 2025). However, most previous research tends to discuss philosophy of science from a general perspective or focuses solely on one epistemological tradition, either Islamic or Western, without providing a comprehensive comparative analysis of the ontological, epistemological, axiological, and methodological foundations of both perspectives.

Based on previous literature reviews, there is a research gap in the form of a limited number of studies that comprehensively integrate discussions on the concept of

science, the relationship between knowledge and science, sources of knowledge, and the characteristics of science from Islamic and Western perspectives within a single analytical framework of the philosophy of science. Therefore, the novelty of this research lies in the effort to present a more holistic comparative analysis of the foundations of science from Islamic and Western perspectives, by examining aspects of ontology, epistemology, axiology, and methodology in an integrated manner. This approach is expected to provide a more complete understanding of the fundamental points of intersection and differences between the two scientific traditions.

This study aims to examine the nature of science from Islamic and Western perspectives by outlining the definitions, sources, types, characteristics, and branches of science. Furthermore, it aims to explain the relationship between knowledge and science, including their similarities and differences, and to analyze how these two epistemological traditions shape perspectives on the process of seeking and developing science. This research is important because a comprehensive understanding of the foundations of science is a fundamental need in facing the increasingly complex developments in science and technology. This study is expected to enrich the discourse on the philosophy of science, encourage integration between Islamic scientific values and modern scientific traditions, and reduce the dichotomy between religious and general sciences that persists in various educational and research practices. The expected contribution of this research is the availability of a more systematic conceptual framework regarding the foundations of science from Islamic and Western perspectives. The results of this study are also expected to serve as an academic reference for students, researchers, and educational practitioners in understanding the nature of science in a more critical, integrative, and multidimensional manner, as well as serve as a basis for developing a scientific paradigm relevant to the needs of contemporary society.

Method

This study uses a qualitative approach with a library research method. The qualitative approach was chosen because this study aims to understand, interpret, and analyze scientific concepts based on various relevant literature sources, rather than testing hypotheses through numerical data. The library study method was used because the focus of the research is directed at philosophical studies regarding the foundations of science from an Islamic and Western perspective, particularly those related to ontological, epistemological, axiological, and methodological aspects. The research data sources consist of primary and secondary data. Primary data were obtained from the main sources that serve as references in discussions of science, namely the Qur'an, hadith, and classical and contemporary works that discuss the philosophy of science, Islamic epistemology, and Western epistemology. Meanwhile, secondary data were obtained from various scientific journals, research articles, proceedings, supporting books, and other academic documents relevant to the research theme. The selection of sources was carried out based on the suitability of the topic, the credibility of the author, and the relevance of the substance to the research objectives.

Data collection techniques were conducted through documentation studies and literature reviews. The data collection process began with the identification of relevant sources, then continued with reading, reviewing, classifying, and recording information related to the concept of science from an Islamic and Western perspective. The collected data were then organized based on the main research themes, such as the definition of science, sources of knowledge, classification of science, characteristics of science, and

the relationship between knowledge and science. The focus of this research study covers three main aspects, namely: the concept and meaning of science; sources of science from an Islamic and Western perspective; and the types and characteristics of science based on both perspectives. These three aspects serve as an analytical framework to understand the similarities, differences, and relationships between Islamic and Western scientific traditions.

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Results and discussion

The research results show that science is understood as a system of knowledge obtained through a systematic process of inquiry, study, and proof. Based on the various literature analyzed, science is characterized by objectivity, rationality, systematicity, and verifiability. Furthermore, science is not merely viewed as a collection of information, but as the result of human intellectual activity aimed at understanding reality and solving various life problems (Rahman, 2020; Ridwan et al., 2021). This study also found that the meaning of science from an Islamic and Western perspective has several similarities and differences. Both perspectives view science as a means to gain an understanding of reality and recognize the role of reason and experience in the process of acquiring knowledge. However, the Islamic perspective positions science as part of divine guidance with spiritual and moral dimensions, while the Western perspective emphasizes the rational and empirical aspects in the formation of knowledge (Fadli, 2021; Lubis & Salminawati, 2022; Makhmudah, 2017).

The next research finding relates to the types of knowledge. Based on the results of the literature review, knowledge can be classified into several categories, namely formal and informal science, pure and applied science, nomothetic and idiographic science, and deductive and inductive science. Each classification has different characteristics according to the object of study, objectives, and methods used in acquiring knowledge (Surajiyo & Sriyono, 2017). The results also show that the sources of knowledge consist of several main elements. In the Western philosophical tradition, three main sources of knowledge are found: empirical experience (empiricism), reason (rationalism), and intuition (intuitionism). Meanwhile, from an Islamic perspective, there is an additional source that has a fundamental position, namely, revelation. Thus, the sources of knowledge in Islam include revelation, reason, experience, and intuition, which complement each other in the process of acquiring knowledge (Lufita et al., 2025; Mu'ammar, 2013; Siola et al., 2025; Umam & Munir, 2025).

