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Reconciling Knowledge: A Comparative Analysis of Amin Abdullah's Integration-Interconnection Paradigm and Syed Naquib Al-Attas's Islamization of Science

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Abstract

This study explores Prof. Dr. Amin Abdullah's Integration-Interconnection paradigm, which seeks to reconcile religious and secular sciences in Islamic educational contexts, particularly within Indonesian universities. While Abdullah's model emphasizes the harmonious integration of diverse scientific domains through a metaphorical "Spider Web of Knowledge," this paper critiques the paradigm using Syed Muhammad Naquib al-Attas's Islamization of Science perspective. Al-Attas argues for a selective integration that eliminates secular influences incompatible with Islamic principles, a view that contrasts with Abdullah's more inclusive approach. This research critically analyzes these two frameworks to assess their efficacy in addressing Islamic academia's contemporary challenges. Findings suggest that critical filtering of secular knowledge may enhance the Islamic identity in scientific scholarship.

Keywords: *Integration-Interconnection, Islamization Of Science, Amin Abdullah, Syed Muhammad Naquib Al-Attas, Spider Web Of Knowledge*

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Introduction

The transition from the Renaissance to various revolutionary phases in human civilization, such as the Agricultural, Industrial, and Information Revolutions has led to a scientific dichotomy in which religion is separated from scientific and everyday life (Muhammad, 2002). This separation has coincided with a significant decline in the Islamic world, which, unlike the Western world, did not experience the same advancements in secularized modern science. Numerous Muslim scholars have engaged with ideas to address the decline of science development in the Islamic world, among them Prof. Dr. Syed Muhammad Naquib al-Attas with his concept of the Islamization of Science, Ismail Raji al-Faruqi with a similar Islamization approach, Seyyed Hossein Nasr with his focus on Sacred Science, Ziauddin Sardar with his concept of *Ijmali* (Integral Knowledge), and various Indonesian scholars who advocate for integrating science within an Islamic framework.

In Indonesia, one prominent scholar addressing the dichotomy between secular science and religion is Prof. Dr. Amin Abdullah. Abdullah argues that Islam must be understood in two dimensions: normativity and historicity. The normative dimension emphasizes the teachings of revelation in religious texts, while the historical dimension relates to how individuals or groups interpret and apply religious principles in their daily lives (Abdullah, 2004). In *Islamic Studies in Higher Education: Integrative-Interconnected Approach*, Abdullah describes the relationship between non-religious scientific disciplines as a "scientific spider web," illustrating the active and dynamic interplay among various scientific fields. This integrative-interconnective model proposes that scientific disciplines should not exist in isolation but in a network of interrelations (Abdullah, 2007). However, Abdullah's integration-interconnection model is not without its limitations. In response, the author seeks to critique these shortcomings by considering them from the perspective of al-Attas' Islamization of Science.

Method

This study adopts a qualitative research approach, combining document analysis with a critical comparative framework to examine the Integration-Interconnection paradigm alongside the Islamization of Science perspective. Primary sources include Amin Abdullah's writings on scientific integration and Naquib al-Attas's texts on Islamization. Secondary sources involve scholarly critiques and interpretations of both theories in academic literature. The study systematically identifies similarities and differences between the two paradigms by conducting a thematic analysis of these texts, focusing on their underlying epistemological assumptions and practical applications in Islamic higher education. This comparative method comprehensively explains each approach's strengths and limitations in reconciling religious and secular knowledge.

Results and Discussion

Concept of Integration-Interconnection

The discourse on integrating knowledge has been widely advanced through the contributions of prominent Muslim scholars, notably Prof. Amin Abdullah. Abdullah is a pioneer in integrating science and religion, providing a paradigm model exemplified at UIN Sunan Kalijaga Yogyakarta with his metaphor of the "Spider's Web."

