EPISTEMOLOGY OF ISLAMIC SCIENCE: A searching for Ideal Form and Format of Scientific Design for Islamic Higher Education in Indonesia

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Abstract: This article is aimed at exploring Islamic science related to the relationship between religion and science which has been being discussed among Indonesian Islamic scientists. Based on the fact occured a long time in many collages under the ministary of religious affair, Islamic educational institutions have only focused on religious science which is narrow and far from science and technology. This research is a type of qualitative research that uses an ex post facto descriptive approach. The descriptive approach is intended to answer questions related to the object under study. Therefore, this is used to systematically describe the present study such as at UIN Sunan Kalijaga Yogkarta, UIN Malang, and UIN Sunan Gunung Djati Bandung. The ex post facto approach is used to evaluate several matters in accordance with the integration and interconnection of science in the three UINs. The results of the study report that first there are several scientific designs that have bring together religion and science. Second, the scientific dichotomy between science and religion is a colonial product that separates religion and science. Third, there is a culmination point between several scientific designs offered by some of these leading Islamic campuses, namely the spirit of reintegration between religion and science which in early Islam did not recognize a scientific dichotomy.

Keywords: epistimology; scientific integration; PTKIN; religion.

Abstrak: Artikel ini bertujuan untuk menggali keilmuan Islam terkait dengan relasi agama dan sains yang masih terus menjadi diskusi di lingkungan ilmuwan Islam Indonesia. Berdasarkan kenyataan yang terjadi di banyak perguruan tinggi di bawah kementerian agama, lembaga pendidikan Islam hanya berfokus pada keilmuan agama yang sempit dan jauh dari ilmu pengetahuan dan teknologi. Penelitian merupakan jenis penelitian kualitatif yang menggunakan pendekatan deskriptif *ex post facto*. Pendekatan deskriptif dimaksudkan untuk menjawab pertanyaan yang berkaitan dengan objek yang diteliti. Karena itu, dalam hal ini pendekatan deskriptif digunakan untuk menggambarkan secara sistematis objek yang diteliti, yaitu UIN Sunan Kalijaga Yogyakarta, UIN Malang, dan UIN Sunan Gugung Djati Bandung. Pendekatan ex post *facto* digunakan untuk mengevaluasi beberapa hal yang berkaitan dengan integrasi dan interkoneksi keilmuan di tiga UIN tesebut. Hasil penelitian melaporkan bahwa pertama adanya beberapa desain keilmuan yang mucul yang mempertemukan agama dan sains. Kedua, dikotomi keilmuan antara sains dan agama adalah produk kolonial yang memisahkan antara agama dan sains. Ketiga, terdapat titik temu antara beberapa desain keilmuan yang ditewarkan oleh beberapa kampus Islam terkemuka tersebut, yaitu semangat reintegrasi antara agama dan sains yang memang dalam Islam awal tidak dikenal dikotomi keilmuan.

Kata kunci: epistimologi; integrasi keilmuan; PTKIN; agama.

Introduction

Searching for an ideal Islamic scientific format has been an interesting discussion. This can be seen from several Islamic universities that develop their respective scientific paradigms. Scientific designs such as the Spider Web of UIN Sunan Kalijaga Yogjakarta, the Tree of Science of UIN Maulana Malik Ibrahim Malang, and the Wheel of

Science of UIN Bandung are scientific designs that carry the Quran and Hadith with various variants and patterns of relationships. With the scientific paradigm that has been established, the three

¹ Eka Saftri and Ihsan Sa'dudin, "APLIKASI INTEGRASI INTERKONEKSI KEILMUAN DI LEMBAGA PENDIDIKAN TINGGI," *Tadrib: Jurnal Pendidikan Agama Islam*, vol. 5, no. 1 (July 1, 2019), pp. 122–37, https://doi.org/10.19109/tadrib.v5i1.2731.

universities emphasize the openness of Islamic studies that accepts input from any science and emphasizes the integration aspect of Islamic sciences with general sciences. One manifestation of the implementation of the scientific paradigm of the three universities is the opening of a world class university (WCU) which is open to the development of types of knowledge and contributions to the wider community.2 Scientific interconnection or the like seems to have become a necessity and even a major need in developing science within the ministry of religion. Religious studies can no longer be fun with itself without involving other scientific disciplines. Several Sate Islamic Higher Educations named Institut Agama Islam Negeri (State Institute for Islamic Studies; IAIN) that have just received a new status as Universitas Islam Negeri (State Islamic University; UIN) must formulate their new scientific designs, namely from a separate scientific model to an integrated scientific model.