Based on an analysis of various literature sources, this study found that revelation occupies a central position in Islamic epistemology as a source of truth originating from Allah SWT. On the other hand, the Western scientific tradition places

rationality and empirical experience as the primary foundations in the formation of scientific knowledge. These differences influence perspectives on the nature of knowledge, methods of acquiring knowledge, and the measures of truth used in each scientific tradition (Ariani & Muchtar, 2024; Hidayat, 2019; Rahmatia & Sahib, 2025). Further research shows differences in the orientation of science between Islamic and Western perspectives. The Islamic perspective views knowledge as a means to draw closer to Allah SWT, shape morals, and provide benefits for human life. In contrast, the Western perspective views knowledge as an instrument to explain, predict, and control natural phenomena through objective scientific methods (Fadli, 2021; Lubis & Salminawati, 2022; Maulana et al., 2025).

Overall, the research findings indicate that Islamic and Western perspectives share a common ground in recognizing the importance of reason and experience in the development of knowledge. However, they differ in aspects such as the primary source of knowledge, the orientation toward the use of knowledge, the concept of truth, and the relationship between knowledge, values, and spirituality. These findings form the basis for further analysis of the foundations of knowledge from both perspectives (Ariani & Muchtar, 2024; Fadli, 2021; Lubis & Salminawati, 2022; Makhmudah, 2017). To provide a more systematic overview of the research findings, the results of the literature review related to the foundations of knowledge from Islamic and Western perspectives are summarized in Table 1. The table compares several key aspects, including the meaning of knowledge, sources of knowledge, key figures, the nature of knowledge, the purpose of knowledge, methods of acquiring knowledge, types of knowledge, and views on truth.

Table 1 comparison of science from an Islamic and Western perspective

Aspect	Islamic perspective	Western perspective
The meaning of science	Knowledge (*al-'ilm*) is light (*nur*) from Allah that guides humans towards the truth, not only intellectual but also spiritual and moral.	Science is a systematic effort to investigate, discover, and explain reality through objective, rational, and empirical scientific methods.
Source of knowledge	Originating from Allah SWT through revelation, and supported by reason, experience, and intuition, revelation is the absolute primary source.	Originating from reason (rationalism) and empirical experience (empiricism) through observation, experimentation, and logical reasoning.
Main figures/thinkers	Al-Ghazali, Ibn Sina, Ibn Khaldun	René Descartes, modern Western scientist (empirical science tradition)
The nature of science	Integrating faith, reason, and morals, knowledge must have moral and spiritual value.	Value-free, focused on objectivity and scientific verification.
The purpose of science	Getting closer to Allah (*ma'rifatullah*), forming noble morals, and providing the benefit of the people.	Explaining, predicting, and mastering natural phenomena and improving technology and human life.
Methods of acquiring knowledge	Revelation, reason, experience, intuition, and learning (*ta'lim*).	Scientific method: observation, hypothesis, experiment, verification, and rational analysis.
Types of science	Religious knowledge (*fardhu 'ain*) and world knowledge (*fardhu kifayah*).	Formal, empirical, pure, applied, deductive, inductive, science, etc.
Views on truth	Truth is absolute if it comes from God's revelation, and relative to human reason.	Truth is empirical, provisional, and subject to change based on new evidence.

Source: primary and secondary data, processed

Based on the results presented in Table 1, it was found that the Islamic and Western perspectives share a number of similarities and differences in their views on

science. These similarities include recognition of the importance of reason and experience as means of acquiring knowledge. Furthermore, both perspectives view science as an instrument for understanding reality and supporting human life. The research also shows differences in the sources of knowledge, the purpose of science, the nature of science, and the concept of truth. The Islamic perspective places revelation as the primary source of knowledge, complementing the roles of reason, experience, and intuition. In contrast, the Western perspective places greater emphasis on rationality and empirical experience as the basis for the formation of scientific knowledge.

Other findings indicate that the orientation of science from an Islamic perspective encompasses spiritual, moral, and social dimensions, while from a Western perspective, the orientation of science is more directed toward the development of scientific knowledge, understanding natural phenomena, and technological advancement. These differences are also reflected in how each perspective views truth, with Islam recognizing absolute truth derived from revelation, while the West positions scientific truth as something that can be tested and updated based on new evidence. Overall, the research findings show that both perspectives have different epistemological characteristics, yet both contribute to the development of science and human civilization.

The meaning of science in Islamic and Western perspectives

The research findings show that both Islamic and Western perspectives view science as an important instrument for understanding reality and explaining various life phenomena. However, there are fundamental differences in how the two traditions interpret the nature of science, the source of truth, and the ultimate goal of the pursuit of knowledge. These differences did not arise by chance, but rather are the result of different processes of intellectual historical development. The Islamic scientific tradition developed within a theocentric framework that places God at the center of all reality and the source of all knowledge, while the modern Western scientific tradition developed through a process of secularization that gradually separated scientific activity from religious authority. As a result, the concept of science in Islam is closely linked to spiritual, moral, and religious aspects, while science in the Western tradition places greater emphasis on rationality, objectivity, and empirical evidence.