The historical separation between science and religion, particularly in university settings, inspired Amin Abdullah to propose a new scientific approach for religious institutions, especially at UIN Sunan Kalijaga Yogyakarta (Abdullah, 2004). He advocates for a review of the traditional academic paradigm, which has primarily separated general science and religion for the past fifty years. According to Abdullah, scientific development must shift towards a new, holistic-integralistic model (Abdullah, 2004).

Etymologically, "integration" means blending elements to form a complete and unified whole (2022). In this context, integration implies a connection and unification between two or more elements, specifically combining science and religion, reason and revelation, much like during the Golden Age of Islam when science and religion were harmoniously intertwined (Abidin, 2005). Another perspective defines integration as an effort to reconcile science, which provides scope for human reasoning (secularism), while also preserving space for divine guidance and revelation (Kuntowijoyo, 2006). Scientific integration thus encompasses a perspective that connects natural sciences, social sciences, and humanities, aiming to foster synergies and mutual understanding across these fields through processes of interrelation and interconnection (Darda, 2016).

"Interconnection," derived from "inter-" and "connect," means to link or bring together. In this case, interconnection integration is a conceptual framework that seeks to bridge and unify general science with religious science. The principle of interconnection suggests that to fully understand the complexities of human experience, each field of knowledge must be connected rather than operating in isolation (Abdullah, 2007).

History of the Concept of Integration and Interconnection of Science

Recognizing Indonesian Muslims' scientific challenges today, Islamic Religious Higher Education Institutions (PTAI) across Indonesia have undertaken significant reforms. Among these reforms are the transitions from STAIN to IAIN and from IAIN to UIN, which continue to develop the paradigm of scientific integration, the pillars of spirituality, and practical implementation models.

One of the six UIN in Indonesia that has evolved from IAIN and STAIN is UIN Sunan Kalijaga Yogyakarta. This transformation aims to integrate religious and secular sciences into a unified educational system, focusing on the Islamic sciences (Minhaji, 2004).

Each UIN has developed its own model and concept of academic science integration. UIN Jakarta adopted the concept of "Integration of Sciences in Islam," while UIN Malang uses a

similar model, symbolized by the "Tree of Knowledge." UIN Bandung's model, "Revelation Combining Sciences," is represented by the Wheel metaphor. UIN Makassar has created the "Integration and Interconnection of Science and Religious Sciences" framework, symbolized by the Pine Cell, and UIN Pekanbaru focuses on "Confirming the Existence of Metaphysics of Science in Islam." UIN Sunan Kalijaga Yogyakarta, on the other hand, developed the "Integration-Interconnection" concept, illustrated through the metaphor of the Spider's Web (Natsir, 2010).

The discourse on integrating science and religion has been ongoing since 2002 when a National Seminar was held to discuss the most suitable scientific epistemology for UIN. The seminar's proceedings were later published by SUKA Press under *Uniting Religious and General Sciences: Efforts to Bring Together Islamic and General Epistemology.* This discussion continued from July 3 to July 5, 2004, during the formulation of UIN Sunan Kalijaga's Basic Curriculum Framework. An interactive dialogue followed on July 26, 2004, featuring experts, including Prof. H. M. Amin Abdullah, who spoke on *Islamic Studies, Humanities, and Social Sciences: An Integrated Perspective.* This discourse ultimately led to the establishment of the Integration-Interconnection Paradigm, pioneered by M. Amin Abdullah as the rector of UIN Sunan Kalijaga (2001-2020) (Faiz, 2007).

The integration-interconnection of knowledge is a concept introduced by Amin Abdullah to resolve the dichotomy between religious knowledge and science. According to Abdullah, these domains are not separate; instead, they complement each other in creating a holistic understanding of knowledge.

The Influence of Scholars on Amin Abdullah's Thought

In examining the dichotomy of knowledge, Amin Abdullah was significantly influenced by Muhammad 'Abid al-Jabiri, who divided the epistemology of Arab reason into three categories: *Bayani*, *Irfan*, and *Burhani* epistemologies. In his work, al-Jabiri criticized Arab reasoning for treating each epistemological approach as self-contained and autonomous. In reshaping these relationships, al-Jabiri prioritized *burhani* reasoning, with *bayani* reasoning as a supportive element for *burhani* epistemology. Meanwhile, al-Jabiri discarded *irfani* epistemology, as he deemed it less relevant to rational Arab thought.

