

The Epistemology of Kashf in Al-Ghazali's Philosophy and Its Relevance to Modern Cognitive Science

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Keywords: Al-Ghazali, <i>kashf</i>, Islamic epistemology, cognitive science, consciousness	Abstract: This study examines the epistemology of <i>kashf</i> in al-Ghazali's philosophy and its relevance to modern cognitive science. The increasing scholarly interest in intuition, consciousness, and non-analytical cognitive processes has created new opportunities for interdisciplinary dialogue between Islamic philosophy and contemporary cognitive science. However, studies integrating al-Ghazali's concept of <i>kashf</i> with modern cognitive theories remain limited. This study aims to analyze the epistemological foundations of <i>kashf</i>, examine contemporary theories of intuition and consciousness, and explore their conceptual relevance. Employing a library research method with a comparative philosophical analysis, this study adopts the approaches of Islamic philosophy, Sufism, and cognitive science. Data were collected through documentation of primary sources, including <i>Al-Munqidh min al-Dalal</i>, <i>Ihya' 'Ulum al-Din</i>, and <i>Mishkat al-Anwar</i>, as well as contemporary scholarly literature. The findings reveal that al-Ghazali's epistemology recognizes <i>kashf</i> as a form of supra-rational knowledge attained through spiritual purification and Divine illumination, complementing sensory perception and rational reasoning. Meanwhile, modern cognitive science explains intuition, consciousness, and metacognition as cognitive mechanisms underlying non-analytical knowledge acquisition. Although both perspectives differ in their ontological and methodological foundations, they converge in acknowledging the significance of intuitive knowledge. This study proposes an Integrative Epistemological Dialogue Model, demonstrating that al-Ghazali's epistemology and modern cognitive science provide complementary perspectives for understanding holistic human knowledge. The study contributes to strengthening interdisciplinary dialogue between Islamic philosophy and contemporary cognitive science.
Kata Kunci: Al-Ghazali, <i>kashf</i>, epistemologi Islam, <i>cognitive science</i>, kesadaran	Abstrak: Penelitian ini mengkaji epistemologi <i>kashf</i> dalam filsafat Al-Ghazali serta relevansinya terhadap perkembangan ilmu kognitif modern. Meningkatnya perhatian terhadap intuisi, kesadaran, dan proses kognitif non-analitis membuka peluang dialog interdisipliner antara filsafat Islam dan <i>cognitive science</i>. Namun, kajian yang mengintegrasikan konsep <i>kashf</i> Al-Ghazali dengan teori-teori kognitif modern masih terbatas. Penelitian ini bertujuan menganalisis landasan epistemologi <i>kashf</i>, mengkaji perkembangan teori intuisi dan kesadaran dalam ilmu kognitif modern, serta menjelaskan relevansi konseptual keduanya. Penelitian menggunakan metode <i>library research</i> dengan pendekatan <i>comparative philosophical analysis</i>, serta memadukan perspektif filsafat Islam, tasawuf, dan <i>cognitive science</i>. Data diperoleh melalui studi dokumentasi terhadap sumber primer, yaitu <i>Al-Munqidh min al-Dalal</i>, <i>Ihya' 'Ulum al-Din</i>, dan <i>Mishkat al-Anwar</i>, serta

berbagai literatur ilmiah kontemporer. Hasil penelitian menunjukkan bahwa Al-Ghazali memandang *kashf* sebagai pengetahuan suprarasional yang diperoleh melalui penyucian jiwa dan iluminasi Ilahi, yang melengkapi pengetahuan inderawi dan rasional. Sementara itu, ilmu kognitif modern menjelaskan intuisi, kesadaran, dan metakognisi sebagai mekanisme kognitif yang mendasari proses memperoleh pengetahuan non-analitis. Meskipun berbeda pada aspek ontologis dan metodologis, kedua perspektif memiliki titik temu dalam pengakuan terhadap pentingnya pengetahuan intuitif. Penelitian ini mengusulkan **Model Dialog Epistemologis Integratif** yang menunjukkan bahwa epistemologi Al-Ghazali dan ilmu kognitif modern saling melengkapi dalam membangun pemahaman yang holistik mengenai pengetahuan manusia.

A. INTRODUCTION

Over the past two decades, developments in cognitive science have brought renewed attention to the issues of consciousness, intuition, and non-analytical cognitive processes in understanding how humans acquire knowledge. Whereas the modern scientific paradigm was previously dominated by empirical and rationalistic approaches, various recent studies have demonstrated that the processes of decision-making, comprehension formation, and the emergence of insight do not always occur through conscious logical reasoning, but also involve complex intuitive mechanisms (Dehaene, 2014; Kahneman, 2011; Seth, 2021). These developments have opened a new space for dialogue between modern cognitive science and the traditions of Islamic philosophy and Sufism, which have discussed the nature of intuitive knowledge for centuries.