The spirit of the Quran and hadith should be the key that must be maintained in the development of Islamic universities. As influenced by the movement of Muhammad bin Abd Wahab in the 18th century, namely the movement called for "back to the Quran and Sunnah" (as was the movement in the golden age of Islam), the most effective recipe in designing scientific integration is also to return to Islamic pure resource, namely the Quran and Hadith. Historically, this movement did not take place entirely as a purification movement for monotheism or religion, but shifted more to a political movement which Yudian Wahyudi said was a defeat movement.³

² Sekar Ayu Aryani, Sunarsih Sunarsih, and Kurnia Rahman Abadi, "Scientific Paradigm Towards World-Class University: Comparative Study on UIN Sunan Kalijaga Yogyakarta and UIN Maulana Malik Ibrahim Malang," ESENSIA: Jurnal Ilmu-Ilmu Ushuluddin, vol. 18, no. 1 (2017), pp. 13–28, https://doi.org/10.14421/esensia.v18i1.1467.

Recently, the solidity of Islamic studies has been considered fragile by several groups and national figures. The former Minister of Religious Affair, Fakhrur Razi, for instance, revealed that Islamic studies experienced a setback after the 1980-1990s era. The implication is that scientific integration between science and religion will certainly face obstacles because the religious studies party itself has 'internal' problems and is not ready to be 'married' with science. The statement from the minister must be an important concern if the government still wants religious values to be the spirit of the rapid development of science and technology.

The most basic concern is that the change in the status of IAIN to UIN is just a scramble for the 'conventional market" known as State Universities with a new Islamic packaging, namely the State Islamic University (UIN). Consequently, the study of general science is increasingly getting 'stage' with the increasingly massive transformation into UIN. Supposedly, scientific discourse has jumped on the grounding process, centralization of knowledge, both religion and science & technology in accordance with the needs of the Indonesian people. The present science is mostly in the "sky" or in space that is difficult for humans to reach. It has not been grounded and internalized in beneficial social and technological behavior. Indonesian scientists are more skilled at discourse and telling stories than acting, practicing, and creating. It means that someone should interpret the science and islamic teaching materials comprehensively and globally in order not to be gullible and rigid person. Dealing with the term of "think globally and act locally", Amin Abdullah sugested that learning various materials in accordance with the Islamic studies such as `ulûm ad-dîn and al-fiqih al-Islâmî should not be in local and conventionalist-traditionalist category.5

³ Yudian Wasmin, Dinamika Politik Kembali Ke Al Quran Dan Assunah Di Mesir, Maroko Dan Indonesia. Pesantren (Yogyakarta: Nawasea, 2010); Moch Iqbal and Betti Dian Wahyuni, "Integrasi Keilmuan Yang Rumit: Wacana Dan Praksis Integrasi Keilmuan Sain Dan Agama Di PTKIN," Nuansa: Jurnal Studi Islam Dan Kemasyarakatan, vol. 13, no. 2 (2020), p. 172, http://dx.doi.org/10.29300/njsik.v13i2.3944.

⁴ AZ Pawennay, "Menag Sayangkan Mahasiswa UIN Lebih Pilih Prodi Umum, tapi Kebobolan," *Indonesiainside.id* (blog), December 20, 2019, https://indonesiainside.id/news/nasional/2019/12/20/menag-sayangkan-mahasiswa-uin-lebih-pilih-prodi-umum-tapi-kebobolan.

⁵ Muhammad Amin Abdullah, "Islamic Studies in Higher Education in Indonesia: Challenges, Impact and Prospects for the World Community," Al-Jami'ah: Journal of Islamic

Sayuti and Rahiem's research states that scientific integration is currently at the normative-philosophical level, not yet touching on the empirical implementation area. The research was conducted at two large PTKIN[s] (State Islamic Higher Colleges), namely UIN Maliki Malang and UIN Syahid Jakarta, which are known to be the loudest in voicing the need to eliminate the scientific dichotomy. The same conclusion is obtained that the integration of science between science and religion is still a discourse and needs to be more practical.⁶

In this article, what needs to be emphasized is the form of scientific integration that is more grounded, qualified, tolerant, and humanist at the State Islamic University. The serious challenge faced by Islamic collages is not only lagging behind in the field of science, but also the danger of the emergence of a radical transnationalist movement that appears to be rife in higher education in the country, including in Islamic state universities. Worse, this movement has actually thrived in several leading campuses in the country. As a prophetic responsibility, carrying out Islam with a national perspective is a must for Indonesian universities, as well as other institutions so that the Unitary State of the Republic of Indonesia, which has been fought for with blood and tears, will continue to be maintained and the realization of peace, prosperity, and social justice. Seeing this phenomenon, it is important to intensively discuss the scientific format used in universities in Indonesia, especially in PTKIN.