From an Islamic perspective, knowledge (*al-'ilm*) is not only understood as knowledge of empirical facts, but also as a means to understand the essence of human existence, the universe, and Allah. This view is rooted in the primary sources of Islam, namely the Qur'an and the hadith. The Qur'an consistently places knowledge as the primary instrument that distinguishes humans from other creatures. This is reflected in Surah Al-'Alaq, verses 1–5, which emphasize the importance of reading and learning as the foundation of human civilization, and Surah Az-Zumar, verse 9, which states that those who have knowledge have a higher status than those who do not. Furthermore, Surah Al-Mujadilah, verse 11, emphasizes that Allah SWT will elevate the status of those who believe and have knowledge. These verses demonstrate that knowledge in Islam is not only instrumental but also has spiritual value that is directly related to the quality of one's faith.

This view is reinforced by the hadith of the Prophet Muhammad, which states that seeking knowledge is an obligation for every Muslim. In this context, knowledge is seen as part of worship and a means to achieve the welfare of life. Therefore, scientific activity in Islam cannot be separated from moral and ethical goals. The findings of this study align with Al-Ghazali's thinking, which explains that knowledge must lead humans

to knowledge of Allah (*ma'rifatullah*) and the formation of good morals (Maulana et al., 2025). Al-Ghazali even places knowledge as the main path to human perfection because, through knowledge, a person can distinguish between right and wrong and direct their life in accordance with divine values.

Besides Al-Ghazali, Ibn Sina also made important contributions in explaining the meaning of knowledge in Islam. According to Ibn Sina, knowledge is obtained through a combination of human rational ability and empirical experience. However, both remain within a divine framework because reason is a gift bestowed by Allah SWT upon humans (Ariani & Muchtar, 2024). This view shows that Islamic epistemology does not reject the use of reason and experience, but rather positions them as instruments that must be used responsibly in accordance with the guidance of revelation. Thus, knowledge in Islam has an integrative character that connects the rational, empirical, and spiritual dimensions simultaneously.

In contrast to the Islamic perspective, the modern Western scientific tradition developed through the strong influence of rationalism and empiricism. During the Renaissance and Enlightenment, Western thinkers sought to build a foundation of knowledge that could stand independently of church authority. René Descartes, known as the main figure of rationalism, argued that reason is the primary source of knowledge, capable of producing definitive truth through logical thought. The principle of *cogito ergo sum* (I think, therefore I am) became the basis for the belief that human reason is capable of discovering truth without relying on revelation or external authority.

On the other hand, Francis Bacon and other empiricists emphasized the importance of observation and experimentation as the foundation for the formation of science. According to this view, valid knowledge is knowledge that can be tested through sensory experience and proven empirically. This tradition later gave birth to the modern scientific method, which emphasizes observation, measurement, experimentation, and verification as the primary standards for determining the validity of knowledge. The findings of this study support the research of Makhmudah (2017); Fadli (2021), which shows that science from a Western perspective is more directed at explaining, predicting, and controlling natural phenomena through an objective and measurable approach.

These differences in philosophical foundations have implications for the orientation of scientific development. From an Islamic perspective, science has a dual function: as a means of understanding the universe and as a path to drawing closer to Allah SWT. Therefore, the success of science is measured not only by its ability to produce technological progress but also by its ability to create justice, prosperity, and noble human morals. In contrast, in the modern Western paradigm, the success of science is more measured by its contribution to the control of nature, efficiency, technological innovation, and material improvements in the quality of life.

This difference in orientation is evident in various developments in contemporary science. Rapid advances in artificial intelligence, biotechnology, genetic engineering, and digital technology demonstrate the success of modern scientific approaches in generating innovation (Ali et al., 2024). However, these developments also raise various ethical issues, such as the misuse of technology, environmental damage, social inequality, and a moral crisis in modern society. This phenomenon reinforces the criticism of a scientific paradigm that is overly oriented toward technical and material aspects without balancing ethical and spiritual considerations.

In this context, the results of this study demonstrate that the Islamic perspective offers a more holistic approach through the integration of revelation, reason, and

empirical experience. This integration enables science to function not only as an instrument for understanding the world but also as a means of building a civilized civilization oriented toward the well-being of humanity. Therefore, dialogue between Islamic and Western epistemologies is crucial to develop in order to face increasingly complex global challenges. The synergy between the power of rationality and empiricism developed in the Western tradition, with the moral and spiritual values developed in the Islamic tradition, has the potential to produce a more comprehensive, humanistic, and sustainable scientific paradigm.

Types of science and their relevance

The research results show that science has various forms and classifications that develop according to the object of study, objectives, methods, and paradigms that underlie it. Based on the literature analyzed, science can be grouped into several categories, namely formal and non-formal science, pure science and applied science, nomothetic and idiographic science, and deductive and inductive science (Surajiyo & Sriyono, 2017). This classification shows that the development of science does not occur in a single place, but rather follows the characteristics of the problems faced by humans. Each type of science has a different function and contribution in producing knowledge, both theoretical and practical.

In the Western philosophical tradition, the classification of sciences is generally based on the object of study and the methods used. Formal sciences, such as mathematics and logic, focus on conceptual and abstract relationships that do not directly depend on empirical experience. In contrast, informal or empirical sciences, such as physics, biology, and sociology, study phenomena that can be observed and tested through sensory experience. This division arose from the development of the traditions of rationalism and empiricism, which place method as the primary element in determining the validity of a science. Therefore, in Western epistemology, the classification of sciences places greater emphasis on methodological aspects and the characteristics of the objects studied.