Within the Islamic intellectual tradition, one of the thinkers who devoted profound attention to epistemological issues is Abu Hamid al-Ghazali (d. 1111 CE). In contrast to the tendency of the Peripatetic philosophers, who positioned reason as the primary source of knowledge, al-Ghazali developed a more comprehensive epistemological structure by integrating sensory knowledge (*al-hiss*), rational knowledge (*al-'aql*), intuitive knowledge (*kashf*), and revelation (*wahy*). Through works such as *Al-Munqidh min al-Dhalal*, *Ihya' 'Ulum al-Din*, and *Mishkat al-Anwar*, al-Ghazali explains that there exists a type of knowledge that cannot be attained solely through empirical observation or logical reasoning, but is rather acquired through the purification of the soul (*tazkiyat al-nafs*), whereby the heart (*qalb*) becomes capable of receiving the radiance of Divine light (*nur ilahi*). It is this knowledge that is known as *kashf*, or spiritual unveiling (al-Ghazali, 2000; al-Ghazali, 2010).

The concept of *kashf* is often understood exclusively as a mystical experience lying beyond the domain of modern scientific inquiry. As a result, the discourse on *kashf* has developed more extensively within Sufi studies than within contemporary epistemological scholarship. Yet, when examined philosophically, *kashf* does not merely describe a spiritual experience but also offers a theory of how human beings acquire knowledge that transcends discursive thinking. From al-Ghazali's perspective, intuitive knowledge is not the antithesis of reason; rather, it serves as the perfection of rational capacity once a person has attained a certain degree of moral and spiritual preparedness (Griffel, 2009).

Meanwhile, modern cognitive science has begun to devote attention to the phenomena of intuition, consciousness, and subjective experience. Dual Process Theory accounts for the existence of two thinking systems, namely a slow analytical process (System 2) and a fast intuitive process (System 1) (Kahneman, 2011). Furthermore, Global Workspace Theory views consciousness as the result of information integration that was previously processed unconsciously (Baars, 1997; Dehaene, 2014), whereas Integrated Information Theory seeks to explain consciousness through the level of information integration within a system (Tononi et al., 2016). Although these theories are built upon empirical and neuroscientific paradigms, several of their concepts exhibit conceptual intersections with al-Ghazali's ideas on intuition and consciousness, particularly concerning the mechanism by which knowledge emerges without proceeding entirely through explicit reasoning.

A number of previous studies have examined al-Ghazali's epistemology from various perspectives. Griffel (2009) emphasizes the transformation of al-Ghazali's thought in integrating philosophy and theology, while Nakamura (2003) reviews the position of *kashf* within the Sufi epistemological system. On the other hand, research in the field of cognitive science has more extensively addressed the neurological mechanisms of intuition, insight, and consciousness (Dehaene, 2014; Seth, 2021). Nevertheless, the majority of these studies have developed in isolation from one another. Studies on al-Ghazali generally stop at historical-philosophical analysis, whereas cognitive science research rarely incorporates the perspective of Islamic epistemology as a framework for conceptual dialogue.

Based on the foregoing, a research gap remains, namely that there are still few studies that systematically bring together al-Ghazali's epistemology of *kashf* with the latest theoretical developments in modern cognitive science. In fact, a dialogue between these two disciplines holds the potential to enrich the understanding of the nature of intuitive knowledge, both from the perspective of Islamic philosophy and contemporary science. It is important to emphasize that this study does not aim to prove the concept of *kashf* through neuroscience, nor to equate the two; rather, it seeks to construct an epistemological dialogue in order to identify points of convergence, fundamental differences, and conceptual relevance between the two scholarly traditions.

Therefore, this study aims to analyze the epistemology of *kashf* in al-Ghazali's philosophy, to examine the development of the concepts of intuition and consciousness in modern cognitive science, and to elucidate the epistemological relevance of *kashf* to the advancement of cognitive science studies. The novelty of this research lies in its endeavor to construct a model of epistemological dialogue between al-Ghazali's concept of intuitive knowledge and contemporary theories of intuition and consciousness, thereby yielding an interdisciplinary perspective that broadens the discourse of both Islamic philosophy and modern cognitive science.