Method

This study is a qualitative research that uses a descriptive and *ex post facto* approach. Gay revealed that the descriptive approach was intended to answer questions related to the

object of the study.⁷ Therefore, in this case, a descriptive approach is used to systematically describe the object, namely the interconnection and integration of state Islamic universities in Indonesia. Through adopting Furchani's idea⁸, the *ex post facto* approach was used to evaluate several things in accordance with the advantages and uniqueness of UIN Sunan Kalijaga Yogyakarta, UIN Maulana Malik Ibrahim Malang, and UIN Sunan Gunung Djati Bandung. Knowing the advantages and characteristics of the three UIN[s] is used as a basis for consideration in finding a model or format for organizing a state Islamic university in the future.

The data collection was carried out by observing and tracing various information written by several researchers and scientists contained in books and scientific journals. Meanwhile, the presence of the researcher is as a key informant in this study. The information tracking will stop if it has reached the saturation point; information is no longer developed or it does not have a new variation.

The Root of Dichotomy in Science

Theoretically, the meaning of dichotomy is a careful and clear separation of one type into two separate from each other where one cannot at all be included in the other and vice versa.9 When examined further, the scientific dichotomy in the Indonesian context is a product of colonialism as well as a product of education politics itself. The authority of each institution in establishing and managing education is the beginning of the barriers of knowledge. The Ministry of Religious Affair, which is given the authority to manage education, certainly cannot leave the religious area. Religious education is indeed a 'plot' from the ministry of religious affair. Any education model developed cannot be far from the religious area, which is interpreted by education observers as a narrow Islamic study.

Studies, vol. 55, no. 2 (2017), p. 408, https://doi.org/10.14421/ajis.2017.552.391-426.

⁶ Wahdi Sayuti and Maila D.H. Rahiem, "A Comparison of Science Integration Implementation in Two State Islamic Universities in Indonesia," *Madania: Jurnal Kajian Keislaman*, vol. 24, no. 1 (July 1, 2020), p.109, https://doi.org/10.29300/madania.v24i1.3293.

⁷ LR Gay, Educational Research, (Columbus: A Bell & Company, 1981), p. 28.

⁸ Arif Furchan, Pengantar Penelitian Dalam Pendidikan, (Surabaya: Usaha Nasional, 1982), p. 384.

⁹ Soegarda Poerbakawatja, Ensiklopedi Pendidikan, (Jakarta: Gunung Agung, 1976), p. 78.

In exploring the idea of scientific integration, there are two circumstances that need to be taken seriously.10 First, PTKIN should have the courage to open up to other disciplines, namely to accept science that has been considered far behind. This criticism is more directed at the internal itself which tends to be less open, both scientifically, and collectively as campus residents. Second, the government should no longer narrow the space for PTKIN to develop science, which is not only limited to narrow religious scholarship. Therefore, one of the paths that must be taken is to open the taps as wide as possible to become a UIN. The discourse of scientific integration is considered successful in dismantling educational barriers, with the opening of the transformation of IAIN to UIN from 2002 to the present.

Religion and Science Conflict

According to Sakir in Kurniasih,11 in the history of human journey, the relationship between science and religion cannot be said to be always harmonious. It was records that the religious institutions had made Galileo (1564-1642) a dissident against religious authority for a time so that he was sentenced to death on the grounds of his scientific attitude that loudly stated that the sun was the center of the universe (heliocentric). Galileo's findings contradicted the belief of the authority of religious institutions at that time which revealed that the earth was the center of the solar system (geocentric). Gelileo pioneered modern scientific institutions that emphasized logic and experimental methods to replace the Aristotelian speculative philosophical approach that was believed by the wider community. At that time, the church was angry because Galileo

Moch Iqbal, "Kritik Nalar Integrasi Keilmuan DI PTKIN: Mengusung Keilmuan Tabot Dan Domestifikasi Studi Keislaman Berwawasan Kebangsaan," *El-Afkar: Jurnal Pemikiran Keislaman Dan Tafsir Hadis*, vol. 9, no. 2 (2020), pp. 307–25, http://dx.doi.org/10.29300/jpkth.v9i2.3586.

voiced Copernican views which were considered contrary to scripture.¹²

Previously, Aristotle had also surprised the knowledge of the people at that time, when he said that the planet Earth was round, not flat as believed in his time. Another religious "sentiment" towards science is in view of Darwin's theory of evolution. For Darwin's materialists, the universe has no value. Ethical instinct is only a way (humans) to adapt to the harshness of this universe. While morality (as well as gender) is created by human genes as a way of bringing humans to future generations.

