

**THE SPIRAL ANDROMEDA PARADIGM;
An Interpretation on Science Integration of UIN Suska Riau**

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ABSTRACT

Among the ideals of the establishment of UIN from IAIN is the desire for scientific integration, which is paradigmatically formulated into a scientific paradigm at each UIN. The scientific paradigm of UIN Sultan Syarif Riau is the "Andromeda Spiral" paradigm. This paradigm is important to be interpreted in the form of praxis-operational, so that it is easy to understand and practice. Through literature studies and in-depth interviews with the initiators of the Andromeda Spiral Paradigm, data were obtained through literature and interview results. Data is analyzed by compiling, categorizing data, looking for patterns or themes with the intention of understanding its meaning. The important meaning of the construction of the Andromeda Spiral Paradigm is First, the triadic linking of three sciences, namely social sciences and humanities, natural sciences, and religious studies, both in the process of education and teaching, as well as in research. Secondly, that whatever the science, religion, science, and humanities, must rest on and be sourced from one meeting point of tawhid, namely the Oneness of Allah swt. as the One who is the creator and source of inspiration for knowledge. This means that the research model that is built is able to give meaning to the omnipotence of God

Kata Kunci

*Paradigma Spiral Andromeda,
Ilmu, UIN, Integrasi Keilmuan*

Abstrak

Di antara cita-cita berdirinya UIN dari IAIN adalah keinginan untuk melakukan integrasi keilmuan, yang secara paradigmatis dirumuskan kedalam paradigma keilmuan pada masing-masing UIN. Paradigma keilmuan di miliki UIN Sultan Syarif Riau adalah paradigma "Spiral Andromeda". Paradigma ini, penting untuk ditafsirkan dalam bentuk praksis-operasional, sehingga mudah dipahami dan dipraktekkan. Melalui studi Pustaka dan wawancara mendalam kepada para penggagas Paradigma Spiral

Andromeda, maka data diperoleh melalui pustaka dan hasil wawancara. Data dianalisis dengan menyusun, mengkategorisasikan data, mencari pola atau tema dengan maksud untuk memahami maknanya. Makna penting dari kontruksi paradigma spiral andromeda adalah Pertama, menjalinkelindankan secara triadic tiga keilmuan, yaitu ilmu-ilmu sosial humaniora (Social Science and Humaniora), ilmu-ilmu kealaman (natural science), dan ilmu-ilmu keagamaan (religious studies), baik dalam proses pendidikan dan pengajaran, maupun dalam riset. Kedua, bahwa apapun keilmuannya, agama, sains, dan humaniora, mestilah bertumpu sekaligus bersumber dari satu titik temu tauhid, yakni Keesaan Allah swt. sebagai Zat yang menjadi pencipta dan sumber inspirasi pengetahuan. Artinya, model riset yang dibangun mampu memberikan makna akan ke-Mahakuasaan Allah

Introduction

The transformation of institutions from IAIN to UIN, which is developing "massively" today in Indonesia, is one of the evidences of the beginning of the idea of scientific integration, which combines Islamic science with secular science¹. There were at least a few books in the first years of UIN's establishment, which became "witnesses" of the change from IAIN to UIN at that time, such as the writings of Bagir & Wahyudi,² Kusmana,³ Amin Abdullah,⁴ and Suprayogo.⁵

This situation lasted up to five centuries later, until when Islam became a lighthouse in all aspects. The development of science in the Islamic world during the Middle Ages was clearly integral and dynamic, since it combined reason and revelation as the source of knowledge and it was

dynamic where it was always evolving with new discoveries. Hence, it was able to produce great scholars in almost all scientific fields.⁶ No doubt, it had contributed significantly to the development of science in the West.⁷

However, since the XIII to the XVII century Islamic education has experienced a serious setback. One of the factors behind the decline of Islamic education at that time was the loss of the culture of rational thinking among Muslims, which Umar Capra and Ibn Khaldun referred to it as a consequence of the rampant moral decadence.⁸ Throughout the history of Islam, there were always two patterns of thought that had given a great influenced toward the way of thinking of Muslims. Firstly, the traditionalist (orthodox) thinking, which were bound to think Sophistically and secondly, the rationalist thought which was liberal,

¹ M Fahim Tharaba et al., "The Development Of Science Integration Towards Smart Campuses In Indonesia Using The Islamic Higher Education Management Model," *Journal of Tianjin University Science and Technology* 54, no. 6 (2021); Abdul Fattah, "Design Strategy for State Islamic Universities (PTKIN) Towards Science and Technology Development In Indonesia," *El-Hikmah: Journal of Islamic Education Studies and Research* 10, no. 2 (2016).