B. RESEARCH METHOD

This study is a library research that aims to examine the epistemological concept of *kashf* in al-Ghazali's philosophy and to analyze its relevance to developments in modern cognitive science. The library research method was selected because the object of study consists of ideas, concepts, and theories contained in both classical and contemporary literature; accordingly, the entire research process focuses on the analysis of written sources without involving field data collection.

The research design employs Comparative Philosophical Analysis, an analytical-comparative approach that juxtaposes two distinct epistemological traditions, namely the classical Islamic epistemology represented by al-Ghazali and the epistemology of modern cognitive science. This approach does not aim to equate the two paradigms; rather, it seeks to identify points of convergence, fundamental differences, and potential avenues for conceptual dialogue between them. In this way, the study generates a philosophical

synthesis regarding the position of *kashf* as a form of intuitive knowledge from the perspective of Islamic philosophy and its relevance to the development of studies on consciousness and intuition within cognitive science.

This study employs three primary approaches. First, the Islamic Philosophy approach is utilized to analyze the structure of al-Ghazali's epistemology, particularly concerning the hierarchy of knowledge sources encompassing the senses (*al-hiss*), reason (*al-'aql*), *kashf*, and revelation. Second, the Sufism approach is employed to understand the spiritual dimension of *kashf*, the relationship between the purification of the soul (*tazkiyat al-nafs*), the heart (*qalb*), and the process of attaining *ma'rifah*. Third, the Cognitive Science approach is applied to examine contemporary theories of intuition, consciousness, insight, metacognition, and non-analytical cognitive mechanisms that have developed within cognitive psychology and neuroscience.

The research data sources consist of primary and secondary sources. The primary sources include al-Ghazali's major works, namely *Al-Munqidh min al-Dalal*, *Ihya' 'Ulum al-Din*, and *Mishkat al-Anwar*, which contain his concepts of epistemology, *kashf*, *qalb*, and *ma'rifah*. The secondary sources comprise scholarly books, reputable national and international journal articles, as well as the latest research findings on Islamic epistemology, Sufism, al-Ghazali's philosophy, consciousness studies, intuition, predictive processing, metacognition, and cognitive science. In selecting secondary references, this study prioritizes articles published within the last five years in order to incorporate the most recent theoretical developments.

The data collection technique employed is documentation study, which involves identifying, gathering, classifying, and organizing various literature relevant to the research focus. All sources are critically examined to obtain a comprehensive understanding of the concept of *kashf* in al-Ghazali's thought as well as the principal theories in modern cognitive science pertaining to intuitive knowledge and consciousness.

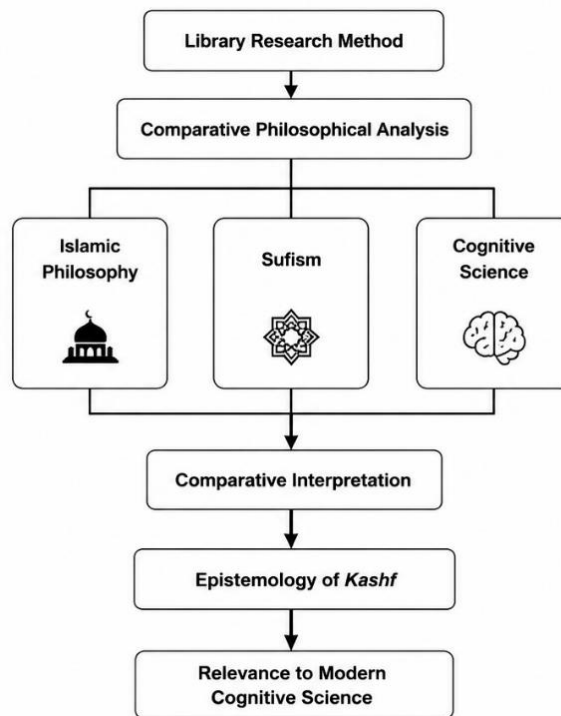


Figure 1. Research Framework

Data analysis is conducted in three stages. First, hermeneutic analysis is employed to interpret al-Ghazali's texts in accordance with their philosophical and Sufi contexts, so that the meaning of the concept of *kashf* can be understood in its entirety. Second, conceptual analysis is carried out to identify the characteristics, structures, and relationships among concepts such as *qalb*, *nur*, *ma'rifah*, and *kashf* within al-Ghazali's epistemological system, and subsequently to compare them with the concepts of intuition, insight, and consciousness in modern cognitive science. Third, comparative philosophical analysis is utilized to examine the similarities, differences, and epistemological relevance between the two scholarly traditions. The results of the analysis are then synthesized in order to construct a framework for conceptual dialogue that demonstrates how the epistemology of *kashf* can contribute to contemporary discourse on intuitive knowledge and human consciousness.

