



Book Chapter of Proceedings Journey-Liaison Academia and Society

Availabel Online: <https://j-las.lemkomindo.org/index.php/BCoPJ-LAS>

Models of Integration of Science and Building Efforts Islamic Scientific Foundation

Siti Nurhalizah

UIN Sumatera Utara Medan, Indonesia

Corresponding author: sitnurhaliza437@gmail.com*

Abstract

Islam as a scientific construction has a pattern in developing various aspects of life including education, philosophy and general science or other secular sciences. The purpose of this research is to find out the model of integration of knowledge in Islam that is used to build Islamic scholarship. The method used in this research is a literature study with a descriptive qualitative research approach. The results that can be summarized by the author are as follows: There are several models of integration of knowledge that are used to build the foundation of Islamic scholarship from various sources that we summarized in this study, namely 1) the IFIAS model (a model of knowledge integration in which a scientist must account for all his activities to God, 2) ASASI model (the view that science is inseparable from Islamic principles), 3) the Islamic Worldview model (in the view of Islam there is an Islamic scientific structure in it), 4) the SPI model (comprehensive relationship between science and religion), 5) Classical Philosophy Model. The conclusion of this study is that there is still a strong public perception that science and religion are separate from each other. Both have their own territory or field. Therefore, Islamic Education experts, in particular, integrate Islamic knowledge into this field as the basis of Islamic scholarship for the next generation.

Keyword: Islam, Integration Model, Science

Model-Model Integrasi Ilmu dan Upaya Membangun Landasan Keilmuan Islam

Abstrak

Dalam teori keilmuan Barat, ontologi ilmu hanya yang empiris (feasible), yang Islam sebagai konstruksi keilmuan, memiliki pola dalam mengembangkan berbagai aspek kehidupan diantaranya Pendidikan, filsafat maupun ilmu umum atau ilmu sekuler lainnya. Tujuan dari riset ini merupakan buat mengenali model integrasi ilmu dalam keislaman yang digunakan untuk membangun keilmuan islam. Tata cara yang dipakai dalam riset ini merupakan studi Pustaka (literature) dengan pendekatan penelitian kualitatif deskriptif. Hasil yang dapat dirangkum oleh penulis ialah sebagai berikut: Ada beberapa model integrasi ilmu yang digunakan untuk membangun landasan keilmuan islam dari berbagai sumber yang kami rangkum dalam penelitian ini yaitu 1) model IFIAS (model integrasi ilmu dimana seorang ilmuwan harus mempertanggungjawabkan seluruh aktivitasnya kepada Tuhan, 2) Model ASASI (pandangan bahwa ilmu tidak terpisah dari prinsip-prinsip Islam), 3) model Islamic Worldview (di dalam pandangan islam terdapat struktur keilmuan islam di dalamnya), 4) Model SPI (hubungan komprehensif antara ilmu dan agama), 5) Model Filsafat klasik. Kesimpulan dari penelitian ini adalah masih kuatnya anggapan masyarakat bahwa ilmu dan agama terpisah satu sama lain. Keduanya memiliki wilayah atau bidang sendiri. Oleh karena itu, para pakar Pendidikan islam khususnya mengintegrasikan ilmuislam masuk dalam bidang tersebut sebagai landasan keilmuan islam untuk generasi penerus.

Kata Kunci: Agama Islam, Ilmu, Model Integrasi

INTRODUCTION

The view on the integration or Islamization of today's scientific knowledge which is tried by the intellectual group of believers, is not free from the understanding of belief. In the midst of a hectic world where the provisions of the development of science and technology (science and technology) with the design that the Islamic ummah wants to advance and want to balance the westerners even more so than the westerners if they are able to transform and absorb in an actual way and the whole science of insight and technology in mastering teachings in developing knowledge outlook. The observations and views of scientific integration were also tried by the believers, namely Naquib al-Attas and Ismail Raji' al-Faruqy, they thought the same thing was that the Islamic ummah wanted to progress. Scientific integration has actually started since the 9th century, even though it faces ups and downs[1].