Conflicts between religion and science in the past occurred when the church acted repressively against its people. The church can impose certain desires based on biblical arguments, without opening the slightest dialogue. When symptoms of different views occur, the church can show its power by freely cracking down on dissidents, because it is feared that science will damage the faith of the laity and at the same time the existence of the church.

In the Islamic world, the conflict between religion and science is represented between two camps, namely, the first is the traditionalist (orthodox) thought group which is characterized by Sufism and develops Sufi education patterns. This pattern of education pays great attention to the spiritual and moral aspects or human character and tends to ignore the rationality aspect. The two camps of rationalist thought are liberal, open, innovative and constructive. This way of thinking gives rise to rational empirical education. This form of education pays attention to intellectual reasoning education.¹³

The stronghold of rational thinkers was unified during the heyday of Islam and they complemented each other. Religion and science no longer want to differentiate between what they should study. They study any kind of science without the dichotomy between religious knowledge that

[&]quot; Augustina Kurniasih, "Hubungan Sains Dan Agama," Proceeding, November 16, 2010; Syarif Hidayatullah, "Agama Dan Sains: Sebuah Kajian Tentang Relasi Dan Metodologi," Jurnal Filsafat, vol. 29, no. 1 (2019), pp. 102–33, https://doi.org/10.22146/jf.30246.

¹² Louis Leahy, "Evolusi Dalam Perspektif Paham Kristiani," *Jurnal* Filsafat, vol. 1, no. 1 (1997), p. 51.

¹³ Z. Zuhairini, Sejarah Pendidikan Islam, (Jakarta: Bumi Aksara, 2000), p.109.

comes from revelation and science that comes from logic. Both have really been used as a means to explore knowledge, both religious knowledge and general science.¹⁴

The period of harmony between science and religion lasted long enough until the appointment of a new ruler of the Abbasid Caliphate, namely al-Mutawakkil, who was a Sunni school of thought, the revoker of the official license of the Mu`tazilah school which became the official state flow during the reign of al-Ma'mun. 15 This condition continued until the mu'tazilah thought patterns barely had a place in the education system. In fact, if traced, the rejection of the Mu`tazilah or rational groups is more based on the existence of political interests, namely the coercive efforts that have been carried out by the authorities to lead Muslims to adhere to an official state teaching.16 This antipathy has also led to intense scrutiny of curriculum implementation in Madrasahs. The fall of the Mu'tazilites had raised the conservatives to power. In addition, this effort is also in order to restore the understanding of Ahlus Sunnah as well as to strengthen the basis of the ulama who often exercise control over the curriculum in educational institutions. At this time, the subject matter is very minimal, only limited to the religious sciences, even Islamic education is more identical with the teaching of Sufism and figh.

Since then, people no longer want to explore the sciences and philosophy. Logical and scientific thinking which was previously very dominant and produced many great works, shifted towards traditional-dogmatic thinking which was heavily influenced by superstitions and stupidity.¹⁷ This means that the decline of Islam has actually started since the collapse of the Mu'tazilah which has implications for the Islamic education system

in general which isolates it from the world of creativity and critical reasoning.

The dispute between the two camps has further strengthened the traditional education pattern which places more emphasis on Sufism and Jurisprudence education and less emphasis on critical reasoning education. The polarization of religion and science is felt until now. The development of Islamic education is increasingly dull. Creativity and a new culture that is commonly produced in the world of education is no longer visible. The world of education is nothing more than repeating old products. Such conditions cause his inability to overcome new problems faced as a result of changes and developments of the times. This intellectual disability is realized in the statement that the door of ijtihad is closed. The spirit of taglid and fanatical madhhab dominate the thoughts of the scholars so that there is a total intellectual freeze.18

Al-Ghazali is often accused of being behind the decline of Islamic scholarly activities. The teachings of Ash'ariyah theology and al-Ghazali's Sufism which taught tawakal (attitude of resihnation) and fatalism that were spread at that time developed rapidly. The Ash'ariyah school is different from the Mu'tazilah and the Samarkand Maturidiyah which gives a weak position to reason. The Ash-`ariyah school was developed by Madrasah Nizamiyyah, the first schoolng institution officially built by al-Ghazali. His monumental works in the field of Sufism are Ihyâ' 'Ulum ad-Dîn; the most famous book in the Islamic world. This mysticism and Sufism quickly spread throughout the Islamic world. Consequently, a few Muslim scholars and thinkers plunged into the world of Sufism. The search for spiritual life by drawing closer to God does have many positive aspects. But on the other hand, in practice it often ignores rationality-based activities. Too much emphasis on the spiritual life causes scholars to be more busy thinking about the secrets of Divine existence, causing confusion of mind.19 The spirit of the world and achieving

¹⁴ H. Samsul Nizar, Sejarah Sosial Dan Dinamika Intelektual Pendidikan Islam Di Nusantara, 1 (Jakarta: Kencana, 2013), 163.