C. RESULTS AND DISCUSSION

The Epistemology of *Kashf* in the Philosophy of al-Ghazali

Epistemology constitutes one of the central themes in the thought of Abu Hamid al-Ghazali (1058–1111 CE). Unlike some earlier Muslim philosophers who positioned reason as the primary instrument for acquiring knowledge, al-Ghazali developed an integrative epistemological system that acknowledges the existence of several sources of knowledge, namely sensory experience (*al-hiss*), rational reasoning (*al-'aql*), spiritual intuition (*kashf*), and revelation (*wahy*). According to al-Ghazali, each source of knowledge possesses its own capacity and limitations, such that none can absolutely substitute for the others (al-Ghazali, 2001).

The formulation of this epistemology did not emerge suddenly; rather, it resulted from al-Ghazali's intellectual journey as recounted in *Al-Munqidh min al-Dalal*. In this work, he explains that the search for certain knowledge (*al-'ilm al-yaqini*) begins with methodological doubt concerning the validity of knowledge obtained through both the senses and reason. Al-Ghazali demonstrates that sensory perception can deceive human beings, just as a shadow appears stationary when it is in fact moving, or a small object appears large when observed through a particular instrument. Likewise, the capacity of reason has its limitations, for it is only able to grasp realities within the rational domain, whereas metaphysical truths lie beyond the reach of logical reasoning (al-Ghazali, 2001).

This critique of the senses and reason is not intended to reject either as a source of knowledge. On the contrary, al-Ghazali positions both as essential stages in the process of searching for truth. Empirical knowledge remains necessary for understanding physical reality, while reason functions to process such experience into rational knowledge. Nevertheless, according to al-Ghazali, there exists a dimension of knowledge that cannot be attained solely through empirical observation or logical deduction. This knowledge is acquired through *kashf*, namely the unveiling of ultimate reality into the human heart after undergoing the process of soul purification (*tazkiyat al-nafs*) and attaining spiritual proximity to Allah SWT (Griffel, 2009).

From al-Ghazali's perspective, *kashf* is not merely a subjective emotional experience; rather, it constitutes a form of intuitive knowledge that possesses epistemological validity. This knowledge arises when the heart (*qalb*) has been liberated

from various spiritual obstacles, thereby becoming capable of receiving the radiance of Divine light (*nur*). Hence, the heart is not merely a spiritual organ but the center of human consciousness, endowed with the capacity to apprehend realities that cannot be reached by either the senses or reason. This understanding is elucidated in greater depth in *Mishkat al-Anwar*, where al-Ghazali describes *nur* as the source of all knowledge that illuminates the human heart according to its degree of spiritual preparedness (al-Ghazali, 1998).

The hierarchy of knowledge sources according to al-Ghazali can be visualized as follows.

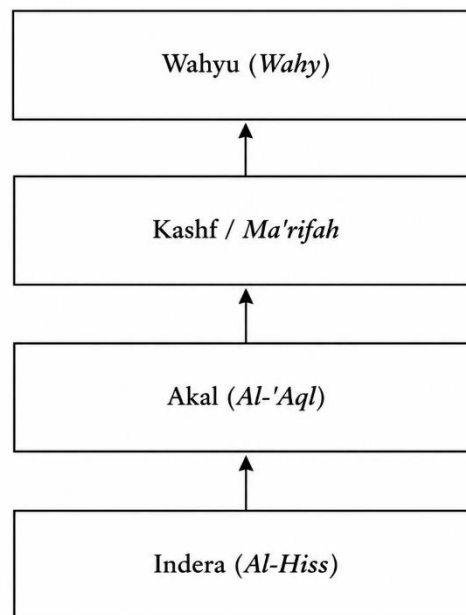


Figure 2. Al-Ghazali's Epistemological Hierarchy

Source: Adapted from al-Ghazali (2001; 2010).

The figure demonstrates that al-Ghazali's epistemology is hierarchical in nature. Sensory knowledge serves as the foundation for rational knowledge, while *kashf* represents a level of knowledge that transcends the capacity of reason without negating the function of reason itself. At the highest level lies revelation, which is granted exclusively to the prophets. Thus, *kashf* occupies the position of intuitive knowledge attainable by human beings through the process of self-purification, yet remains ontologically distinct from prophetic revelation.

