

Integration of Religion and Science in Nidhal Guessoum's Thought: An Epistemological Analysis and Its Implications for Islamic Education

Faisal Amir Toedien^{1*}, Eva Dewi²

^{1,2}Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

*Corresponding Author. E-mail: 22490114357@students.uin-suska.ac.id

Abstract: This study aims to analyze the concept of the integration of religion and science from Nidhal Guessoum's perspective, with a particular focus on its epistemological dimension and its relevance to the development of contemporary Islamic education. The study is motivated by the limited number of works that examine in depth the epistemological aspects of Guessoum's integrative paradigm, while discourse on the integration of knowledge in the Muslim world has largely been dominated by normative approaches such as the Islamization of knowledge. This research employs a library research method with source triangulation and a descriptive-analytical approach through an examination of Guessoum's major works and relevant scholarly literature. The findings indicate that the paradigm of knowledge integration he proposes is grounded in three main principles: the non-contradiction between revelation and science, layered interpretation, and theistic falsification. This approach rejects rigid models of i'jaz al-Qur'an and the Islamization of knowledge, while emphasizing a rational dialogue between religion and science. This study contributes theoretically to the strengthening of Islamic epistemology and offers practical implications for the development of Islamic education that is scientific, contextual, and open to scientific advancement.

Keywords: Nidhal Guessoum, Integration of Religion and Science, Islamic Epistemology, Contemporary Islamic Education, Rational Hermeneutics.

Introduction

The development of modern science and technology has had a significant impact on almost all aspects of human life. Modern science, with its empirical, experimental, and rational characteristics, has become a major driving force of civilizational progress.¹ However, this progress

¹ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996).

has also given rise to philosophical and epistemological problems when confronted with the domain of religion. Science is grounded in observation and empirical verification, whereas religion is based on revelation and transcendent authority.² This fundamental difference often generates tension in the discourse of the philosophy of science and social practice, particularly in the Muslim world, where the relationship between revelation and rationality remains a central and ongoing debate.³

In the history of Islamic intellectual thought, the relationship between religion and science has produced various models of approach. Some scholars place revelation above science by rejecting scientific theories deemed to contradict religious texts, while others emphasize secular scientism that neglects religious values altogether.⁴ Both extremes are considered unproductive for the advancement of Islamic intellectual life, as they result in stagnation on the one hand and excessive secularization on the other.⁵ This situation highlights the need for an approach capable of bringing religion and science together in a dialogical and mutually complementary manner.

Several figures have proposed models of knowledge integration, such as Ismail Raji al-Faruqi with his concept of the Islamization of knowledge,⁶ and Syed Muhammad Naquib al-Attas with his idea of *ta'dīb* and the cultivation of proper scientific adab.⁷ Nevertheless, both models continue to face methodological challenges in the context of modernity and the development of contemporary science.⁸ In this regard, the thought of Nidhal Guessoum makes an important contribution by offering an integrative paradigm that is rational, empirical, and open to scientific progress. He rejects claims of *i'jaz al-Qur'an* that subordinate revelation to scientific theories, while simultaneously criticizing rigid

² Ian G. Barbour, *Religion and Science: Historical and Contemporary Issues* (New York: HarperCollins, 1997).

³ Seyyed Hossein Nasr, *Religion and the Order of Nature* (New York: Oxford University Press, 1996).

⁴ John F. Haight, *Science and Religion: From Conflict to Conversation* (New York: Paulist Press, 1995).

⁵ Ziauddin Sardar, *Islam, Science and Cultural Relations* (London: Routledge, 1989).

⁶ Ismail Raji al-Faruqi, *Islamization of Knowledge: General Principles and Work Plan* (Herndon, VA: IIIT, 1982).

⁷ Syed Muhammad Naquib al-Attas, *Islam and Secularism* (Kuala Lumpur: ISTAC, 1993).

⁸ Wan Mohd Nor Wan Daud, *The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas* (Kuala Lumpur: ISTAC, 1998).

and exclusive projects of the Islamization of knowledge.⁹

Epistemologically, Guessoum proposes the paradigm of Scientific and Rational Islam, an integrative model that emphasizes rational dialogue between religion and science through three main principles: non-contradiction, layered interpretation, and theistic falsification.¹⁰ This approach not only affirms the harmony between revelation and science but also provides a new direction for the development of Islamic education that is integrative, scientific, and responsive to contemporary challenges.¹¹

Nevertheless, studies on the integration of knowledge in Nidhal Guessoum's thought remain largely limited to descriptive analyses that outline his views in general terms, without systematically exploring their epistemological foundations and implications for Islamic education.¹² This research seeks to fill that gap by offering a more systematic epistemological analysis, while also examining his contribution to strengthening an integrative paradigm in modern Islamic education.

The research questions of this study focus on how Nidhal Guessoum conceptualizes the relationship between religion and science, the model of integration between religion and science that he proposes, and the implications of his thought for the development of Islamic education in the contemporary era.

Literature Review

Studies on the integration of religion and science constitute one of the central themes in contemporary Islamic epistemological discourse.¹³ Ismail Raji al-Faruqi and Syed Muhammad Naquib al-Attas are among the earliest figures to emphasize the importance of connecting revelation and knowledge within the framework of the Islamization of knowledge.¹⁴ Al-Faruqi developed the concept of the Islamization of Knowledge by positioning *tawhīd* as the integrative foundation of all scientific

⁹ Nidhal Guessoum, *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science* (London: I.B. Tauris, 2011).

¹⁰ Nidhal Guessoum, "Islam and Science: A New Approach," *Zygon* 44, no. 3 (2009): 611–634.

¹¹ Muzaffar Iqbal, *Science and Islam* (Westport, CT: Greenwood Press, 2007).

¹² Ibrahim Moosa, "Knowledge, Authority and Change in Islamic Thought," *Journal of Islamic Studies* 15, no. 1 (2004): 1–25.

¹³ Seyyed Hossein Nasr, *Knowledge and the Sacred* (Albany: State University of New York Press, 1989).