Furthermore, the distinction between pure science and applied science demonstrates a difference in orientation in scientific development. Pure science focuses on the search for truth and the development of theories without considering their direct practical benefits. In contrast, applied science aims to utilize scientific theories and concepts to solve real-life problems. For example, physics, as a pure science, produces various theories about energy and matter, while electrical engineering, as an applied science, utilizes these theories to develop electrical technology. These findings demonstrate that in the Western tradition, scientific progress is heavily influenced by the increasingly complex specialization and differentiation of scientific fields.

Meanwhile, from an Islamic perspective, the classification of knowledge is not only based on the object of study or the methods used. But also considers the values, objectives, and social responsibilities of the knowledge. Al-Ghazali divided knowledge into two main categories: *fardhu 'ain* (obligatory) and *fardhu kifayah* (obligatory) (Maulana et al., 2025). *Fardhu 'ain* knowledge encompasses knowledge that is obligatory for every Muslim individual to learn because it is directly related to faith, worship, and moral development. *Fardhu kifayah* knowledge encompasses knowledge necessary to meet the needs of society, such as medicine, agriculture, economics, technology, and various other disciplines. This division demonstrates that Islam views knowledge not only as an intellectual instrument, but also as a means to realize the welfare of the community.

These findings indicate that Islamic epistemology possesses a normative dimension not explicitly found in Western classifications of science. While in the Western tradition, science is categorized based on its scientific characteristics, in Islam, science is also assessed based on its benefits and contributions to human life. In other words, a science is judged not only by its methodological validity, but also by the extent to which it supports the realization of the goals of sharia (*maqasid al-shari'ah*) and the welfare of society. This view aligns with Al-Ghazali's thinking, which asserts that science must benefit human life and not simply be an intellectual activity detached from social reality.

The differences in the classification of knowledge between Islam and the West are fundamentally rooted in differing epistemological paradigms. The modern Western tradition developed within the context of the scientific revolution, which encouraged the specialization of disciplines to produce increasingly profound and measurable knowledge. As a result, various branches of knowledge emerged, each with its own distinct methods. In contrast, the Islamic scientific tradition developed within the monotheistic paradigm, viewing all knowledge as a unified whole originating from God Almighty. Therefore, despite the diversity of branches of knowledge, they are all viewed as interconnected and sharing the same goal: to promote human well-being and strengthen awareness of God's greatness.

The implications of these differences can be seen in contemporary education systems. Modern educational models, heavily influenced by Western paradigms, tend to separate religious and general knowledge into distinct disciplines. This separation results in a high degree of scientific specialization, but at the same time often leads to fragmentation of knowledge and a loss of connection between intellectual, moral, and spiritual aspects. In practice, someone can be an expert in a field of science or technology, but not necessarily possess an adequate ethical foundation in using their expertise.

In contrast, the Islamic educational paradigm seeks to integrate various branches of knowledge within a unified framework of values. Religious and general knowledge are not viewed as opposing entities, but as parts of a single, complementary knowledge system (Rodrigues & Agada, 2022). This approach is relevant to the needs of modern society, which faces multidimensional issues such as environmental crises, social inequality, technological misuse, and moral degradation. These issues cannot be resolved solely through technical or scientific approaches; they also require ethical, moral, and spiritual considerations.

The findings of this study support the views of contemporary Muslim scholars who propose the integration of knowledge as an effort to overcome the dichotomy between religious and general knowledge. This concept of integration aims to build an educational paradigm that not only produces individuals who are academically competent but also possess moral and social responsibilities. In the context of 21st-century scientific developments, an integrative approach is becoming increasingly important because various global challenges require cross-disciplinary collaboration and a strong ethical foundation.

Thus, the research results show that the classification of science is not simply a matter of academic grouping, but rather reflects a civilization's perspective on the nature of knowledge and the purposes of its use. The Western perspective has contributed significantly to the development of scientific specialization and rigorous scientific methodology. In contrast, the Islamic perspective offers an integrative framework that connects science with moral, social, and spiritual values. These two

perspectives can complement each other in building a more comprehensive, relevant, and responsive system of knowledge to the needs of modern society.

Sources of knowledge: revelation, reason, experience, and intuition

One of the main findings of this study is the fundamental differences in the sources of knowledge between Islamic and Western perspectives. These differences relate not only to the methods of acquiring knowledge but also to the philosophical foundations that determine the validity and truth of a science. The study's findings indicate that Islamic epistemology recognizes four primary sources of knowledge: revelation, reason, empirical experience, and intuition. These four sources are viewed as complementary and forming a complete system of knowledge. In contrast, the modern Western scientific tradition emphasizes reason and empirical experience as the primary sources of knowledge, while revelation is not considered a source of scientific knowledge that can be used in the academic verification process.