The concept of *kashf* possesses distinctive characteristics that set it apart from other forms of knowledge. First, *kashf* is immediate in nature (*immediate knowledge*),

meaning it is obtained without a lengthy process of logical inference. Second, *kashf* is illuminative, as it emerges through the radiance of Divine light into the heart. Third, *kashf* demands moral and spiritual preparedness, such that it cannot be attained solely through intellectual activity. For this reason, al-Ghazali positions the practices of *riyadhah*, *mujahadah*, and *tazkiyat al-nafs* as the primary prerequisites for the attainment of *kashf* and *ma'rifah* (al-Ghazali, 2010).

The process of attaining *kashf* can be understood as a spiritual transformation that unfolds in stages. Purification of the soul through the restraint of carnal desires and the cultivation of devotional practices cleanses the heart of various spiritual obstacles. The purified heart then receives the radiance of Divine light (*nur ilahi*), thereby enabling the emergence of *kashf*, which ultimately leads one to *ma'rifah*, or profound knowledge of the nature of reality and closeness to Allah SWT. Thus, *kashf* is not merely a mystical phenomenon; rather, it is the culmination of an interconnected epistemological and ethical process.

Based on the foregoing exposition, it can be understood that al-Ghazali's epistemology does not position reason and intuition as two mutually opposed sources of knowledge. On the contrary, *kashf* constitutes a form of supra-rational knowledge, that is, knowledge that transcends the capacity of reason without negating the function of reason as an essential instrument in the pursuit of truth. It is this perspective that serves as the conceptual foundation for constructing a dialogue with modern cognitive science in the following section, particularly in the discussion of intuition, consciousness, and the mechanisms underlying the emergence of non-analytical knowledge.

Modern Cognitive Science on Intuition and Consciousness

Developments in cognitive science over recent decades have broadened the understanding of how humans acquire knowledge, make decisions, and construct consciousness. Whereas the classical paradigm in cognitive psychology placed greater emphasis on rational and analytical thinking processes, contemporary research demonstrates that the majority of cognitive activity takes place automatically, intuitively, and often beyond explicit awareness (Kahneman, 2011; Seth, 2021). These findings have prompted the emergence of various theories concerning intuition, consciousness, and insight that have become central focuses of modern cognitive science.

One of the most influential theories is Dual Process Theory, which distinguishes between two mechanisms of human thinking, namely System 1 and System 2. System 1 operates rapidly, automatically, and intuitively, requiring little cognitive effort, whereas System 2 operates slowly, analytically, and logically, demanding conscious attention (Kahneman, 2011). In practice, these two systems complement one another in the decision-making process. Although this theory does not address the spiritual dimension, its concept of intuitive knowledge demonstrates that humans possess a mechanism for acquiring information that does not always proceed through discursive reasoning.

In addition to intuition, considerable attention in cognitive science has also been directed toward the issue of consciousness. One widely adopted theory is the Global Workspace Theory (GWT), developed by Bernard Baars and later expanded by Stanislas Dehaene. This theory explains that information initially processed unconsciously can become conscious when it gains access to the global workspace, a system that enables information to be distributed across various cognitive networks so that it can be used for thinking, remembering, and decision-making (Baars, 1997; Dehaene, 2014). In other words, consciousness is understood as the result of integrating various mental processes that previously took place covertly.

Another rapidly developing theory is the Integrated Information Theory (IIT), developed by Giulio Tononi. In contrast to GWT, which emphasizes the mechanism of information distribution, IIT views consciousness as the level of information integration possessed by a system. The greater a system's capacity to integrate information, the higher its level of consciousness (Tononi et al., 2016). This approach offers a new perspective for understanding the relationship between brain activity and subjective experience, although it remains a subject of debate within the scientific community.

A further development has emerged through Predictive Processing theory, which views the brain not merely as a recipient of information from the environment but as actively constructing predictions about reality based on prior experience. According to this theory, perception results from the interaction between sensory information and the predictive models formed by the brain. Knowledge is continuously updated through the process of correcting prediction errors, thereby enabling humans to adapt to their environment efficiently (Clark, 2016). This approach demonstrates that the process of

knowing is not a passive activity but a dynamic construction involving the interplay of experience, memory, and interpretation.

Beyond these theories, research on metacognition has increasingly affirmed that humans possess the ability to reflect upon, evaluate, and regulate their own thinking processes. Fleming (2024) explains that metacognition enables individuals to assess their degree of confidence in the knowledge they hold, thus playing a crucial role in the formation of self-awareness and adaptive decision-making. Accordingly, human consciousness is not solely concerned with the capacity to receive information but also involves the ability to reflect upon ongoing cognitive processes.