¹⁴ Ismail Raji al-Faruqi, *Islamization of Knowledge: General Principles and Work Plan* (Herndon, VA: International Institute of Islamic Thought, 1982).

disciplines, while al-Attas advanced the concept of ta'dīb as the formation of scholarly adab that integrates Islamic values with rational methodology.¹⁵ Despite their substantial contributions, these two approaches have not fully addressed the epistemological challenges of rapidly developing modern science, particularly in the context of the plurality of contemporary methods and bodies of knowledge.¹⁶

Critically, the Islamization-of-knowledge models proposed by al-Faruqi and al-Attas continue to raise methodological issues that limit the scope of Islamic epistemology. Their approaches tend to be normative and idealistic, positioning revelation as the sole source of truth without providing sufficient space for scientific methodologies that have developed in the West.¹⁷ As a result, epistemological dialogue between religion and science often becomes trapped in a binary dichotomy between "Islamic knowledge" and "Western knowledge."¹⁸ These limitations make the integration of knowledge proposed by both thinkers difficult to implement in contemporary scientific practice, particularly in the fields of education and scientific research that demand empirical and falsification-oriented approaches.¹⁹

Within this context, Nidhal Guessoum introduces a new paradigm that places religion and science in a dialogical and complementary relationship, rather than a subordinate or antagonistic one.²⁰ Nidhal Guessoum is an Algerian Muslim astrophysicist and intellectual known for his rational and critical engagement with the integration of science and Islam. His educational background in astrophysics especially his doctoral studies at the University of California, San Diego, and his postdoctoral research at a NASA Research Center has shaped his deep understanding of modern scientific methodology.²¹ He currently serves as a full professor at the American University of Sharjah. Through his

¹⁵ Syed Muhammad Naquib al-Attas, *Islam and Secularism* (Kuala Lumpur: ISTAC, 1993).

¹⁶ Ziauddin Sardar, *Islam, Science and Cultural Relations* (London: Routledge, 1989).

¹⁷ Wan Mohd Nor Wan Daud, *The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas* (Kuala Lumpur: ISTAC, 1998).

¹⁸ Ebrahim Moosa, "Knowledge, Authority and Change in Islamic Thought," *Journal of Islamic Studies* 15, no. 1 (2004): 1–25.

¹⁹ Ian G. Barbour, *Religion and Science: Historical and Contemporary Issues* (New York: HarperCollins, 1997).

²⁰ Nidhal Guessoum, "Islam and Science: A New Approach," *Zygon* 44, no. 3 (2009): 611–634.

²¹ Nidhal Guessoum, *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science* (London: I.B. Tauris, 2011).

academic and research experience, Guessoum seeks to build an epistemological bridge between Islam and modern science, domains that have long been perceived as separate.

Guessoum's major works, such as *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science* (2011), *Islam, Big Bang et Darwin: Les Questions Qui Fâchent* (2012), and *The Young Muslim's Guide to Modern Science* (2019), demonstrate his consistency in developing an integrative paradigm that is rational and open.²² Guessoum rejects the *i'jâz al-Qur'an* approach, which interprets Qur'anic verses in a scientific manner, arguing that it reduces revelation to empirical theories that are subject to change.²³ He also criticizes al-Faruqi's Islamization-of-knowledge project for being overly methodological and exclusive.²⁴ As an alternative, Guessoum offers an integrative approach grounded in rational dialogue, openness to scientific developments, and an awareness of the epistemological limits of each domain of knowledge.

Guessoum's epistemological paradigm is based on three main principles: non-contradiction, layered interpretation, and theistic falsification.²⁵ The principle of non-contradiction affirms that revelation and science should not be placed in opposition to one another, as both ultimately originate from divine truth. The principle of layered interpretation calls for contextual readings of religious texts in accordance with the development of knowledge and human civilization.²⁶ Meanwhile, theistic falsification emphasizes that science must remain open to empirical testing in accordance with Popperian principles, while still being grounded in a theistic worldview.²⁷ In this framework, science is understood as a rational endeavor to read God's *āyāt kawniyyah* (signs in nature), while religion provides ethical values and moral direction for human life.

Critically, Guessoum's thought can be viewed as a response to the methodological rigidity of Islamization-of-knowledge projects that place

²² Nidhal Guessoum, *The Young Muslim's Guide to Modern Science* (London: I.B. Tauris, 2019).

²³ Nidhal Guessoum, *Islam, Big Bang et Darwin: Les Questions Qui Fâchent* (Paris: Albin Michel, 2012).

²⁴ Muzaffar Iqbal, *Science and Islam* (Westport, CT: Greenwood Press, 2007).

²⁵ Guessoum, *Islam's Quantum Question*, 310–345.

²⁶ Abdullah Saeed, *Interpreting the Qur'an: Towards a Contemporary Approach* (Lon Karl R. Popper, *The Logic of Scientific Discovery* (London: Routledge, 2002).don: Routledge, 2006).

²⁷ Karl R. Popper, *The Logic of Scientific Discovery* (London: Routledge, 2002).

excessive emphasis on “filtering” Western knowledge rather than fostering an egalitarian epistemological dialogue.²⁸ His approach, grounded in scientific rationality and openness to falsification, offers a new horizon for a more empirical and reflective Islamic epistemology.²⁹ Through this approach, Guessoum succeeds in integrating scientific rationality with religious spirituality without negating either.

Thus, this study does not merely describe Guessoum’s thought but positions it as a critical response to normative and closed paradigms of knowledge integration. This inquiry seeks to broaden the horizon of Islamic epistemology toward a model of integration that is dynamic, contextual, and scientific approach that is more compatible with the challenges of modern scholarship while remaining rooted in Islamic values.³⁰

Research Methods

This study adopts a qualitative approach employing a library research design. This methodological choice is appropriate because the primary focus of the research is the critical analysis of Nidhal Guessoum’s thought, which requires systematic exploration, interpretation, and synthesis of relevant textual sources rather than field observation or experimental investigation.³¹ Library research enables an in-depth examination of conceptual frameworks, epistemological assumptions, and theoretical arguments embedded in authoritative texts, making it particularly suitable for philosophical and epistemological studies.