From an Islamic perspective, revelation holds the highest position as a source of knowledge because it originates directly from Allah SWT as the Creator of the universe. This position of revelation is based on the belief that Allah possesses perfect and unlimited knowledge, while human knowledge is limited and relative. The Qur'an repeatedly emphasizes that humans are only given a small portion of the knowledge possessed by Allah SWT, as stated in Surah Al-Isra' verse 85. Therefore, revelation is seen as a source of knowledge capable of explaining various realities that cannot be fully reached by reason or empirical experience, such as the nature of human creation, the purpose of life, life after death, and moral values that serve as guidelines in life.

Besides serving as a source of religious teachings, revelation also serves as an epistemological foundation for the development of science. Many verses in the Qur'an encourage humans to observe nature, think critically, and learn from various life phenomena. This demonstrates that Islam does not contrast revelation with scientific activity, but rather considers revelation as a fundamental framework guiding the use of reason and experience. This finding aligns with research by Siola et al. (2025), who stated that revelation and reason are two primary, mutually supportive instruments in the Islamic intellectual tradition. In this context, revelation provides direction and purpose, while reason functions to understand, interpret, and develop knowledge based on that guidance.

The role of reason in Islamic epistemology also holds a crucial position. Reason is seen as a gift from Allah that distinguishes humans from other creatures and enables them to understand the signs of His greatness found in the universe. Many verses of the Quran use terms such as "*afala ta'qilun*" (do you not think) and "*afala tatafakkarun*" (do you not reflect), demonstrating the importance of intellectual activity in Islam. Therefore, reason functions not only as a tool for logical thinking but also as a means to understand revelation and reality more deeply. This view is reflected in the thinking of Ibn Sina, who emphasized that knowledge is acquired through the work of reason supported by experience, yet remains within a divine framework because the ability to think itself is a gift from Allah SWT (Ariani & Muchtar, 2024).

In addition to revelation and reason, empirical experience is also recognized as an important source of knowledge in Islam. Observations of natural phenomena, experiments, and life experiences serve as means of gaining an understanding of the physical world. The Islamic scientific tradition during the heyday of the Abbasid civilization demonstrates how Muslim scientists such as Ibn al-Haytham, Al-Biruni, and Jabir ibn Hayyan used observation and experimentation to develop optics, astronomy,

and chemistry. This historical fact demonstrates that Islamic epistemology is not only normative and theological but also allows ample room for empirical approaches to knowledge acquisition.

The next source of knowledge is intuition (*kashf* or *ilhām*), the ability to directly grasp a truth through a process of deep reflection. In Islamic tradition, intuition is often associated with clarity of heart, spiritual depth, and inner experience. Although it cannot be used as the primary basis for building scientific theories, intuition is seen as a complement that helps humans gain a deeper understanding of a problem. This thinking bears similarities to the concept of intuitionism developed by Henri Bergson, although in Islam, intuition remains within the framework of revealed values and does not stand independently.

In contrast to the Islamic perspective, modern Western epistemology developed through the dominance of two major schools of thought: rationalism and empiricism. Rationalism, pioneered by René Descartes, stems from the belief that reason is the primary source of knowledge capable of producing definitive truth. Descartes sought to establish a solid foundation of knowledge through methodical doubt and concluded that human existence can be ascertained through the activity of thought (*cogito ergo sum*). From this developed the belief that human reason is capable of discovering truth without relying on revelation or religious authority.

On the other hand, empiricism, developed by John Locke and David Hume, asserts that all knowledge comes from sensory experience. Locke, through the concept of tabula rasa, explained that humans are born without innate knowledge and acquire knowledge through interaction with the environment (Umam & Munir, 2025). Hume then developed the view that all human ideas are the result of reflection on empirical experiences previously received by the senses (Pangestutiani & Habibah, 2026). The findings of this study strengthen the results of research by Lufita et al. (2025), which shows that the combination of rationalism and empiricism is the main foundation of the development of modern science.

Differences in the sources of knowledge in Islamic and Western epistemologies result in distinct criteria for determining truth. In Islamic epistemology, knowledge is considered true if it aligns with revelation, sound logic, and empirical facts. Thus, truth is measured not only by observable evidence but also by its conformity to divine values. In contrast, in modern Western epistemology, the validity of knowledge is largely determined by a theory's ability to be tested, verified, replicated, or even falsified through scientific methods. Consequently, scientific truth within the Western tradition is regarded as tentative and remains open to revision as new evidence emerges.

These differences have significant implications for the development of contemporary science. The Western paradigm has succeeded in producing extraordinary advances in science and technology because a systematic, empirical approach supports it. However, this approach often faces limitations when dealing with issues related to the meaning of life, morality, and the purpose of human existence. In contrast, Islamic epistemology offers a more comprehensive framework by integrating revelation, reason, experience, and intuition into a unified system of knowledge. This approach allows science to function not only to explain reality but also to provide ethical and spiritual direction for its use.

Thus, the research results indicate that the differences in sources of knowledge between Islam and the West are not merely methodological, but rather reflect different paradigms in viewing the nature of knowledge and truth. The Western perspective has made significant contributions to the development of scientific methods and empirical

evidence. In contrast, the Islamic perspective offers a broader epistemological framework through the integration of revelation, reason, experience, and intuition. Both perspectives can be viewed as complementary approaches in the effort to build knowledge that is not only scientifically sound but also morally and spiritually meaningful.