Although all of these theories have been developed within empirical and neuroscientific frameworks, they share a common thread, namely the recognition that human knowledge is not entirely shaped through linear logical reasoning. Intuition, insight, consciousness, and metacognition point to the existence of cognitive processes that operate in complex ways and are often not fully accessible to awareness. Nevertheless, modern cognitive science explains these phenomena based on biological mechanisms and neural network activity, whereas metaphysical aspects and transcendent dimensions fall outside its scope of inquiry.

Therefore, although cognitive science does not recognize *kashf* as a source of knowledge in the sense understood by Islamic epistemology, various theories of intuition and consciousness open up opportunities for conceptual dialogue with al-Ghazali's thought. The similarity lies in the recognition that humans possess a form of knowledge that transcends ordinary analytical reasoning, while the difference resides in the ontological and epistemological foundations employed. Cognitive science explains intuitive phenomena through brain activity and the nervous system, whereas al-Ghazali explains *kashf* as knowledge acquired through the purification of the heart and Divine illumination. It is these similarities and differences that will be analyzed in greater depth in the following section through a comparative approach.

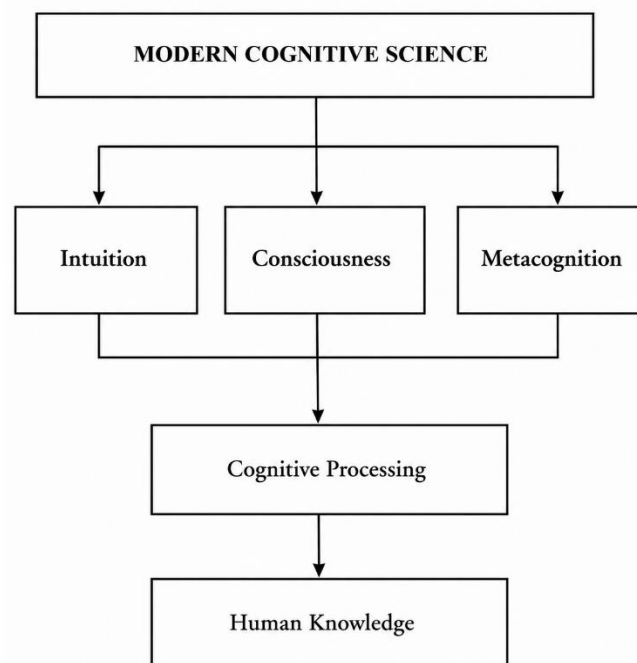


Figure 3. Conceptual Framework of Modern Cognitive Science

Comparative Analysis between *Kashf* and Modern Cognitive Science

The epistemology of *kashf* in al-Ghazali's thought and the theories of modern cognitive science emerged from distinct scientific paradigms. Al-Ghazali's epistemology is rooted in Islamic philosophy and Sufism, which acknowledge the metaphysical dimension as part of the reality of knowledge, whereas cognitive science developed within the modern scientific tradition, which situates empirical observation, experimentation, and biological mechanisms as the basis for explaining human cognitive processes. Nevertheless, both endeavors seek to explain how humans acquire knowledge that does not arise entirely from linear logical reasoning. Therefore, a dialogue between these two perspectives becomes important for understanding the position of intuitive knowledge within the development of contemporary science.

In al-Ghazali's epistemology, *kashf* is understood as intuitive knowledge obtained through the purification of the heart (*qalb*), such that it becomes capable of receiving the radiance of Divine light (*nur*). This knowledge is not acquired through a process of rational inference but through spiritual experience that yields *ma'rifah*, or direct knowledge of the nature of reality. In contrast, modern cognitive science explains intuition as the result of information processing that takes place rapidly, automatically, and largely beyond explicit

awareness (Kahneman, 2011). Thus, both *kashf* and intuition alike point to the existence of a form of knowledge that transcends ordinary analytical processes, albeit with different epistemological foundations.

This conceptual parallel is also evident in the discussion of consciousness. In al-Ghazali's thought, the heart (*qalb*) functions as the center of spiritual consciousness that determines the human capacity to comprehend truth. The purified heart becomes the medium for receiving Divine light (*nur*), thereby enabling the occurrence of *kashf*. Meanwhile, Global Workspace Theory explains that consciousness arises when information gains access to a global system that enables the integration of various cognitive processes (Baars, 1997; Dehaene, 2014). Although the concept of *qalb* is not identical to the global workspace, both indicate the existence of a central mechanism that allows information to be processed into meaningful knowledge.