The data sources used in this research consist of both primary and secondary materials. Primary sources include Nidhal Guessoum’s original works, especially *Islam’s Quantum Question: Reconciling Muslim Tradition and Modern Science* (2011), *Islam, Big Bang et Darwin: Les Questions Qui Fâchent* (2012), as well as several peer-reviewed journal articles in which Guessoum articulates his views on science, religion, and epistemology.³² Secondary sources comprise books, scholarly journals,

²⁸ Osman Bakar, *Tawhid and Science* (Kuala Lumpur: Secretariat for Islamic Philosophy and Science, 1991).

²⁹ Mehdi Golshani, *Science and Religion: A Need for Reconciliation* (Tehran: Institute for Humanities and Cultural Studies, 2004).

³⁰ Amin Abdullah, *Islamic Studies in Higher Education in Indonesia* (Yogyakarta: Pustaka Pelajar, 2012).

³¹ John W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed. (Thousand Oaks, CA: Sage Publications, 2018).

³² Nidhal Guessoum, *Islam’s Quantum Question: Reconciling Muslim Tradition*

and academic articles addressing the integration of religion and science, Islamic epistemology, and contemporary Islamic education. To ensure academic rigor and credibility, priority is given to publications indexed in reputable databases such as SINTA, Scopus, and the Web of Science (WoS).³³

Data collection is conducted through purposive sampling, whereby literature is intentionally selected based on its relevance to the research focus on knowledge integration, Islamic epistemology, and educational implications within Guessoum's intellectual framework.³⁴ The literature search is carried out using digital academic databases, including Google Scholar, Scopus, and SINTA, complemented by national journal repositories and manual examination of printed scholarly works. All collected materials are systematically organized and classified according to thematic relevance, year of publication, and their contribution to the analytical objectives of the study.

Data analysis is performed using a descriptive-analytical and hermeneutical approach. The process begins with data reduction, involving the selection and critical filtering of relevant texts. This is followed by data organization, in which key concepts, arguments, and epistemological positions in Guessoum's thought are identified and structured coherently. The final stage consists of verification and interpretation, where the data are critically examined to elucidate the relationship between Guessoum's epistemological paradigm and broader models of knowledge integration in Islamic thought.³⁵ This interpretive process allows the study to move beyond mere description toward analytical depth and theoretical synthesis.

The primary analytical tools employed in this research are content analysis and rational hermeneutical analysis. Content analysis is used to identify patterns, conceptual consistency, and recurring themes in Guessoum's writings, while rational hermeneutics facilitates contextual and critical interpretation of religious and scientific discourses within their epistemological boundaries.³⁶ Data validity is

and Modern Science (London: I.B. Tauris, 2011); Nidhal Guessoum, *Islam, Big Bang et Darwin: Les Questions Qui Fâchent* (Paris: Albin Michel, 2012).

³³ Barbara M. Wildemuth, *Applications of Social Research Methods to Questions in Information and Library Science* (Westport, CT: Libraries Unlimited, 2009).

³⁴ Michael Quinn Patton, *Qualitative Research & Evaluation Methods*, 4th ed. (Thousand Oaks, CA: Sage Publications, 2015).

³⁵ Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 4th ed. (Thousand Oaks, CA: Sage Publications, 2020).

³⁶ Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 4th

ensured through source triangulation, achieved by cross-examining primary and secondary sources to enhance the accuracy, objectivity, and credibility of the interpretations.³⁷ This methodological rigor ensures transparency and supports the replicability of the research findings, in line with the standards of reputable academic research.

Results and Discussions

Intellectual Profile of Nidhal Guessoum

Nidhal Guessoum sometimes written in the literature as Nidhal Qassum is a globally recognized Muslim scientist, particularly noted for his contributions to education and the discourse on Islam and science. Several sources, including Indonesian authors such as Soleh, state that Nidhal Guessoum was born in Algiers on 6 September 1960, while other references simply mention Algeria; both refer to the same geographical context.³⁸ He is an astrophysicist, academic, and Muslim intellectual whose scholarly career has been deeply devoted to education, astrophysical research, and sustained dialogue between science and Islam, which has become a distinctive hallmark of his intellectual work.³⁹ Guessoum explicitly asserts that “science and religion must engage in a constructive dialogue without mutual exclusion,”⁴⁰ a principle that has profoundly shaped the direction and motivation of his research agenda.

Guessoum pursued higher education in physics and astrophysics, earning his doctoral degree (Ph.D.) in astrophysics from the University of California, San Diego (UCSD), United States. He is currently a Professor of Astrophysics at the American University of Sharjah, United Arab Emirates.⁴¹ His formal scientific training provided him with an in-depth understanding of modern science, particularly in cosmology,

ed. (Thousand Oaks, CA: Sage Publications, 2019).

³⁷ Norman K. Denzin, *The Research Act: A Theoretical Introduction to Sociological Methods* (New York: McGraw-Hill, 2017).

³⁸ Muhammad Fahmi, Achmad Khudori Soleh, dan Lia Cahyati, “The Concept of Religion-Science Integration: A Comparative Study of Naquib Al-Attas and Nidhal Guessoum,” *DINIKA : Academic Journal of Islamic Studies*, 9.2 (2024), hlm. 151–72.

³⁹ Achmad Khudori Soleh, “Pendekatan Kuantum Dalam Integrasi Agama Dan Sains Nidhal Guessoum,” *ULUL ALBAB Jurnal Studi Islam*, 19.1 (2018), hlm. 119.

⁴⁰ Husni Mubarak dan Amril Mansur, “Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum,” *Jurnal Penelitian Ilmu Pendidikan Indonesia*, 2.3 (2023), hlm. 296–305 <<https://jpion.org/index.php/jpi296> Situs web jurnal: <https://jpion.org/index.php/jpi>>.