Amin Abdullah also drew from the ideas of Muhammad Arkoun, who argued that Islamic rational thought tended to be dogmatic, defensive, apologetic, and polemical—an approach Arkoun referred to as *taqdis al-afkar ad-diniyah* (the sanctification of religious thought). Abdullah posits that *bayani* epistemology does not adequately address the practical application of textual teachings (*nash*) in the lives of the broader community (Abdullah, 1995).

Beyond Arkoun, Abdullah's thoughts were further inspired by Richard C. Martin and Nasr Hamid Abu Zaid. Drawing on Martin's perspective, Abdullah argues that Islamic studies benefit from applying methodologies from other disciplines, particularly the social sciences and humanities. It means that the field of Islamic Studies derives substantial benefit from this relationship, particularly in advancing its epistemological frameworks. This progression is marked by increasing complexity and the formation of interconnections across diverse approaches, encompassing both interdisciplinary and multidisciplinary perspectives. Such an approach aims to foster a search for meaning as opposed to a definitive, static notion of truth. These methodologies, he suggests, can help Islamic studies transcend historical and cultural constraints (Abdullah, 2002).

In developing his concept of integration-interconnectivity, Amin Abdullah was greatly influenced by Ian Barbour's ideas on dialogue and integration. Barbour asserted that the existence of God could be supported by scientific data (Barbour, 2002). Thus, religious figures can serve as discussion partners (or "dialogue" partners, as Barbour puts it) for scientists in discussions on human and cosmic creation. Abdullah was also inspired by Nasr Hamid Abu Zaid's approach to interpreting texts through a productive and contextual reading (*al-qira'ah as-siyaqiyyah*), often referred to as the renewal method (*manhaj at-tajdid*) (Abdullah, 2009). Abu Zaid views Islam as a "textual civilization" (*Hadlarah an-Nash*) with the Qur'an as the

foundation of Muslim religious life (Zaid, 2003). This concept of *Hadlarah an-Nash* later influenced Abdullah's the anthropocentric-integralistic perspective.

The Concept of the Spider Web of Knowledge

In his scientific integration-interconnection project, Amin Abdullah introduces the concept of the "Anthropocentric-Integralistic Scientific Spider Web Horizon," an approach encompassing three dimensions of scientific development.

The scientific paradigm of integration-interconnection proposed by Abdullah represents a crucial intellectual and historical process that incorporates *Bayani*, *Irfan*, and *Burhani* reasoning patterns (PTAI, 2019). According to Abdullah, these three epistemologies, initially articulated by al-Jabiri, form a cohesive group but rarely operate together in practice (Al-Jabiri, 2000). *Bayani* reasoning, being textual-normative, often dominates *irfani* (spiritual-intuitive) and *burhani* (rational) reasoning, which has led to a rigid mainstream of Islamic thought (Abdullah, 2004).

Abdullah's integration-interconnection project has been developed at UIN Yogyakarta, with the Qur'an and Hadith forming the first layer of the spider web. These texts serve as the foundation for objective religious and moral ethics, interpreted hermeneutically to engage with contemporary fields within the social sciences and humanities, such as international law, religious pluralism, environmental issues, gender studies, cultural studies, human rights, socio-political matters, and economics.

The anthropocentric-integralistic model envisions an expansive, integrative scientific horizon that bridges traditional and modern sectors through mastery of foundational knowledge and skills essential for life in the information-globalization era. Additionally, this model presents an ideal Muslim individual who is adept at addressing humanitarian and religious issues of the modern and postmodern eras. Such individuals are equipped with a range of contemporary approaches from the natural sciences, social sciences, and humanities, all underpinned by an objective, robust moral and religious ethic grounded in the Qur'an (Abdullah, 2004).