Similarly, Predictive Processing theory posits that the brain actively constructs models of the world based on prior experience and subsequently updates them through the correction of prediction errors (Clark, 2016). From al-Ghazali's perspective, the process of soul purification can be understood as an effort to remove the various "obstacles" that cause human beings to perceive reality erroneously. Although these approaches are not methodologically identical, both emphasize the importance of internal transformation so that the knowledge acquired approaches ever closer to the truth.

Despite several points of conceptual convergence, there are fundamental differences between the epistemology of *kashf* and modern cognitive science. These differences reside primarily in the source of knowledge, the mechanism of knowledge acquisition, the basis of validity, and the ultimate purpose of knowledge. This comparison can be summarized in Table 1.

Table 1. Comparison between the Epistemology of *Kashf* according to al-Ghazali and Modern Cognitive Science

Aspect	Epistemology of <i>Kashf</i> (al-Ghazali)	Modern Cognitive Science
Paradigm	Islamic Philosophy and Sufism	Empirical science and neuroscience
Source of Knowledge	Qalb, <i>kashf</i> , and Divine light (nur)	Brain activity and cognitive processes
Mechanism	Purification of the soul (tazkiyat al-nafs) and illumination	Information processing, perception, memory, and prediction
Validity	Proximity to spiritual truth	Empirical verification and scientific observation
Purpose	Ma'rifah and closeness to Allah	Understanding of human cognitive mechanisms

Source: Compiled by the author based on al-Ghazali (2001), Baars (1997), Kahneman (2011), Dehaene (2014), Clark (2016), and Seth (2021).

Although there exist fairly fundamental ontological differences, these two perspectives need not be positioned as mutually opposed approaches. On the contrary, both can be understood as two ways of explaining the phenomenon of intuitive knowledge from different levels of analysis. Modern cognitive science explains how the processes of intuition and consciousness occur through biological mechanisms and neural activity, whereas al-Ghazali explains why intuitive knowledge can lead human beings to a more profound understanding through spiritual and ethical dimensions. Thus, the relationship between the two is complementary rather than competitive in nature.

Based on this analysis, the present study proposes an epistemological dialogue between the philosophy of al-Ghazali and modern cognitive science. This dialogue is not intended to prove the concept of *kashf* through neuroscience, nor to Islamize modern cognitive science theories. Rather, it demonstrates that developments in cognitive science open up space for re-examining the concept of intuitive knowledge in the Islamic tradition as a philosophical perspective that remains relevant to the study of human consciousness. Accordingly, the epistemology of *kashf* can be regarded as a model of supra-rational knowledge, while modern cognitive science provides an account of the cognitive mechanisms that enable the emergence of intuitive experience. These two perspectives

complement one another in enriching the understanding of the nature of human knowledge.

Philosophical Implications

The results of the analysis demonstrate that the epistemology of *kashf* in al-Ghazali's thought and modern cognitive science do not stand in a relationship of mutual negation; rather, they can be understood as two perspectives that explain the phenomenon of human knowledge from different levels of analysis. Al-Ghazali regards *kashf* as a form of intuitive knowledge originating from Divine illumination following the process of soul purification, whereas modern cognitive science explains intuition, consciousness, and insight through biological mechanisms and the activity of the nervous system. This paradigmatic difference in fact opens up opportunities for a broader epistemological dialogue between the tradition of Islamic philosophy and contemporary science.

The first implication of this study is the reaffirmation of the position of Islamic epistemology within the discourse of modern philosophy of science. Over the past several centuries, modern theories of knowledge have been largely dominated by empiricist and rationalist approaches, which situate observation and logical reasoning as the primary bases for the validity of knowledge. Through the concept of *kashf*, al-Ghazali offers the perspective that human knowledge is not solely constructed through empirical experience and rational processes but also through moral and spiritual transformation that influences the quality of consciousness. Thus, Islamic epistemology presents an ethical and transcendent dimension that has yet to be fully accommodated within the modern scientific paradigm.

The second implication pertains to the development of cognitive science studies. Various theories concerning intuition, consciousness, predictive processing, and metacognition demonstrate that the process of acquiring knowledge is far more complex than mere logical reasoning. These findings provide space for re-examining classical concepts in Islamic philosophy, including *kashf*, as a form of intuitive knowledge. Although cognitive science does not recognize the metaphysical dimension as an object of scientific inquiry, its acknowledgment of the existence of non-analytical cognitive processes opens up the possibility of conceptual dialogue with the Islamic epistemological tradition without requiring either discipline to relinquish its distinctive characteristics.