⁴¹ Muhammad Fahmi, Achmad Khudori Soleh, dan Lia Cahyati, “The Concept of Religion-Science Integration: A Comparative Study of Naquib Al-Attas and Nidhal Guessoum,” *DINIKA : Academic Journal of Islamic Studies*, 9.2 (2024), hlm. 151–172.

astrophysics, and quantum mechanics. After completing his doctoral studies, Guessoum undertook postdoctoral research at a NASA Research Center in the United States between 1988 and 1990. Subsequently, he returned to his home country and served as a lecturer at the University of Blida, Algeria (1990–1994). From 1994 to 2000, he worked as an assistant professor at the College of Technological Studies in Kuwait. In 2000, he moved to the United Arab Emirates and, in 2008, was appointed full professor at the American University of Sharjah, Department of Physics, Faculty of Arts and Sciences.⁴²

Among his most influential scholarly works, *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science* is arguably the most widely known, including in Indonesia. In addition, Guessoum has authored several other significant books, such as *Islam, Big Bang et Darwin: Les Questions Qui Fâchent*, *Islam et Science: Comment Concilier le Coran et la Science Moderne*, and *Réconcilier l'Islam et la Science Moderne*.⁴³ He has also published important journal articles, including "The Qur'an, Science, and the (Related) Contemporary Muslim Discourse," which emphasizes the crucial role of hermeneutics in bridging the gap between the Qur'an as a text with a stable, transcendent character and science as a dynamic and evolving body of knowledge.⁴⁴ Through these works, Guessoum has sought to build an epistemic reconciliation between Islamic tradition and modern science.⁴⁵ His intellectual project aims to establish an epistemological bridge between revelation, reason, and the natural world through rational and empirical approaches, highlighting the importance of rational hermeneutics in mediating the relationship between transcendent revelation and dynamic scientific knowledge.

As a Muslim scientist, Nidhal Guessoum consistently seeks to integrate Islam with modern science through a rational, evidence-based

⁴² Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁴³ Fahmi, Soleh, dan Cahyati, "The Concept of Religion-Science Integration: A Comparative Study of Naquib Al-Attas and Nidhal Guessoum."

⁴⁴ Qowim Musthofa, "Al-Qur'an dan Filsafat Ilmu Pengetahuan: Studi Pemikiran Nidhal Guessoum," *An-Nur: Jurnal Studi Islam*, 13.1 (2021), hlm. 60 <<https://jurnalannur.ac.id/index.php/An-Nur/article/view/103>>.

⁴⁵ Nur Rofiq dan M. Zidny Nafi' Hasbi, "Mendamaikan Tradisi Muslim dan Ilmu Pengetahuan Modern: Kajian Eksploratif Pemikiran Nidhal Guessoum Nur Rofiq Universitas Tidar / nurrofiq@untidar.ac.id M. Zidny Nafi' Hasbi," *Al-Irfan: Journal of Arabic Literature and Islamic Studies*, 4.2 (2021), hlm. 203–216.

framework.⁴⁶ His thought offers an alternative pathway for Muslims to understand and respond to scientific developments without sacrificing their religious identity.⁴⁷ He has made significant contributions to the fields of science and religion, education, and public understanding of science.⁴⁸ In the late 1990s, Guessoum began to engage more intensively with issues of science, religion, and philosophy.⁴⁹ He systematically explored Western perspectives on science and religion, reading key figures such as Ian Barbour, Arthur Peacocke, John Polkinghorne, and Michael Ruse, while also revisiting the Islamic philosophical tradition through thinkers such as al-Ghazālī, Ibn Rushd, Muhammad Iqbal, and Seyyed Hossein Nasr. In 2000, together with his colleague Karim Meziane, Guessoum conducted comparative research examining three variables: cosmology as developed by medieval Muslim philosophers, contemporary Islamic thought, and modern scientific cosmology.⁵⁰ This research enabled him to analyze Islam and cosmology from multiple perspectives and informed his broader reflections on the integration of religion and science in the modern context.⁵¹

Consistent with this intellectual trajectory, Guessoum has been an active and prolific writer. He has published books on science, religion, and education in several languages, including *The Story of the Universe* (Arabic, first edition 1997), *Islam's Quantum Question* (English, 2010; translated into multiple languages), and *The Young Muslim's Guide to Modern Science* (English, 2019; also translated into several languages).⁵² In addition, he has authored numerous academic and popular articles, some indexed in Scopus and Web of Science, and he actively disseminates his ideas through various academic and public platforms

⁴⁶ Muhammad Sulaiman, "Integrasi Agama Islam Dan Ilmu Sains Dalam Pembelajaran," *PANCAWAHANA: Jurnal Studi Islam* Vol.15, 15.1 (2020), hlm. 96–110.

⁴⁷ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁴⁸ Dahlan, Veni Sofia, dan Syaiful Dinata, "Nidhal Gousscum: Integrasi Agama Dan Sains," *Jurnal Dinamika Sosial dan Sains*, 2.3 (2025), hlm. 626–633.

⁴⁹ Nidhal Guessoum, "Science, religion, and the quest for knowledge and truth: An Islamic perspective," *Cultural Studies of Science Education*, 5.1 (2010), hlm. 55–69.

⁵⁰ Abdulloh Hanif, "Pembacaan Ilmiah Al-Qur'an: Kritik Nidhal Guessoum Atas Teori I'jaz," *KACA (Karunia Cahaya Allah): Jurnal Dialogis Ilmu Ushuluddin*, 12.2 (2022), hlm. 205–226.

⁵¹ Rofiq dan Hasbi, "Mendamaikan Tradisi Muslim dan Ilmu Pengetahuan Modern : Kajian Eksploratif Pemikiran Nidhal Guessoum Nur Rofiq Universitas Tidar / nurrofiq@untidar.ac.id M . Zidny Nafi ' Hasbi."

⁵² Rofiq dan Hasbi, "Mendamaikan Tradisi Muslim dan Ilmu Pengetahuan Modern : Kajian Eksploratif Pemikiran Nidhal Guessoum Nur Rofiq Universitas Tidar / nurrofiq@untidar.ac.id M . Zidny Nafi ' Hasbi."

such as Google Scholar⁵³, ResearchGate⁵⁴, and YouTube⁵⁵.

Overall, Nidhal Guessoum's body of work demonstrates a strong commitment to bridging the Islamic intellectual tradition with the advances of modern science. With a solid academic background in the natural sciences, he occupies a distinctive position among Muslim intellectuals, as he engages not only at the philosophical or theological level but also with a deep technical and methodological understanding of science itself.⁵⁶ Like many influential thinkers, his ideas have also attracted criticism, reflecting the broader impact and significance of his contributions.