In the era of al-Farabi (born in 257 H) ideas about the unity and hierarchy of knowledge that emerged as a result of conventional investigations into epistemology and were the basis for the search for productive life and finding its place. When viewed from the axiological point of view, science and technology must provide the greatest benefit to individual life. In this sense, science and technology become instruments, especially in every way of development as an effort to create problems in people's lives. Thus, science and technology must provide benefits to individual lives and not the other way around. In order to achieve this, it is necessary to try an effort to combine the ordinary sciences with Islamic sciences, as a result, the general sciences are neither value-free nor secular.[2]. An interdisciplinary approach and the interconnectivity between religious and general knowledge needs to be developed and nurtured continuously.

The inspiration for the integration of Islamic scholarship among the Islamic learning thinkers in Indonesia has so far been seen as a mess and has not been formulated in a typology of views that is distinctive, organized, and analytical. Moreover, changes in some learning bodies are also seen as not describing the layout of Islamic scientific views, either in Indonesia or in the Islamic world in general; either classic or contemporary era. That's why there are various ideas on scientific integration, including crystallization in the form of changes in the learning body so that it means to make a typology or view on the integration of Islamic scholarship.[3]

The idea of scientific integration first emerged against the background of the existence of dualism or scientific dichotomy between the ordinary sciences in one part and the religious sciences in another. The dichotomy of science, one of which appears in the dichotomy of educational institutions between general learning and religious learning, has been running since this nation understands the modern learning system.[4]. The dichotomy of Islamic scholarship has major implications for the education aspect in the area of Muslims, both concerning the method of people's view of science and learning, learning institutions, learning curriculum, or the psychology of the people in general.[5].

Another consequence that is no less serious than the scientific dichotomy between the Islamic religious sciences in one part and the sciences in another is the metaphysical framework of Islamic scholarship. Even though the dichotomy of Islamic scholarship has been going on for several previous eras, the consequences for the metaphysical framework of Islamic scholarship have become increasingly crucial in the aftermath. One of the less "general" Islamic scientific frameworks when compared to the "secular"

scientific metaphysics framework is the lack of familiarity with the design of paradigms, normal science, anomalies, and scientific revolutions, which have so far "managed" the progress and development of modern science. The Islamic scientific framework is even embraced by romanticism which produces a later era, even as an important framework, it is not one of them, pattern assumes followers of Islam. Romanticism in a simple sense is indeed needed, especially to avoid the formation of ways of canceling contemporary views with ancient scientific origins. However, if romanticism leads the framework for the scientific assumption of Muslims, then the spirit and the Islamic scientific revolution will not have time to take place[6].

Another link of the scientific dichotomy to the metaphysical framework of Islamic scholarship is the growth of views that contradict in a diametrical way between comparisons and teachings and between qauliyah verses and kauniyah verses. In the Muslim group there is a growing view that teaching is the important base of knowledge while discriminating against the task and position of comparison as the base of knowledge. In the Muslim group there is also an understanding to produce qauliyah verses as the main subject of observation, but neglecting the Kauniyah verses which actually keep many secrets and have a lot of scientific treasures. Knowing that the consequences of dualism or the dichotomy of Islamic scholarship are so great, Muslim thinkers have begun to initiate a design for the integration of Islamic scholarship,

RESEARCH METHODS

This research is categorized in the type of library research (library research).[7]. This type of library research is intended to accumulate information or data with the support of various materials available in the bibliotek space, such as journals, research information, objective magazines, news letters, relevant books, colloquium results, unpublished objective posts, internet information. related to the head of this research essay with the method of observing and analyzing these sources, the results are recorded and qualified for the framework that has been determined.[7]. This research is related to the description of the form of integration of knowledge and efforts to make the basis of Islamic scholarship, in a methodological way this research can be included in the type of exploratory research.[8]. That is, this research is to find forms of integration of knowledge and efforts to establish the basis of Islamic scholarship by analyzing various sources of reference.