Comparison of Islamic and Western perspectives on science

The research findings show that Islamic and Western perspectives converge in recognizing the importance of reason and experience as instruments for acquiring knowledge. Both traditions share the belief that humans possess the intellectual capacity to understand reality through thought, observation, and reflection on the phenomena around them. This similarity has become the basis for the development of various scientific disciplines aimed at systematically explaining natural and social phenomena. However, this study found that fundamental differences between the two perspectives lie in the sources of legitimacy of knowledge, the orientation of scientific development, the ultimate goal of the pursuit of knowledge, and the relationship between science, values, and spirituality.

These differences are rooted in the epistemological foundations that shape each scientific tradition. From an Islamic perspective, all knowledge ultimately originates from Allah SWT as the source of absolute truth. Therefore, revelation occupies a central position as a source of knowledge that provides guidance for the use of reason and empirical experience. This view is reflected in various verses of the Quran that encourage humans to think, observe nature, and learn from various life phenomena, all within the framework of devotion to Allah SWT. Thus, scientific activity in Islam is not only aimed at acquiring knowledge, but also at building spiritual awareness, strengthening faith, and realizing the benefit of humanity.

In contrast, the modern Western scientific tradition developed through a long process marked by the Renaissance, the Scientific Revolution, and the Enlightenment. During this period, the authority of knowledge shifted from religious institutions to human rationality. The thinking of René Descartes, Francis Bacon, John Locke, and David Hume laid the foundation for the development of rationalism and empiricism, which later gave birth to the modern scientific method. In this paradigm, knowledge is considered valid if it can be proven through observation, experimentation, measurement, and logical reasoning. As a result, science developed with an orientation that emphasized objectivity, empirical verification, and freedom from the influence of metaphysical or religious values.

The findings of this study indicate that differences in the sources and orientations of knowledge have direct implications for the goals of scientific development. From an Islamic perspective, the goal of knowledge is not merely mastery of reality or the achievement of material progress, but is also directed towards achieving knowledge of Allah, the development of noble morals, and the realization of societal welfare. This view aligns with Al-Ghazali's thinking, which positions knowledge as a means of human self-improvement and a path to happiness in this world and the hereafter (Maulana et al., 2025). Therefore, the success of knowledge in Islam is measured not only by its practical benefits but also by its contribution to improving human moral and spiritual quality.

In contrast, from a modern Western perspective, science is more directed toward explaining, predicting, and controlling natural phenomena to improve human well-being. This orientation has proven successful in producing various advances in technology, health, communications, industry, and transportation. The development of

the industrial revolution, digital technology, artificial intelligence, genetic engineering, and space exploration is a clear example of the success of the Western scientific paradigm based on rationality and empiricism. These findings support research by Makhmudah (2017); Fadli (2021), which suggests that the primary strength of Western epistemology lies in its ability to produce measurable, testable, and applicable knowledge to solve various practical problems.

However, research also shows that each perspective has limitations. The Western paradigm, which emphasizes objectivity and value neutrality, has been remarkably successful in driving scientific progress, but in some cases raises complex ethical issues. Various contemporary issues, such as environmental damage due to the exploitation of natural resources, the misuse of digital technology, weapons of mass destruction, genetic manipulation, and the moral crisis in modern society, demonstrate that scientific and technological progress do not always go hand in hand with human moral progress. This situation reinforces the criticism of contemporary thinkers who believe that modern science often loses its ethical orientation due to an overemphasis on technical and material aspects.

On the other hand, the Islamic paradigm offers a more integrative framework because it connects science with moral values and spiritual responsibility. However, in its historical practice, the Islamic world has also faced challenges in developing a tradition of scientific research and innovation capable of competing with the developments of modern science. Therefore, the primary challenge today is not to pit these two paradigms against each other, but rather to find common ground that allows for the integration of the methodological strengths of modern science with the ethical and spiritual values developed within the Islamic tradition.

The findings of this study are consistent with those of Lubis & Salminawati (2022); Ariani & Muchtar (2024); Hidayat (2019), who demonstrated that Islamic epistemology has an integrative character because it combines revelation, reason, empirical experience, and spiritual dimensions into a unified system of knowledge. Meanwhile, research by Makhmudah (2017); Fadli (2021) emphasized that Western epistemology developed through a rational and empirical approach, resulting in a robust and systematic scientific methodology. This study expands on previous findings by demonstrating that the differences between Islam and the West lie not solely in the sources of knowledge but also in the civilizational orientations underlying the development of these sciences.

In the current global context, various issues such as climate change, humanitarian crises, social inequality, the development of artificial intelligence, and bioethical challenges cannot be resolved solely with a technical scientific approach. These problems also require a strong moral, spiritual, and humanitarian foundation. Therefore, the results of this study indicate that dialogue between Islamic and Western epistemologies needs to be continuously developed to build a more comprehensive scientific paradigm. The integration of rationality and empiricism, which are the strengths of the Western tradition, with the values of revelation, ethics, and spirituality that characterize the Islamic tradition, has the potential to produce a scientific model that is not only academically superior but also capable of providing more humane and sustainable solutions to the various challenges of modern civilization.