In clear terms, Guessoum's epistemological approach represents a synthesis of scientific rationalism and Islamic spirituality. He critically examines approaches such as *i'jāz al-Qur'an* (scientific miracle narratives) and certain models of the Islamization of knowledge that he considers overly apologetic. Instead, he proposes a dialogical model in which science and revelation can mutually enrich one another without hierarchical subordination. This perspective opens new possibilities for applying an integrative paradigm within contexts such as Islamic education in Indonesia, particularly in the development of curricula that balance empirical scientific competence with theological and ethical awareness.

Thus, this section not only presents the academic profile of Nidhal Guessoum but also positions him as a representative of a new epistemological orientation in the study of knowledge integration one that can be adapted and developed in accordance with the needs of Islamic educational systems in Indonesia.

Epistemological Paradigm in the Thought of Nidhal Guessoum

In examining the relationship between revelation and science, Guessoum rejects the claim of Qur'anic *i'jāz* as advanced by Zaghlul al-Najjar. According to him, attempts to equate Qur'anic verses directly with scientific theories risk reducing revelation to provisional empirical facts. Science is falsifiable and subject to change as research advances,

⁵³ Nidhal Guessoum, "Nidhal Guessoum American University Of Sharjah" <<https://scholar.google.com/citations?user=D34S80QAAAAJ&hl=en>>.

⁵⁴ Nidhal Guessoum, "Nidhal Guessoum's Lab" <<https://www.researchgate.net/profile/Nidhal-Guessoum>>.

⁵⁵ Nidhal Guessoum, "NidhalG" <<https://www.youtube.com/@NidhalG>>.

⁵⁶ Nadhila Mastura dkk., "Jurnal Pendidikan dan Pemikiran Islam," *Jurnal Pendidikan dan Pemikiran Islam*, 20.1 (2025), hlm. 1717-1726.

whereas revelation is absolute. For this reason, he proposes a multilevel reading (layered interpretation), namely understanding Qur'anic verses in accordance with the cultural horizon, scientific knowledge, and historical context of their time.⁵⁷

Guessoum's epistemological paradigm rests on three main principles: non-contradiction (religion and science do not inherently conflict), layered interpretation, and theistic falsifiability. The first principle ensures that science and religion should not be positioned in a state of permanent conflict; the second opens space for dynamic reinterpretation of religious texts; and the third affirms that science must adhere to Popperian falsifiability while remaining grounded in theistic values.⁵⁸ Guessoum thus promotes a "theistic science" as well as a theology of nature.⁵⁹ Through this framework, he seeks to construct an epistemic reconciliation that goes beyond mere compromise, offering instead an alternative paradigm that enables constructive dialogue between revelation and modern science.⁶⁰

The epistemological paradigm developed by Nidhal Guessoum is grounded in the conviction that science and religion should not be set in opposition to one another. He views both as paths of knowledge oriented toward the same goal: the pursuit of truth. Within this framework, Guessoum rejects a sharp dichotomy between modern science and Islamic theology and offers a middle path that integrates scientific methodology with religious spirit.⁶¹

The approach he proposes later became known as the quantum approach, which emphasizes the principles of non-contradiction, layered interpretation, and theistic falsifiability. Through these principles, epistemological integration becomes dynamic, open to revision, and continuously evolving.⁶² Consequently, the epistemology constructed by Guessoum is oriented toward dialogue among revelation, reason, and

⁵⁷ Hanif, "Pembacaan Ilmiah Al-Qur'an: Kritik Nidhal Guessoum Atas Teori I'jaz."

⁵⁸ Soleh, "Pendekatan Kuantum Dalam Integrasi Agama Dan Sains Nidhal Guessoum."

⁵⁹ Nidhal Guessoum, "Issues and agendas of islam and science," *Zygon*, 47.2 (2012), hlm. 367–387.

⁶⁰ Zulpa Makiah, "Rekonsiliasi Islam Dan Sains Dalam Perspektif Nidhal Guessoum," *Khazanah: Jurnal Studi Islam dan Humaniora*, 19.1 (2021), hlm. 61.

⁶¹ Soleh, "Pendekatan Kuantum Dalam Integrasi Agama Dan Sains Nidhal Guessoum."

⁶² Rüdiger Lohker dan Margareta Wetchy, "Colliding Epistemologies: Reflections on Nidhal Guessoum," *JRAT (Interdisciplinary Journal for Religion and Transformation in Contemporary Society)*, 7.2 (2021), hlm. 426–446.

empirical reality as a unified and mutually reinforcing whole.

Guessoum's epistemological paradigm is strongly influenced by the thought of Ibn Rushd (Averroes).⁶³ He admires Ibn Rushd's effort to reconcile religion and philosophy and to treat them as "bosom sisters." This principle asserts that religion and science can never truly conflict, since both ultimately derive from God: revelation as *āyāt qawliyyah*, nature as *āyāt kawniyyah*, and reason as a divine gift.

Within his epistemological framework, Guessoum rejects the view that treats revelation as a scientific textbook, and he likewise rejects scientism that excludes revelation from the domain of rationality. Guessoum emphasizes that "Islamic thought must embrace scientific reasoning while remaining faithful to revelation," reflecting the necessity of integrating reason and revelation. Accordingly, he proposes a rational and contextual approach built upon three main pillars:⁶⁴

1. Non-contradiction: there is no conflict between revelation, reason, and nature;
2. Layered interpretation: understanding Qur'anic verses in light of context, historical period, and the intellectual level of the reader;
3. Theistic falsification: accepting Popperian scientific methodology within a theistic metaphysical framework, wherein scientific truth remains grounded in the oneness of God.

Nidhal Guessoum highlights the metaphysical dimension of science as an issue concerning the epistemic boundaries between science, philosophy, and religion. He rejects scientism, which claims that science can explain all aspects of reality, and instead offers the concept of theistic science that integrates belief in God within the rational framework of modern science. This view resonates with Mehdi Golshani, who argues that theistic science can serve as an alternative to secular science and as a response to ethical, social, and environmental crises in the scientific world.⁶⁵ This paradigm demonstrates that science and religion are two distinct yet mutually reinforcing paths in the search for truth: religion provides value orientation and purpose, while science uncovers the mechanisms of God's creation. Through this paradigm, Guessoum rejects both textual extremism and scientific secularism.