¹⁵ Majid Fakhry, Sejarah Filsafat Islam: Sebuah Peta Kronologis, (Bandung: Penerbit Jendela, 2001), p. 24.

¹⁶ Suwito Fauzan, ed., Menimbang Sisi Positif Perlunya Pembaruan Pendidikan Islam" Dalam Sejarah Sosial Pendidikan Islam, (Jakarta: Kencana, 2005), pp. 163–64.

¹⁷ Abuddin Nata, Sejarah Pendidikan Islam: Pada Periode Klasik Dan Pertengahan, (Jakarta: Rajagrafindo, 2004), p. 123.

¹⁸ Z. Zuhairini, Sejarah Pendidikan Islam..., p. 111.

¹⁹ Azyumardi Azra, Esei-Esei Intelektual Muslim Dan Pendidikan Islam, (Jakarta: Logos Wacana Ilmu, 1999), p. 685.

progress is increasingly lost so that the teachings of mysticism, as expressed by Amir Ali, can only cause intellectual paralysis.²⁰

The residue of the defeat of the rationalists against the traditionalist group of thought is felt to this day. Education that emphasizes critical reasoning is hobbled to get back up and is difficult to get a place in the Islamic education system. The 'dispute' between traditionalists and rationalists continues to this day. In fact, both are needed in building a solid civilization. The traditional 'faction' is very concerned with spirituality, while the rational faction is very strong in developing innovative critical reasoning.

Toward Reintegration of Science

There are several forms of the relationship between science and religion. In the preparation of the book UIN Syarif Hidayatullah Jakarta Towards a Research University, Amin Abdullah revealed that there are five forms of the relationship between science and religion, namely (1) religious conflict; the conflict between religion and science as happened in the case of Galileo, (2) the independence of the concept of religion and science that runs independently without interacting with each other, (3) Islamization; the theory of science that requires alignment with Islamic religious concepts, (4) dialogic; religion and science interacting with each other, and (5) integration of religion and science that goes hand in hand and science is given the content of religious values or even some science is also developed by starting from the concept or statement of religion.21

Islamic universities in Indonesia are more likely to choose the path of scientific integration, which is often popularized by M Amin Abdullah, namely the interrelation of various scientific disciplines sourced from the Quran and Hadith.²² Efrinaldi et

al's research on the pattern of scientific integration in several PTKIN[s] in Indonesia showed that the new scientific pattern is more of a scientific integration pattern between science and religion, rather than other forms.²³ In addition to scientific integration, the Islamization of science voiced by Ismail Faruqi in the 1970s is also quite popular in the discourse of seeking forms of Islamic scholarship.²⁴ The integration-interconnection of science emphasizes the existence of interrelationships between various disciplines that are fragmented so that the dichotomy of religion and science and technology no longer appears. Meanwhile, the Islamization of science is more towards giving the spirit of Islam to various developing sciences.

The Islamization school of science views that there is a 'latent danger' to the development of science, which is widely exhaled from western civilization. At least, the most visible is the secularization in every pulse of the progress of knowledge. Meanwhile, secularism in the eastern world is strongly opposed and is not in accordance with cultural values that are thick with beliefs and religion. So all western products deserve to be suspected and localized or Islamized, so that they are in accordance with the pulse of the eastern people.

The first world conference on Muslim education was held in Mecca in 1977. The conference, which was initiated and organized by King Abdul Aziz University, was successful in discussing 150 papers written by scholars from 40 countries. The results of the conference formulated recommendations for revamping and perfecting the Islamic education system organized by Muslims around the world. One of the recommended ideas concerns the

²⁰ Alimuddin Hassan Palawa, "Api Islam Syed Ameer Ali: Perdebatan Atas Wacana Poligami, Budak, Dan Eskatologis," TOLERANSI: Media Ilmiah Komunikasi Umat Beragama, vol. 8, no. 1 (2017), pp. 97–116, http://dx.doi.org/10.24014/trs.v8i1.2473.

²¹ Tim Perumus, Integrasi Keilmuan UIN Syarif Hidayatullah Jakarta Menuju Universitas Riset, (Jakarta: UIN Jakarta Press, 2006), pp. 34–62.