RESULTS AND DISCUSSION

Formulating scientific integration models in a conceptual way is not easy. This happens because various ideas and ideas of scientific integration arise sporadically, whether in the conditions of the place, the time, or the reasons behind it. the aspects associated with this idea are also not singular. There are several aspects that are related to it, namely (1) the origin of the bond between science and religion; (2) strong pressure from academic groups who deny the value-free teaching of science; (3) emergency caused by science and technology; and (4) Muslims are lagging behind in the aspects of science and technology[9].

From the aspects that urge the emergence of the idea of scientific integration, in the usual way, scientific integration capital can be classified into the following models:

1. IFIAS Model

The form of scientific integration IFIAS (International Federation of Institutes of Advance Study) first appeared in a congress on "Knowledge and Values", more or less it can be described as follows:

Belief in the Creator makes the believer academic more aware of all his activities. They are responsible for their behavior by placing their ideas on the basis of God's power. Therefore, in Islam, there is no division between the instrument and the goal of science. Both are subject to ethical standards and religious values. He must follow the principle that as an academic he is responsible for all his activities to God, so that he must fulfill the social role of science to serve the people, and at the same time prevent and improve its ethical and moral institutions. In this way, the Islamic approach to science is formed on the basis of absolute morals and ethics with an energetic construction standing on it. Ideas and neutrality are recommended in the chart to explore objective insights,

The appeal for eternal Islamic values such as khilafala, worship, and adl is an individual view of Islamic science. Anger, deviation, and bias of people must be removed towards the path of this great goal through objective research. The neutrality of the body of knowledge functions through the methods and research methods used to encourage the free formulation, testing and analysis of assumptions, changes, and back-testing of theories if possible. Because science describes and describes a very limited view of reality, it is used to emphasize us about the limitations and weaknesses of people's capacities. The Qur'an also emphasizes that we must wake up to our limitations before being amazed by the success of scientific discoveries and the results of objective research[10].

2. Model of the Malaysian Academy of Islamic Sciences (ASASI)

The form developed by the Malaysian College of Islamic Sciences (Asas) first appeared in May 1977 and was a valuable effort in the integration of Islamic scholarship in Malaysia because for the first time, Muslim scholars in Malaysia integrated to, among other things, liven up the culture. knowledge based on the rules of the Holy Qur'an.

The scientific customs that were raised through this ASAI form thought that science could not be separated from Islamic principles. The form of the principle wants to support and urge the involvement of Islamic values and principles in objective research activities; promote scientific observations among citizens; and produce the Qur'an as the base of ideas as well as instructions and references in scientific activities. The principle supports the desire to restore the Arabic language, acting like the language of the Koran, to its rightful and original role as the language of knowledge for the entire Islamic world, and seeks to integrate Muslim scientists in the direction of advancing Islamic society in the aspects of science and technology.[11].

The ASASI approach departs from describing the epistemology of Islam by using the scientific views of classical malims such as al-Ghazali, who generally use the fiqh approach in one part and the approach of philosophers such as al-Farabi in another. ASASI's form of scientific integration moves to classical thinking if science is grouped into 4 types, namely fard'ain science which must be for every Muslim, fard kifayah science which must be understood by some individuals, permissible knowledge which transcends interests, and taboo free knowledge. The form of the principle of initiating the unity and integration of science as a characteristic of Islamic science which is rooted in the oneness

of God. ASASI improves the form of Islamic scholarship that has a global, integral, unified, and balanced character[12]. ASASI believes that knowledge is not only obtained through sense perception (empirical information) and induction, and inference, but also through instinct, heuristics, dreams and teachings from God.[13].