⁶³ Nidhal Guessoum, "The Qur' An , Science , And The (Related) Contemporary Muslim Discourse by Nidhal Guessoum," *Zygon*, 43.2 (2008), hlm. 411–432.

⁶⁴ Mastura dkk., "J. Pendidik. dan Pemikir. Islam."

⁶⁵ Makiah, "Rekonsiliasi Islam Dan Sains Dalam Perspektif Nidhal Guessoum."

The Concept of the Integration of Religion and Science from Nidhal Guessoum's Perspective

Guessoum rejects the project of Islamization of knowledge as proposed by Ismail Raji al-Faruqi, arguing that it is methodologically rigid and risks positioning Islam in a passive role under Western hegemony. According to him, filtering knowledge based on labels such as "Islamic" or "non-Islamic" contradicts the cosmopolitan spirit of classical Islamic civilization.⁶⁶ Instead, Guessoum suggests "Islamizing Western thought" by incorporating Islamic ethical and moral values (ta'dīb) and theistic principles.⁶⁷

As an alternative, he proposes a quantum integration model. First, religion and science are viewed as complementary rather than mutually negating. Second, the Qur'an is positioned as a source of moral guidance, not as an encyclopedia of science. Third, integration is pursued through strong scientific education in the Muslim world and sustained dialogue between religious scholars and scientists.⁶⁸

When compared with other thinkers, significant differences emerge. Naquib al-Attas emphasizes the Islamization of knowledge and moral-ethical formation through ta'dīb. By contrast, Guessoum stresses the compatibility of science and religion through layered interpretation and theistic falsifiability. The only common ground between the two lies in their shared rejection of extreme secularization.⁶⁹

The concept of integrating religion and science proposed by Guessoum thus differs fundamentally from earlier Islamization models. He emphasizes that revelation is not a scientific textbook but a guide for life that inspires the development of knowledge. Therefore, the relationship between sacred texts and modern science must be situated within a framework of complementary dialogue rather than mutual negation.⁷⁰

Within this perspective, science provides critical methodology and empirical evidence, while religion offers value orientation and meaning. Their integration is realized through mechanisms of layered

⁶⁶ Mastura dkk., "J. Pendidik. dan Pemikir. Islam."

⁶⁷ Fahmi, Soleh, dan Cahyati, "The Concept of Religion-Science Integration: A Comparative Study of Naquib Al-Attas and Nidhal Guessoum."

⁶⁸ Dahlan, Veni Sofia, dan Dinata, "Nidhal Gousscum: Integrasi Agama Dan Sains."

⁶⁹ Fahmi, Soleh, dan Cahyati, "The Concept of Religion-Science Integration: A Comparative Study of Naquib Al-Attas and Nidhal Guessoum."

⁷⁰ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

interpretation and openness to falsification, allowing religion to remain relevant without losing its identity, and science to advance without being detached from ethical values.⁷¹ Consequently, integration in Guessoum's view is not merely a compromise but an alternative paradigm that enables constructive dialogue between revelation and modern science. Guessoum critically rejects two popular approaches in the contemporary Muslim world:

1. The Qur'anic I'jāz Model of Zaghlul al-Najjar, which seeks to interpret every Qur'anic verse scientifically and present it as proof of modern scientific truth. According to Guessoum, this method is trivial and non-fundamental, and it risks subordinating revelation to empirical theories that are inherently provisional.
2. The Islamization of Knowledge Model of Ismail Raji al-Faruqi, which is considered overly methodological and inclined to render Islam passive under Western intellectual dominance. The project of categorizing knowledge as "Islamic" or "non-Islamic" contradicts the cosmopolitan ethos of classical Islamic civilization.

As an alternative, Guessoum offers the quantum approach, a dialogical model of integration between religion and science based on three principles:⁷²

1. Non-Contradiction: Religion, philosophy, and science are three branches originating from a single divine source of truth and therefore must not be set in opposition to one another.
2. Layered Interpretation: Qur'anic interpretation is conducted in accordance with rational capacity and cultural context, thereby opening space for dialogue between revelation and science without imposing a single, rigid interpretation.
3. Theistic Falsification: Scientific methodology is applied rigorously, yet within a theistic worldview that acknowledges God as the source of cosmic order.

This approach allows religion and science to proceed side by side: science explains how nature works, while religion explains why and for what purpose humans should understand it. Thus, integration according to Guessoum is neither subordination nor compromise, but an epistemic

⁷¹ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁷² Lohlker dan Wetchy, "Colliding Epistemologies: Reflections on Nidhal Guessoum."

reconciliation that is mutually enriching. This relationship can be illustrated in the following comparative table:

Comparative Table of Thought

| Aspect of Comparison | Syed M. Naquib al-Attas | Ismail Raji al-Faruqi | Nidhal Guessoum |
|--------------------------------|--|--|--|
| Primary Focus | Formation of intellectual <i>adab</i> and Islamization of knowledge based on <i>ta'dīb</i> . | Islamization of knowledge through restructuring scientific disciplines grounded in <i>tawhīd</i> . | Dialogical integration of religion and science through rational and empirical approaches. |
| Epistemological Foundation | Knowledge derives from revelation and reason, both subordinated to divine truth. | <i>Tawhīd</i> as the principle of unity of knowledge and scientific ethics. | Rational-theistic: revelation and science operate harmoniously without contradiction. |
| Methodological Approach | Normative-philosophical, emphasizing the Islamization of Western concepts. | Reconstructive-systematic reform of modern sciences to align with Islamic values. | Descriptive-empirical and hermeneutical; rejects Qur'anic <i>i'jāz</i> and scientism. |
| Attitude toward Modern Science | Critical of Western secularism, selectively receptive. | Adaptive but requires reorientation toward Islamic values. | Acceptive and dialogical; embraces modern scientific methodology rationally. |
| Ultimate Goal | Formation of morally cultivated and knowledgeable individuals based on Islamic <i>adab</i> . | Integration of Islamic and modern sciences within the educational system of the Muslim community. | Epistemic reconciliation between religion and science for the advancement of the Muslim community and Islamic education. |

A Critical Analysis of Nidhal Guessoum's Thought

Guessoum's thought can be categorized into four typologies: perennial, essentialist, contextual, and falsificationist, which

affirm that the search for universal truth is the result of continuity between earlier generations and their successors, who continuously develop values in accordance with advances in science and technology as well as social change.⁷³ This perennial-essentialist-contextual-falsificationist typology describes a mode of thought grounded in universal and enduring truths (perennial), committed to preserving the core or essence of those truths (essentialist), yet adaptive to social and cultural contexts and developments in modern science (contextual), while also allowing space for rational testing and correction through scientific approaches (falsificationist). In this framework, scientific methodology must be accompanied by a theistic worldview or divine values.