The third implication is the importance of developing interdisciplinary approaches in Islamic philosophy studies. To date, studies of al-Ghazali's thought have often been conducted historically or normatively, while developments in modern cognitive science have proceeded along a separate trajectory. This study demonstrates that a dialogue between these two fields can yield new perspectives on the nature of knowledge, consciousness, and intuition. Such an interdisciplinary approach does not aim to equate the concept of *kashf* with neurological mechanisms but rather to enrich the understanding of human beings as creatures who simultaneously possess biological, rational, moral, and spiritual dimensions.

Based on these findings, this study proposes an Integrative Epistemological Dialogue Model, namely a conceptual framework that views the epistemology of *kashf* and modern cognitive science as two mutually complementary perspectives in understanding human knowledge. Within this model, cognitive science contributes by explaining the cognitive mechanisms of how intuition and consciousness operate (how knowledge works), while al-Ghazali's epistemology provides the philosophical foundation concerning the origins, purposes, and ethical-spiritual dimensions of knowledge (why knowledge matters). Thus, the integration of these two perspectives yields a more holistic understanding of the nature of human knowledge.

The theoretical contribution of this study lies in its endeavor to construct a conceptual bridge between classical Islamic philosophy and modern cognitive science. This research does not claim that neuroscientific theories prove the existence of *kashf*, nor that the concept of *kashf* can be reduced to neurological activity. On the contrary, it affirms that the two disciplines possess distinct objects, methods, and epistemological assumptions, yet can engage in constructive dialogue in explaining the phenomenon of intuitive knowledge. In this way, the concept of *kashf* retains its relevance as an important contribution of Islamic philosophy to the development of contemporary discourse on consciousness and human knowledge.

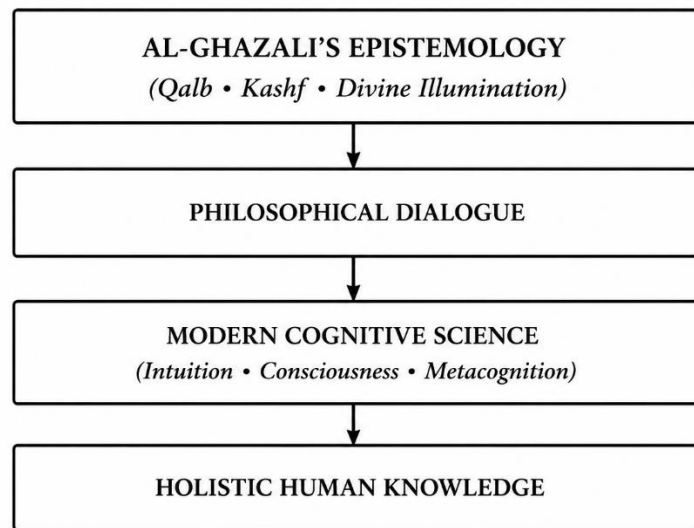


Figure 4. Integrative Epistemological Dialogue Model

Source: Developed by the author (2026).

D. CONCLUSION

This study demonstrates that the epistemology of kashf in al-Ghazali's philosophy constitutes a knowledge system that positions the senses (al-hiss), reason (al-'aql), kashf, and revelation (wahy) within a mutually complementary epistemological hierarchy. Kashf is understood as a form of supra-rational knowledge obtained through the purification of the soul and Divine illumination, thus transcending the capacity of rational reasoning without negating the role of reason. Meanwhile, modern cognitive science explains intuition, consciousness, metacognition, and predictive processing as cognitive mechanisms that enable human beings to acquire knowledge beyond linear analytical processes. Although the two perspectives differ fundamentally in their ontological and methodological aspects, they converge in acknowledging the existence of intuitive knowledge as an integral part of the process of comprehending reality.

The principal contribution of this study is the proposal of the Integrative Epistemological Dialogue Model, which positions al-Ghazali's epistemology of kashf and modern cognitive science as two mutually complementary perspectives in explaining the nature of human knowledge. This model demonstrates that cognitive science provides an account of cognitive mechanisms (how knowledge works),

whereas al-Ghazali's epistemology provides the philosophical and spiritual foundation regarding the purpose and meaning of knowledge (why knowledge matters). Although this study remains conceptual in nature and based on library research, the findings open up opportunities for interdisciplinary research that integrates Islamic philosophy, consciousness studies, cognitive psychology, and neuroscience in order to enrich the development of Islamic epistemology while broadening the dialogue between the Islamic intellectual tradition and contemporary science.

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