²² Muhammad Amin Abdullah, Islamic Studies Di Perguruan

Tinggi: Pendekatan Integratif-Interkonektif, (Yogyakarta: Pustaka Pelajar, 2006).

²³ Efrinaldi Efrinaldi, Toha Andiko, and Taufiqurrahman Taufiqurrahman, "The Paradigm of Science Integration in Islamic University: The Historicity and Development Pattern of Islamic Studies in Indonesia," *Madania: Jurnal Kajian Keislaman*, vol. 24, no. 1 (2020), pp. 97–108, http://dx.doi.org/10.29300/madania. v24i1.3326.

²⁴ Ismail Al-Frauqi, *Dialog Tiga Agama Besar,* (Surabaya: Pustaka Progresif, 1994), pp. 7–8.

²⁵ Muljamil Qomar, Epistemologi Pendidikan Islam: Dari Metode Rasional Hingga Metode Kritik, (Jakarta: Erlangga, 2005), p. 115.

Islamization of science. This idea was put forward, among others, by Syed Muhammad Naquib al-Attas in his paper entitled Preliminary Thoughts on the Nature of Knowledge and the Definition and the Aims of Education, and Ismail Raji al-Faruqi in his paper "Islamicizing social science.²⁶

It is very reasonable if there is enthusiasm from some Islamic scientists towards the discourse of Islamization of science. As AM Saefuddin said, Islamization is a must for the revival of Islam because the center of the decline of today's ummah is the drying up of knowledge and the elimination of a low position.27 There were a few muslims who reject this idea. Like Ziauddin Sardar, a Muslim thinker from England, thinks that the Islamization of science program is something naive and shallow. Sardar is worried about the idea of an Islamization movement which will eventually result in the westernization of Islam. Sardar is also pessimistic about the ability of Muslim scientists to combine Islamic science with Western science because between the two there are striking paradigm differences. This is a reaction to Sardar's disapproval of al-Farugi who puts the mastery of modern science as the first step before mastering the knowledge of Islamic heritage and explains the relevance of Islam to Western disciplines. This action is considered by Sardar to be like "stretching before sitting" or like "putting the carriage in front of the horse". According to him, it is modern science that is relevant to Islam because Islam is "a priori relevant for every era." It is very fatal to emphasize the relevance of Islam which is unique to modern scientific disciplines. It will only make us trapped into "Westernization of Islam" by justifying the justification of Western science as the standard that dominates the development of science at a macro level. Sardar argues that all science is born from a particular view and in terms of the hierarchy that is subject to that view. Therefore, a

lot of efforts to find epistemology should not be initiated by focusing on modern science because Islamization of modern science can only occur by developing a paradigm that examines applications outside of Islamic civilization that are related to the needs of contemporary reality. If you persist in this way of thinking, it means that you are only exploiting Islamic knowledge, but still using the Western way of thinking. Therefore, Sardar invites that the Islamization of science must start from building an Islamic epistemology so that it actually produces a scientific system that is built on the pillars of Islamic teachings.²⁸

Stronger criticism of the rejection of the Islamization of science also came from a local scientist, namely Usep Fahrudin. According to him, the Islamization of knowledge is not a creative work. Islamization of knowledge is no different from piracy or acknowledgment of the work of others. To a certain extent, Islamization is like the work of an artisan, if a scientist succeeds in creating or developing a science, a Muslim captures and Islamizes it.

Usep Fahrudi's statement is interesting because in practice, 'knowledge piracy' has been going on for a long time in Islamic higher education institutions. The study programs of Islamic Economics, Islamic Banking, and Islamic Sociology, for example, are forms of the practice of 'piracy' of knowledge. In the learning process, references and other learning materials are still dominant from 'infidel' references. However, a small number of libraries or other learning resources come from Islamic classical literature.

Islamic literature is merely affixed to 'conventional' science which does not offer a new paradigm. Since the 2000s, in the economic field, for example, Bank Muamalat which is claimed to be the most authentic Islamic bank product of Islamic economics, still has a strong smell of conventional banks. Islamic banks only replace some terms in conventional banks with Arabic terms which are substantially not much different from conventional banking. In fact, the latest

²⁶ Muhaimin, Arah Baru Pengembangan Pendidikan Islam: Pemberdayaan, Pengembangan Kurikulum, Hingga Definisi Islamisasi Pengetahuan, (Bandung: Nuansa, 2003), p. 330.

²⁷ Wina Khusnul Urifah, "KONSEP ISLAMISASI ILMU PENGETAHUAN MENURUT SYED NAQUIB AL-ATTAS DAN ISMAIL RAJI AL-FARUQI: STUDI PERBANDINGAN", (PhD Thesis, UIN Sunan Ampel Surabaya, 2010), p. 83.