Thus, a comparison of Islamic and Western perspectives demonstrates that both traditions have made equally important contributions to the development of science. The Western perspective provides a strong methodological foundation for producing objective and verifiable knowledge. In contrast, the Islamic perspective provides

normative and ethical direction to ensure that science remains oriented toward the benefit of humanity. The synergy between these two perspectives can form the basis for developing a future scientific paradigm that is more holistic, integrative, and relevant to the needs of global society.

Conclusions

This study found that Islamic and Western perspectives of science share a common ground in recognizing the role of reason and experience as primary instruments in acquiring knowledge. However, they differ fundamentally in the sources, orientation, and goals of science. The Islamic perspective places revelation as the primary source, complementing reason, experience, and intuition, and views science as a means to achieve happiness in this world and the hereafter, develop morals, and draw closer to Allah SWT. Meanwhile, the Western perspective emphasizes rationality and empiricism as the primary basis of knowledge, with an orientation toward explaining, predicting, and mastering natural phenomena through scientific methods.

The implications of these findings suggest that both perspectives have complementary contributions to the development of modern science. The Western tradition emphasizes methodological aspects, objectivity, and empirical validity, while the Islamic tradition provides a normative, ethical, and spiritual foundation for the use of knowledge. Integrating the two has the potential to produce a more holistic scientific paradigm, one that is not only academically and technically superior but also more morally and humanitarianly responsible in addressing the challenges of contemporary civilization.

The limitations of this research lie in the approach used: a library study that relies on secondary sources, thus not involving empirical field data or direct validation from scientific practitioners. Furthermore, this study is still conceptual in nature and has not yet tested the application of the science integration model in the context of education or scientific practice. Therefore, further research is recommended to use an empirical or mixed methods approach to more concretely examine the implementation of the integration of Islamic and Western epistemologies in the educational system or scientific practice, as well as to test its effectiveness in addressing contemporary issues.

References

Ali, M., Shabbir, K., Ali, S., Mohsin, M., Kumar, A., Aziz, M., Zubair, M., & Sultan, H. M. (2024). A New Era of Discovery: How Artificial Intelligence has Revolutionized the Biotechnology. *Nepal Journal of Biotechnology*, *12*(1), 1–11. https://doi.org/10.54796/njb.v12i1.312

Ariani, W., & Muchtar, N. E. P. (2024). Interpretasi Ilmu Dan Iman Perspektif Pendidikan Islam Ibnu Sina. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *20*(1), 25–36. https://doi.org/10.54069/attaqwa.v20i1.405

Boon, M., Orozco, M., & Sivakumar, K. (2022). Epistemological and educational issues in teaching practice-oriented scientific research: roles for philosophers of science. *European Journal for Philosophy of Science*, *12*(1), 16. https://doi.org/10.1007/s13194-022-00447-z

Fadillah, N. H., Kusuma, A. R., & Al-Lakhm, N. R. R. (2023). The Concept of Science in Islamic Tradition: Analytical Studies of Syed Naquib Al-Attas on Knowledge. *Tasfiyah: Jurnal Pemikiran Islam*, *7*(1), 25–62. https://doi.org/10.21111/tasfiyah.v7i1.8456

Fadli, M. R. (2021). Hubungan Filsafat dengan Ilmu Pengetahuan dan Relevansinya Di

Era Revolusi Industri 4.0 (Society 5.0). *Jurnal Filsafat*, *31*(1), 130. https://doi.org/10.22146/jf.42521

Hangel, N., & ChoGlueck, C. (2023). On the pursuitworthiness of qualitative methods in empirical philosophy of science. *Studies in History and Philosophy of Science*, *98*, 29–39. https://doi.org/10.1016/j.shpsa.2022.12.009

Hidayat, Y. (2019). Pendidikan Dalam Perspektif Ibnu Khaldun. *Jurnal Pendidikan Islam Al-Ilmi*, *2*(1), 11–22. https://doi.org/10.32529/al-ilmi.v2i1.261

Lubis, A. R. R., & Salminawati, S. (2022). Struktur Sains (Metode Ilmiah). *Journal Of Social Research*, *1*(3), 731–735. https://doi.org/10.55324/josr.v1i3.142

Lufita, D., Pratiwi, F. A. I., Yasmin, F., Triananda, L., Jumadi, J., Gusman, E., & Suwarno, R. N. (2025). *Rasionalisme Dalam Pendidikan IPA: Membangun Penalaran Logis Siswa Dengan Fisika*. Thalibul Ilmi Publishing & Education.