3. Islamic Worldview Model

This form moves from the idea that Islamic worldview is the basis for the epistemology of Islamic scholarship in a global and integral way. Two Muslim thinkers who intensely initiated and developed this form are Alparslan Acikgenc, Professor of Metaphysics at Fatih University, Istanbul Turkey. He developed 4 thoughts of Islamic earth as a comprehensive framework of Islamic scholarship, namely: (1) belief as the basis of the world structure (world structure, belief); (2) science as a form of insight (knowledge structure, al-ilm); (3) fiqh as a form of value (value structure, al-fiqh); and (4) the caliphate as an individual structure (human structure, caliph)[14].

In explaining the thoughts of the Islamic world in which there is a form of Islamic scholarship, he explains: As can be observed, every structure revolves around a central doctrinal idea that connects a network of related ideas and thoughts. Our picture of the cosmos and the place of humanity within it is based on the world structure. A person with such a mental model provides existence significance in accordance with this framework. Since it is the most fundamental framework, it serves as the foundation for all other structures. The Qur'an makes explicit that this structure contains three essential components: God, prophethood, and the notion of an ultimate judgment. Because these three ideas are necessary for understanding man, religion, and knowledge, they together make up Islam's core metaphysics. These essential ideas are deeply ingrained in the Islamic conception of reality and truth, which serves as the basis for all human behavior and the overarching framework from which all other frameworks flow. This conception of reality and truth functions as an architectonic mental unity. The Islamic worldview's knowledge structure is thus the next to be discussed. We simply need to look at the frameworks that have been constructed thus far because the action at hand is scientific. I won't talk about values and human structures in this context s knowledge structure is thus the next to be discussed. We simply need to look at the frameworks that have been constructed thus far because the action at hand is scientific. I won't talk about values and human structures in this context s knowledge structure is thus the next to be discussed. We simply need to look at the frameworks that have been constructed thus far because the action at hand is scientific. I won't talk about values and human structures in this context[15].

Alparslan Acikgenc's thoughts on the thought of the Islamic world, based on the epistemology of science in general, are (1) a very general framework or worldview (the most general framework or worldview); (2) in the world's thinking the framework of view supports the totality of epistemological activities. which is pronounced in the form of insight (within the worldview another psychological framework supporting all our epistemological activities, called" knowledge structure");(3) abstract scientific concepts in a general way (the general scientific conceptual scheme); and (4) abstract scientific concepts in a special way (the specific scientific conceptual scheme)[16].

4. Islamic Knowledge Structure Model Islamic Knowledge Structure Model (SPI)

This model has been widely discussed in various writings by Osman Bakar,

Professor of Philosophy of Science at the University of Malaya. In developing this model, Osman Bakar departs from the fact that science has been systematically organized in various academic disciplines. For Osman Bakar, building SPI as part of efforts to develop a comprehensive relationship between science and religion, is only possible if Muslims recognize the fact that knowledge has been systematically organized and divided into a number of academic disciplines.

Osman Bakar developed four components which he called the theoretical structure of science. The four structures of knowledge are: (1) the first component deals with what is called the subject and object of science which builds the body of knowledge in the form of concepts, facts (facts, data), theories (theories), and laws or rules of science. (laws), as well as the logical relationships that exist therein; (2) the second component consists of the basic premises and assumptions that form the basis of scientific epistemology; (3) the third component relates to the methods of developing knowledge; and (4) the last component relates to the goals to be achieved by science.

5. Classical Philosophy-Based Scientific Integration Model

The Form of Scientific Integration with the Classical Metaphysics Platform seeks to explore the relics of classical Islamic metaphysics. One of the experts who influenced the ideas of this form was Seyyed Hossein Nasr. For Seyyed Hossein Nasr, classical Muslim thinkers tried to incorporate Tawhid into the design of their philosophy. The principle of Tawhid, is that the Unity of God is made as the principle of the unity of the natural tabii (thabi'ah). Supporters of this form also believe that the natural world is only a feature or part of the existence of absolute forms and facts. Only Allah is the true essence, and this natural world is only the lowest realm of reality. For Seyyed Hossein Nasr, modern Islamic academics should balance the two thoughts of tanzih and tasybih to achieve the goal of integrating Islamic scholarship.[16].