The Spider Web Theory aims not only to develop a normative framework for Islamic sciences but also to integrate them with secular sciences that are empirical and rational. In the model introduced by Amin Abdullah, the Qur'an and Sunnah form the first layer of the spider web, serving as the foundation for objective religious ethics and driving the emergence of new disciplines, such as social sciences, humanities, natural sciences, and other contemporary fields—all rooted in the Qur'an and Sunnah (Abdullah, 2014).

The Anthropocentric-Integralistic framework utilizes an interdisciplinary, interconnected approach based on the triadic model of *Hadlarah an-Nash*, *Hadlarah al-'Ilm*, and *Hadlarah al-Falsafah*, where these three intellectual civilizations converge. In practice, general and religious sciences are interconnected and adapted to contemporary developments. Various contemporary issues appear in the outer layer of the spider web. Within this structure, the Qur'an and Sunnah occupy the web's centre, referred to as *Hadlarah an-Nash*. Religious and general sciences form the next layer, termed *Hadlarah al-'Ilm*, while contemporary sciences and issues are represented by *Hadlarah al-Falsafah* (Abdullah, 2013).

Amin Abdullah also introduced the normativity-historicity approach, moving from a positivistic-secularistic to the anthropocentric-integralistic paradigm, as a reconstruction within Islamic studies (Abdullah, 2006).

In explaining the Spider Web Metaphor, Abdullah provided three keywords that illustrate the dialogical and integrative relationship between religion and science:

1. **Semipermeable or Mutually Penetrating:** Science, based on causality, and religion, grounded in meaning, are semipermeable, allowing for mutual penetration. This interrelationship may be clarificative, complementary, affirmative, corrective, verifiable, or transformative. Quoting Holmes Rolston, Abdullah argues that religious studies, separated from science, fail to foster progress across generations. Similarly, religious

understanding cannot persist without adapting to its intellectual context (Abdullah, 2014). The Spider Web Metaphor reflects diverse, interconnected disciplines interacting actively and dynamically. Dotted lines in the Spider Web image represent pores in dividing walls (symbolizing boundaries of scientific disciplines, worldviews, space, and time). These pores function like ventilation, allowing the circulation of knowledge between disciplines. The metaphor suggests that each discipline is permeable to others, enabling interdisciplinary interaction and collaboration (Abdullah, 2014).

2. **Intersubjective Testability:** Abdullah draws on Ian G. Barbour's concept, explaining that natural and human sciences rely on both objective and subjective elements in knowledge creation. A concept is not simply derived from nature but is constructed by scientists. Therefore, objectivity must be enhanced by intersubjective testability, where scientific communities collaborate in testing and validating the interpretations and meanings of data gathered by researchers (Abdullah, 2014).
3. **Creative Imagination:** According to Abdullah, creative imagination is essential for forming new theories, often emerging from a scientist's courage to connect isolated ideas (Abdullah, 2014). Abdullah suggests linking creative imagination with legal contexts and cultural education. Contemporary Muslims, he argues, should cultivate creative imagination to connect religious knowledge with other disciplines, such as dialogue between *fiqh* (Islamic jurisprudence) and contemporary social sciences or between marriage *fiqh* and gender studies. This approach aims to interconnect the three primary areas of study in PTAI—Islamic Sciences, Natural Sciences, and Social-Humanity Sciences—so that they no longer function independently but are interrelated.