Makhmudah, S. (2017). Hakikat Ilmu Pengetahuan dalam Perspektif Modern dan Islam. *AL-MURABBI: Jurnal Studi Kependidikan Dan Keislaman*, *4*(2), 202–217. https://doi.org/10.53627/jam.v4i2.3173

Maulana, M. N. A., Aulia, F., & Irawan, I. (2025). Analisis Pemahaman Al-Ghazali dan Abu Thalib Al-Makky Terhadap Struktur Keilmuan PAI. *Jurnal Miftahul Ilmi: Jurnal Pendidikan Agama Islam*, *2*(1), 13–29. https://doi.org/10.59841/miftahulilmi.v2i1.33

McKinley, J. (2022). An argument for globalized L2 writing methodological innovation. *Journal of Second Language Writing*, *58*, 100945. https://doi.org/10.1016/j.jslw.2022.100945

Milasari, M., Syukri, A., Badarussyamsi, B., & Fadhil Rizki, A. (2021). Filsafat Ilmu dan Pengembangan Metode Ilmiah. *Jurnal Filsafat Indonesia*, *4*(3), 217–228. https://doi.org/10.23887/jfi.v4i3.35499

Mu'ammar, M. A. (2013). *Studi islam perspektif insider/outsider* (2nd ed.). IRCiSoD.

Pangestutiani, Y., & Habibah, A. N. (2026). Filsafat Empirisme David Hume. *Jurnal Ilmiah Spiritualis: Jurnal Pemikiran Islam Dan Tasawuf*, *12*(1), 94–110. https://doi.org/10.53429/spiritualis.v12i1.2295

Pauspaus, B., Iqbal, I. M., & Rokhani, S. (2025). The Concept of Iqra' as a Pillar of Islamic Epistemology in Tafsir al-Munir by Wahbah az-Zuhaili. *Arfannur: Journal of Islamic Education*, *6*(3), 327–337. https://e-journal.iainptk.ac.id/index.php/arfannur/article/view/4533

Pradeu, T., Lemoine, M., Khelfaoui, M., & Gingras, Y. (2024). Philosophy in Science: Can Philosophers of Science Permeate through Science and Produce Scientific Knowledge? *The British Journal for the Philosophy of Science*, *75*(2), 375–416. https://doi.org/10.1086/715518

Putri, D. A. D. (2024). Understanding the Relationship between Humans, Culture, and Civilization in Islamic. *Hikamia: Jurnal Pemikiran Tasawuf Dan Peradaban Islam*, *4*(2), 59–72. https://doi.org/10.58572/hkm.v4i2.90

Rahman, M. T. (2020). *Filsafat Ilmu Pengetahuan* (R. Rosyad & D. Suherman (eds.)). Prodi S2 Studi Agama-Agama UIN Sunan Gunung Djati Bandung.

Rahmatia, R., & Sahib, M. (2025). Filsafat Keilmuan Rasionalisme Dan Empirisme. *Tashdiq: Jurnal Kajian Agama Dan Dakwah*, *16*(1), 151–160. https://cibangsa.com/index.php/tashdiq/article/view/4817

Ridwan, M., Syukri, A., & Badarussyamsi, B. (2021). Studi Analisis Tentang Makna Pengetahuan Dan Ilmu Pengetahuan Serta Jenis Dan Sumbernya. *Jurnal Geuthèë: Penelitian Multidisiplin*, *4*(1), 31. https://doi.org/10.52626/jg.v4i1.96

Rodrigues, L. C., & Agada, A. (2022). African Philosophy of Religion: Concepts of God,

Ancestors, and the Problem of Evil. *Philosophy Compass*, *17*(8). https://doi.org/10.1111/phc3.12864

Selçuk, Z. V., & Çetinkaya, M. (2025). The evolution and future prospects of science education in China: Historical foundations and contemporary challenges. *Education Mind*, *4*(1), 18–28. https://doi.org/10.58583/EM.4.1.3

Siola, M. N., Haq, A. M. A., Attwar, M., Anggraeni, G. F., & Asmar, F. (2025). Dasar-Dasar dan Sumber Ilmu Pengetahuan. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, *2*(6), 249–255. https://www.ojs.daarulhuda.or.id/index.php/Socius/article/view/1154

Solihah, I., Aljauhany, I. H., Akmaluddin, K., Mustafidin, A., Alrumayh, S., & Rochmawan, A. E. (2025). Integrating al-qur'an, hadith, and science in islamic education: Tracing scientific insights. *Jurnal Ilmu Pendidikan Dan Sains Islam Interdisipliner*, *4*(3), 123–131. https://doi.org/10.59944/jipsi.v4i3.453

Surajiyo, S., & Sriyono, S. (2017). Struktur Pengetahuan Ilmiah dan Sikap Ilmiah Ilmuwan. *Prosiding Diskusi Panel Pendidikan "Menjadi Guru Pembelajar,"* 12–22. https://journal.lppmunindra.ac.id/index.php/repository/article/view/1660

Tegegn, D. A. (2024). The role of science and technology in reconstructing human social history: effect of technology change on society. *Cogent Social Sciences*, *10*(1). https://doi.org/10.1080/23311886.2024.2356916

Umam, D. F., & Munir, M. (2025). Comparative Study: The Epistemology of Ibnu Sina and John Locke on the Acquisition of Knowledge. *Al-Falasifah: Journal of Philosophy and Islamic Studies*, *1*(2), 52–63. https://ejournal.uinsgd.ac.id/index.php/alfalasifah/article/view/1441