CONCLUSION AND SUGGESTION

From some of the reviews above, so the author can quote the conclusion that until now, there is still a solid assumption among the wider community which states that religion and science are 2 entities that cannot be reconciled. Both have individual areas, separate from one another, both from the official subject area of scientific material, research procedures, benchmarks of fact, the position played by academics or the philosophical status of each and moreover to the organizing institution.

The current scientific paradigm that combines, not only mixes, God's teachings and the invention of individual minds (integralistic sciences) will not have the effect of reducing God's position (secularism) or alienating individuals as a result of being alienated from themselves, from the surrounding community, and the living environment around them. Organizing and formulating scientific integration plans is certainly not easy. Moreover, the various efforts that have so far been attempted by several Islamic higher education institutions, especially in Indonesia, by including several Islamic research programs are claimed as part of the scientific integration process. Formulating scientific integration models in a conceptual way is not easy. This matter occurs because various inspirations and ideas of scientific integration arise sporadically in good condition of the place.

REFERENCES

- [1] T. M. E. A. Jakfar, "Model Integrasi Ilmu Dan Pengembangannya," *Jurnal Ilmiah Islam Futura*, Vol. 18, No. 2, Pp. 206-230, 2019.
- [2] S. H. Hamzah, "Pemikiran Mahmud Yunus Dalam Pembaruan Pendidikan Islam Di Indonesia," *Dinamika Ilmu*, Vol. 14, No. 1, 2014.
- [3] A. D. C. I. Rifa'i, "Relevansi Pendidikan Agama Islam Terintegrasi Dalam Membangun Karakter Bangsa Di Era Digital 4.0," *Asn Kemenag Jakarta Pusat*, 2016.
- [4] M. Zainuddin, "Paradigma Pendidikan Islam Holistik," *Umma*, Vol. Xv, No. 1, 2011.
- [5] I. Fiteriani, "Analisis Model Integrasi Ilmu Dan Agama Dalam Pelaksanaan Pendidikan Di Sekolah Dasar Islam," *Terampil Jurnal Pendidikan Dan Pembelajaran Dasar*, Vol. 1, No. 2, 2014.
- [6] H. D. S. B. A. Huda, "Nilai Konstruksi Keilmuan Islam Untuk Membangun System Pendidikan Keislaman," *Batusangskar Internasioanal Conference V*, Pp. 115-126, 2020.
- [7] Sukardi, *Metodologi Penelitian Pendidikan Kompetensi Dan Prakteknya*, Jakarta: Bumi Aksara, 2003.
- [8] Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek*, Jakarta: Pt. Rineka Cipta, 2006.
- [9] P. Siregar, "Integrasi Ilmu-Ilmu Keislaman Dalam Perspektif M. Amin Abdullah," *Miqot*, Vol. Xxxviii, Pp. 335-354, 2014.
- [10] N. Jamal, "Model-Model Integrasi Keilmuan Perguruan Tinggi Keagamaan Islam," Vol. 02, Pp. 83-101, 2017.
- [11] A. Abdullah, *Islamic Studies*, Bandung: Pustaka Belajar, 2006.
- [12] H. H. Batubara, "Metode Dan Model Integrasi Sains Dan Islam Di Perguruan Tinggi Agama Islam," Pp. See Discussions, Stats, And Author Profiles For This Publication At: <https://www.researchgate.net/publication/324744404>, 2018.
- [13] A. Açıkgenç, "Holisitc Approach To Scientific Traditions," *Islam & Science*, Vol. 1, No. No 1, Pp. 12-26, 2003.
- [14] Istikomah, "Integrasi Ilmu Sebuah Konsep Pendidikan Islam Ideal," *Annual International Conference On Islamic Studies (Aicis)*.
- [15] Akbarizan, *Integrasi Ilmu*, Pekanbaru: Suska Press, 2013.
- [16] S. H. Nasr, *Science And Civilization In Islam*, Chicago: Abc International Group, Inc., 2001.