Nidhal Guessoum's intellectual path reflects a remarkably coherent vision. From his own writings, it is evident that the foundation of his thought is strongly influenced by his intellectual idol, Ibn Rushd (Averroes).⁷⁴ Guessoum deeply admires Ibn Rushd, and as a result, his intellectual trajectory and patterns of reasoning closely resonate with those found in Ibn Rushd's scholarly works. Epistemologically, Guessoum's thought possesses several strengths:⁷⁵

1. It encourages Muslims to embrace modern science openly without losing their faith.
2. It offers a more scientifically grounded alternative to Qur'anic i'jāz claims or projects of Islamization of knowledge.
3. It is relevant for addressing the intellectual crisis in the Muslim world, marked by limited scientific publications and lagging research and patent development.

Nevertheless, several weaknesses have also been identified:⁷⁶

1. Some critics argue that his approach is overly "rationalist" or "Western-centered."
2. There is a potential marginalization of classical exegetical authority due to the emphasis on modern hermeneutics.

⁷³ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁷⁴ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁷⁵ Musthofa, "Al-Qur'an dan Filsafat Ilmu Pengetahuan: Studi Pemikiran Nidhal Guessoum."

⁷⁶ Mastura dkk., "J. Pendidik. dan Pemikir. Islam."

3. Traditionalist Muslim scholars criticize his approach as being overly conciliatory toward Western scientific paradigms.

Overall, Guessoum's thought represents a significant contribution to contemporary Islamic intellectual discourse. He has successfully developed an integrative, rational, and open paradigm that encourages Muslims to accept modern science without compromising their faith. His quantum integration approach offers a middle path between religious literalism and secular scientism, while also providing a strong methodological foundation for reconstructing the philosophy of science in Islam.⁷⁷

However, critical responses persist. Some scholars view Guessoum's approach as excessively "philosophical-rationalist" and too closely aligned with Western scientific paradigms, potentially weakening the authority of Islamic tradition and leaving insufficient space for spiritual and intuitive dimensions of religious experience.⁷⁸ Traditionalist circles, in particular, argue that his emphasis on modern hermeneutics risks obscuring the authority of classical Qur'anic interpretation.⁷⁹ On the one hand, Guessoum's ideas create meaningful space for reconciliation between modern science and Islam through a fresh epistemological approach. He succeeds in opening new intellectual horizons by positioning science and religion as complementary domains. On the other hand, despite his proposal of layered interpretation, hermeneutical challenges especially in dealing with Qur'anic verses that appear to conflict with scientific findings have not been fully resolved. Even so, Guessoum's thought remains highly significant for fostering constructive dialogue between Islam and science. His contribution lies in offering a rational, open, and progress-oriented model of dialogue that continues to enrich contemporary Islamic scholarship.

The Relevance of Guessoum's Thought to Islamic Education and Knowledge in the Contemporary Era

The integrative paradigm developed by Guessoum is not only relevant but can also serve as a conceptual model for reshaping the direction of Islamic education in Indonesia, particularly in fostering

⁷⁷ Hanif, "Pembacaan Ilmiah Al-Qur'an: Kritik Nidhal Guessoum Atas Teori I'jaz."

⁷⁸ Lohker dan Wetchy, "Colliding Epistemologies: Reflections on Nidhal Guessoum."

⁷⁹ Ebrahim Moosa, "Nidhal Guessoum, Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science. London and New York: I.B. Tauris, 2011. Pp. xxvi+403. ISBN 978-1-84885-518-2. £16.99 (paperback).," *The British Journal for the History of Science*, 46.4 (2013), hlm. 736-738.

epistemological integration between science and religious values. He emphasizes that Islamic education must not be stagnant; rather, it should remain progressive by continuously opening space for reconstruction and the development of knowledge.⁸⁰ This principle aligns with ongoing curriculum reform initiatives at State Islamic Higher Education Institutions (Perguruan Tinggi Keagamaan Islam Negeri / PTKIN) such as UIN Sunan Kalijaga and UIN Maulana Malik Ibrahim Malang, which have implemented the “integration–interconnection” and *ulul albab* models. Guessoum’s Scientific and Rational Islam paradigm can strengthen these models through the application of a rational scientific approach grounded in *tawhīd* values.

In the context of secondary education and modern Islamic boarding schools (*pesantren*), Guessoum’s approach can be implemented through the strengthening of science literacy rooted in Qur’anic values. For example, the teaching of astronomy and biology may be linked to *āyāt kawniyyah* as a form of spiritual–scientific internalization, rather than mere textual memorization.

Accordingly, Guessoum’s paradigm provides a new direction for renewing the epistemology of Islamic education in Indonesia: a shift from structural integration toward epistemological integration. It reorients Islamic education from the “synchronization of disciplines” to the “reconciliation of ways of thinking” among revelation, reason, and nature.⁸¹ Moreover, Guessoum’s thought is not merely relevant but also practically applicable as a pedagogical framework for cultivating scientific thinking that remains firmly rooted in Islamic spirituality.

The integration of religion and science that he proposes can serve as a foundational framework for an Islamic educational curriculum that balances mastery of empirical sciences with the internalization of spiritual and metaphysical values. This approach corresponds to the demands of the contemporary global era, in which Muslims are expected to confront challenges such as biotechnology, environmental crises, and pandemics through scientific approaches grounded in religious ethics. In this sense, Guessoum’s thought is highly relevant as a foundation for Islamic education capable of producing a generation of Muslims who are critical, rational, and deeply religious.

⁸⁰ Mubarak dan Mansur, “Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum.”