Islamization of Science and Criticism of the Integration-Interconnection Paradigm

Prof. Dr. Syed Muhammad Naquib al-Attas (S.M.N. al-Attas) (1931–present) is a key proponent of the Islamization of Science paradigm, which seeks to liberate human thought from myths, magic, and Western values that tend toward secular humanism. The influence of secular science has manifested in society through the erosion of *adab* (the desacralization of knowledge), the decline of recognized authority and established hierarchies in both social and scientific spheres, the rise of intellectual disarray, and a growing inability to discern authentic knowledge from knowledge imbued with Western perspectives (Al-Attas, 1985). Consequently, Al-Attas underscores the necessity of Islamizing knowledge, asserting that true knowledge is rooted in revelation or derived from it, even as it extends to encompass broader human understanding. The central role of knowledge within Islamic civilization is aptly illustrated by F. Rosenthal, who describes it as follows:

..'ilm is one of those concept that have dominated Islam and given Muslim civilization its distinctive shape and complexion. In fact there is no other concept that has been operative as determinant of Muslim civilization in all its aspects to the same extent as 'ilm (Rosenthal, 1970).

This perspective supports the principle that Islamic civilization is fundamentally established upon knowledge derived from revelation. It implies that the gradual decline of the Muslim community over the past few centuries stems from the corruption and inadequate mastery of knowledge. Due to this epistemic confusion and weakened intellectual authority, the Muslim community faces numerous challenges across political, economic, social, and cultural spheres. This viewpoint diverges significantly from mainstream interpretations, which often attribute the community's decline to political defeats, economic weaknesses, cultural deterioration, or low educational standards—factors that, in reality, are merely secondary outcomes of deeper epistemological issues.

The confusion within scientific knowledge can, of course, only be addressed through the advancement of science itself—a task achievable primarily through educational institutions. Given the intrinsic connection between knowledge and worldview, Islamic educational institutions must prioritize integrating elements of the Islamic worldview into their curricula. As previously discussed, these elements primarily encompass Islamic perspectives on life, the world, knowledge, values, and human nature. These foundational concepts can be drawn from the primary sources of Islamic knowledge—namely, revelation and the intellectual

contributions of scholars within the Islamic tradition. A thorough exploration of these concepts can eventually establish a 'scientific conceptual framework,' which serves as a critical filter for assimilating foreign ideas.

The concepts of the integration and Islamization of science arise from distinct motivations. For example, the integration of science is driven by the need to address the strict dichotomy between religious and general sciences, which has often led to the mutual invalidation of both domains. In contrast, the Islamization of Science arose from an awareness among Muslim scholars of the significant challenge facing the Muslim world: modern science, which is neither neutral nor value-free, has incorporated cultural, religious, and philosophical assumptions derived from Western human experience and consciousness (Armas, 2015). Here, the Islamization of Science is considered essential to remove influences of naturalism, materialism, and similar elements from various disciplines.

In practice, the Integration-Interconnection paradigm aims to blend religious and secular sciences without discarding elements from either (Abdullah, 2013). This approach, however, is sometimes criticized for allowing the resulting knowledge to become "poisoned," as it lacks selective filtering of elements that align with Islamic principles. In contrast, the Islamization of Science necessitates an initial filtering process rather than a mere blending or integration of elements from both domains.

The Islamization process begins with "de-westernization," which entails removing Western elements—especially perspectives and paradigms that conflict with Islamic values. Once the science is "cleansed" of Western elements inconsistent with Islam, it can then be integrated with Islamic principles to produce a distinctly Islamic science resulting from this process of Islamization (Al-Attas, 2002).

Conclusion

The analysis reveals that Amin Abdullah's Integration-Interconnection paradigm, while innovative in fostering dialogue between religious and secular sciences, may lack the filtering process advocated by al-Attas in his Islamization of Science. Abdullah's framework promotes a cohesive network of scientific fields, encouraging engagement without strict boundary maintenance. In contrast, al-Attas emphasizes purifying secular elements to align knowledge more closely with Islamic values, arguing that unchecked integration could dilute the religious essence in academia. Therefore, incorporating elements of both paradigms—Abdullah's integrative openness with al-Attas's selective Islamization—could offer a balanced approach that respects Islamic values while promoting interdisciplinary scholarship. This synthesis may serve as a constructive model for Islamic educational institutions aiming to navigate the complexities of modern science and traditional religious knowledge.

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