²⁸ Wina Khusnul Urifah, "KONSEP ISLAMISASI ILMU PENGETAHUAN..., p. 83.

issue is that Bank Muamalat is experiencing capital difficulties.²⁹

The Term of Becoming Islamic Science in Kuntowijoyo's Thought

In terms of the integration of science, Kuntowijoyo prefers the term of Islamic science. The use of this term seems to belittle Islam, which seems to lack knowledge. This term is also a form of low self-esteem and distrust of science. The term is less or even unpopular in the context of efforts to bring together Islam and science.

However, Kuntowijoyo's explanation as mentioned in his book entitled Islam Sebagai Ilmu: Epistemologi, Metodologi, dan Etika (Islam as Science: Epistemology, Methodology, and Ethics) is very interesting.30 Kuntowijoyo chose a scientific program with an Islamic scientific paradigm. In other words, Muslims must look at several things related to the reality of Islamic scholarship, and the existence of Humanities in the Quran. First, the task is carried out by "Islamic demystification". This view is similar to that of M Amin Abdullah, who recommended the need for the desacralization of the scriptures. The need for Islam as a text (the Quran and Sunnah) to be faced with reality, both everyday reality and scientific reality. Second, why should Muslims see reality through Islam? The answer is that according to cultural science and the sociology of science, reality is not seen directly by humans but through the veil (concepts, cultural symbols, and people's approval). Third, the recognition of the human factor. Without the human factor the construction of human experience becomes incomplete science. Humanities in the Quran wants to emphasize that there are not only two knowledges (qauliyah and kauniyah), but there are three kinds of knowledge which include qauliyah, kauniyah, and nafsiyah. Without

The Islamic sciences described by Kuntowijoyo reversed the concept of Islamization of knowledge, which is a movement from context to text into a movement from text to context. It means (the text of the Quran and Sunnah) is used as a paradigm for the development of science. According to Kutowijoyo, there are two methodologies that can be used in the Islamic scientific process, namely integration and objectification. First, integration is the integration of human scientific wealth with revelation (God's instructions in the Quran and its implementation in the Sunnah of the Prophet). Second, objectification is to make Islamic knowledge a blessing for everyone.

Kuntowijoyo illustrates the flow of the development of the sciences to the scientific integralistic phase as follows:

religion \rightarrow anthropocentric \rightarrow dedifferentiation \rightarrow integralistic science

- Religion. The Quran is God's revelation, which regulates human relations with God, humans, and the environment (physical, social, cultural). The Quran is a guide to ethics and wisdom that can be used as a grand theory such as the economic system. God's revelation never claims to be a science qua science.
- 2. Theoanthropocentrism. Religion does claim to be the source of truth, ethics, law, wisdom. Religion never makes God's revelation the only source of knowledge and denies human intelligence, or on the contrary considers the human mind as the only source of knowledge and forgets about God. So there are two kinds of sources of knowledge, namely those from God and those from humans, which is called theoanthropocentrism.

the humanities, science would not be able to touch art, philosophy, history, anthropology, and political science.³¹

²⁹ Nandra Piliang, "Bank Muamalat Sedang Kesulitan Permodalan, Ini Tanggapan OJK - Riaumandiri.Co," November 14, 2019, https://www.riaumandiri.co/read/detail/77077/bankmuamalat-sedang-kesulitan-permodalan-ini-tanggapan-ojk.

³⁰ Kuntowijoyo, Islam Sebagai Ilmu: Epistemologi, Metodologi, Dan Etika, (Yogyakarta: Tiara Wacana, 2004), p. 3.

³¹ Anshori Anshori and Zaenal Abidin, "Format Baru Hubungan Sains Modern Dan Islam (Studi Integrasi Keilmuan Atas Uin Yogyakarta Dan Tiga Uinversitas Islam Swasta Sebagai Upaya Membangun Sains Islam Seutuhnya Tahun 2007-2013)," Jurnal Studi Islam, vol. 15, no. 1 (2014).

- 3. Dedifferentiation. In the so-called Post-modern civilization there needs to be a change. That change is dedifferentiation. If differentiation requires separation between religion and other sectors of life, dedifferentiation is the reunification of religion with other sectors of life, including religion and science.
- 4. Integralistic science. The science that unites the revelations of God and the findings of the human mind. Integralistic sciences will not exclude God or exclude humans. It is hoped that integralism will simultaneously resolve the conflict between extreme secularism and radical religions in many sectors.³²

It seems that before the surge of scientific integration discourse emerged among PTKIN academics, Kuntowijoyo, a scientist and humanist at Gajah Mada University, first paid attention to the scientific problems that many universities in Indonesia are engaged in, especially Islamic universities. The stages of scientific development to enter the stage of scientific integration are part of the process that must be passed.