⁸¹ Guessoum, “Science, religion, and the quest for knowledge and truth: An Islamic perspective.”

First, scientific literacy must be strengthened within the curriculum so that Muslims are not trapped in pseudo-science or misguided i'jāz claims.⁸² Second, PTKIN institutions in Indonesia can adopt a model of critical integration that places science alongside philosophy of science and contextual Qur'anic interpretation, in line with the interdisciplinary principles advocated by Guessoum. Within this framework, the concept of theistic falsification may function as a methodological foundation for science education, reinforcing both empirical reasoning and spiritual awareness among learners.⁸³ Third, the discourse on knowledge integration in Indonesiadeveloped within UINs, IAINs, and other PTKIN institutionsresonates with Guessoum's rejection of both disciplinary dichotomy and oversimplified integration. His model of critical integration can be adapted to strengthen interdisciplinary education that bridges Qur'anic interpretation, philosophy, and the natural sciences.⁸⁴ Thus, Guessoum's ideas are not only meta-theoretically relevant but also practically applicable in shaping Islamic education that is responsive to modern science without losing its transcendent values.⁸⁵

Nidhal Guessoum is also attentive to emerging trends in science and theology, as well as to various misconceptions among modern Muslim intellectuals regarding evolutionary theory and creation narratives, particularly immature forms of opposition to evolution.⁸⁶ He rejects such apologetic approaches and instead seeks to explain evolutionary theory within a rational theistic framework that remains consistent with the principles of faith.

Nidhal Guessoum menyadari munculnya *trend* baru dalam ilmu pengetahuan dan teologi, serta berbagai kekeliruan yang berkembang di kalangan intelektual Muslim modern terkait teori evolusi dan narasi penciptaan yang belum matang dalam menentanginya. Ia menolak

⁸² Dahlan, Veni Sofia, dan Dinata, "Nidhal Gousscum: Integrasi Agama Dan Sains."

⁸³ Mubarak dan Mansur, "Integrasi Sains dengan Agama dan Pemikiran Pendidikan Islam Prespektif Nidhal Guessoum."

⁸⁴ Rofiq dan Hasbi, "Mendamaikan Tradisi Muslim dan Ilmu Pengetahuan Modern : Kajian Eksploratif Pemikiran Nidhal Guessoum Nur Rofiq Universitas Tidar / nurrofiq@untidar.ac.id M. Zidny Nafi ' Hasbi."

⁸⁵ Zainal Abidin Bagir, "Nidhal Guessoum ' s Reconciliation of Islam and Science," *Zygon*, 47.2 (2012), hlm. 343–353.

⁸⁶ Andi; Holilulloh dan Fouad Larhizer, "The Islamization of Knowledge: Telaah Pemikiran Nidhal Guessoum dan Ismail al-Faruqi," *Alfikr*, XVII (2020), hlm. 53–62 <<https://media.neliti.com/media/publications/556998-the-islamization-of-knowledge-4b5fbbf6.pdf>>.

pendekatan apologetik semacam itu, dan berupaya menjelaskan teori evolusi dalam kerangka teistik yang rasional dan sejalan dengan prinsip keimanan.⁸⁷

Another dimension of the relevance of Guessoum's thought appears in the context of globalization and contemporary moral crises.⁸⁸ For Guessoum, one of the main reasons scientists and philosophers engage in ambitious yet controversial projects is that modern science, by itself, fails to uncover meaning behind its discoveries. He identifies the emergence of what he calls a "new generation of harmonizers," namely Muslim scientists such as Mehdi Golshani, Basil Altaie, Bruno Guiderdoni, and Guessoum himself, who seek to harmonize theistic belief with the findings and methods of contemporary science.⁸⁹

Islamic education oriented toward the integration of knowledge thus not only produces religious scientists but also cultivates societies capable of responding to challenges in technology, biotechnology, and environmental crises with a high level of ethical consciousness.⁹⁰ In this way, Guessoum's integrative paradigm offers a new direction for the renewal of Islamic education in the era of modern science and digitalization.

Ultimately, Guessoum's ideas do not merely seek to establish harmony between religion and science; they also open pathways for epistemological reform in Islamic education, making it more adaptive to the challenges of biotechnology, artificial intelligence, and digital science in the twenty-first century.

Conclusion

This study concludes that Nidhal Guessoum's thought on the integration of religion and science offers an epistemological paradigm that is rational, dialogical, and open to the development of modern scientific knowledge. Through the framework of Scientific and Rational

⁸⁷ Moosa, "Nidhal Guessoum, Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science. London and New York: I.B. Tauris, 2011. Pp. xxvi+403. ISBN 978-1-84885-518-2. £16.99 (paperback)."

⁸⁸ Muhammad Solikhudin, "Rekonsiliasi Tradisi Muslim Dan Sains Modern Telaah atas Buku Islam's Quantum Question Karya Nidhal Guessoum," *Kontemplasi: Jurnal Ilmu-Ilmu Ushuluddin*, 4.2 (2016).

⁸⁹ Ahmad Zainor Rozikin, Ahidul Asror, dan Subakri Subakri, "Mendamaikan Agama Dan Sains: (Telaah Pemikiran Teori Quantum Nidhal Guessoum)," *Instructional Development Journal*, 7.3 (2024), hlm. 555.

⁹⁰ Nidhal Guessoum, "Reviews on Religion and Science around the World," *Zygon*, 50.4 (2015), hlm. 854–876.

Islam, Guessoum articulates three core principles: the non-contradiction between revelation and science, layered interpretation, and theistic falsification. This paradigm affirms that religion and science are not opposing entities but rather complementary domains that together contribute to a deeper understanding of divine reality and the universe.

The novelty of this research lies in its epistemological approach to interpreting the integration of knowledge within Guessoum's thought. This approach has not been extensively explored in previous studies and provides a theoretical contribution to the development of Islamic epistemology as well as to integrative paradigms in Islamic education. Nevertheless, an important research gap remains in the concrete application of Guessoum's paradigm within formal educational systems and science literacy grounded in religious values. Therefore, future research should be directed toward empirical and comparative studies in order to broaden the contribution of Guessoum's ideas to strengthening the dialogue between religion and science in the contemporary Muslim world.

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