Barriers to Scientific Integration at PTKIN

After IAIN was converted into a new UIN, the university freely opened various study programs, especially general study programs. This is a consequence of the transfer of status to a university that has the right to develop various scientific disciplines. 19 years since the change of status to UIN at UIN Syarif Jakarta 2002 and 2004 UIN Suka Yogjakarta, the transformation into a university has also not shown excellence in the fields of general science and science. UIN is still thick with religious studies and discourses. It may be because the main 'habitat' is Islamic studies and still cannot fully 'move on' to more general and scientific studies.

In the writing entitled "Desain Pengembangan Akademik IAIN menuju UIN Sunan Kalijaga", Amin Abdullah said that:

"Although IAIN Sunan Kalijaga and STAIN Malang have changed to UIN Sunan Kalijaga Yogyakarta and UIN Malang, their main task remains as an institute of higher education in the field of Islam, while organizing non-Islamic programs is "an additional task", as an institute of higher education, the field of Islam is still the main task. Its main mandate should not be shifted by its wider mandate. However, the quality and collection of the library, the literature used, the institutional network, the development of teaching methodologies, research, and the scientific mentality of the lecturers and students need to get more emphasis than before in accordance with the academic culture that exists at the university.33

This means that even though IAIN is gradually being abandoned and turning into a UIN, the main mission is to continue to develop Islamic studies, while other sciences are only complementary to long-established Islamic studies. In other words, the intention to catch up in the field of science has been hampered by internal education since the beginning, with the Islamic religion still being the main task. Its main mandate must not and need not be shifted by its wider mandate". At least, the signs have been given 'don't be too scientific, your territory is religious studies'. PTKIN still cannot get out of the stigma as a 'center for religious studies, not a center for scientific studies'.

Is that so? The answer is not certain. Is it true that the main vision of PTKIN is religious studies, while the study of other sciences is the reinforcement? or whether the resources were deliberately never prepared so that there has been no significant change, both in terms of scientific contribution and competitiveness among other campuses. Is PTKIN deliberately designed to be a university that only focuses on religious studies?

³² Kuntowijoyo, Islam Sebagai Ilmu..., pp. 51-54

³³ Zainal Abidin Bagir, Integrasi Ilmu Dan Agama: Interpretasi Dan Aksi, (Bandung: Mizan Pustaka, 2005), p. 238.

Isn't the spirit of change to become a UIN based on the ideals of catching up in the field of science? Therefore, becoming a UIN is an opportunity to open a wider scientific study of science. Supposedly, changing the status to UIN, it will immediately become a competitive higher education institution, at least for campuses in Indonesia. How not? The characteristics of the religious Indonesian people who are very thick with religious activities, especially Islam, view that the presence of campuses with strong religious nuances and campuses that study various general sciences that are very much needed by the world of work and the demands of technological developments are very interesting. By becoming a UIN, Muslims can participate in fighting over the world market which was previously only monopolized by public campuses, especially state universities. UIN will become a trademark who cares about religion as well as those who want to learn science and technology. Almost major cities in Indonesia already have UIN which was previously IAIN. This can be seen in big cities such as Jakarta, Yogyakarta, Bandung, Surabaya, Semarang, Makassar, Pekanbaru, and Medan. Indonesian people increasingly have choices in determining higher education studies.

It is feared that the transformation of the Institute into a university will displace religious studies that have been established and have long roots in PTKIN. By looking at the phenomena that have occurred, many Islamic campuses in Indonesia have complained about the Faculty of Religion because this faculty is the most minority among other faculties. The 'defeat' of religious studies is also seen in the phenomenon of leading universities in the world which coldly or even does not respond to religious studies as an urgent matter to be integrated. The study of religion is only a small part of the many studies that develop on major campuses in the world.

Conclusion

Several scientific models find common ground that there is no dichotomy between science and religion. Scientific studies that have been separate and dichotomy are contrary to science itself. The rapid development of science in reality cannot run alone, but always involves other disciplines. Monodiscipline that has been developed in Islamic education is considered to be one of the roots of the backwardness of Islam in the field of science and technology. Therefore, the dichotomy of science that has been going on so far must be ended again and integrated and interconnected with various disciplines. Thus, the Islamic world can again contribute in developing science and technology based on a strong Islamic spirit.

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