² Zainal Abidin Bagir and Jarot Wahyudi, *Integration of Science and Religion Interpretation and Action* (Yogyakarta: Mizan Cooperation, MYIA and SUKA Press UIN Sunan Kalijaga, 2005).

³ Aan Kusmana, *Scientific Integration of UIN Syarif Hidayatullah Jakarta Towards a Research University* (Yogyakarta: PPJM and UIN Jakarta Press, 2006).

⁴ M. Amin Abdullah, "Religion, Science, and Culture: An Integrated, Interconnected Paradigm of Science," *Al-*

Jami'ah: Journal of Islamic Studies 52, no. 1 (April 8, 2015): 175.

⁵ Imam Suprayogo, *Science Cage* (Malang: UIN Malang Press, 2003); Imam Suprayogo, *Excellent Islamic University* (Malang: UIN Malang Press, 2009); Imam Suprayogo, "Building the Integration of Science and Religion," in *Integration of Science and Religion: Interpretation and Action*, ed. Zainal Abidin Bagir (Bandung: Mizan, 2005).

⁶ Ramayulis and Samsul Nizar, *Philosophy of Islamic Education* (Jakarta: Kalam Mulia, 2009).

⁷ Ismail R. al-Faruqi, *Islamization of Science*, (Bandung: Pustaka, 1984).

⁸ Tijani Ahmad Ashimi, "Islamic Civilization: Factors Behind Its Glory and Decline," *International Journal of Business, Economics and Law* 9, no. 5 (2016).

open, innovative and constructive.⁹ The first pattern called Islamic philosophy (which has a Sufistic nuance) has been excessively incorporated by al-Ghazali into the Islamic world in the East, while the second one, Ibn Rushd, has also excessively incorporated his Islamic philosophy (rationalistic nuance) into the Islamic world in the West. Al-Ghazali with his philosophy headed towards the spiritual field until he disappeared into the deep mega world of Sufism, while Ibn Rushd with his philosophy headed towards the abyss of materialism, the opposite direction to al-Ghazali.

In the next process, along with the progress of Western science and technology, at the same time Muslims were faced with the decline of their civilization. It happened especially around the 16th - 17th centuries. During these times, a dichotomous epistemology emerged between "religious sciences" ('ulum shari'ah) or "traditional sciences" ('ulum naqliyyah) with "rational sciences" ('ulum 'aqliyyah or ghair syar'iiyyah), The culmination point occurred when al-Ghazali categorized fardhu 'ain for religious science and fard kifayah for rational science. According to Rahman, apart from al-Ghazali's attack, there are several reasons for this. *Firstly*, there was the view that life is relatively short. Thus, people prioritized the religious sciences to provide "guarantees" in the afterlife. *Secondly*, there was a Sufi tradition that deliberately rejected intellectual-rationalism in the attainment of knowledge. And *Thirdly*, certificates that received legislation to work as mufti or qadi, at that time, only those containing religious studies, while philosophers and scientists could only work in the palace. This condition is further exacerbated by the presence of Western colonialists in several Muslim countries. Having a strong set of secular epistemologies, the West were increasingly 'lulling' the status quo of Muslim mindsets under the pretext of the afterlife.¹⁰

In such an attitude polarization, the two knowledge systems operated simultaneously i.e., Modern knowledge with its secular system, and Islamic knowledge with its hereafter orientation. This dichotomous orientation continues to extend to the pattern of education which made it

increasingly difficult for Muslims to dilute it. Figures such as Muhammad Iqbal (1981); Sayyid Hossein Nasr (1986;1976;1989), Fazlur Rahman (1979;1982), Ismail Razi al-Faruqi (1982), Syed Muhammad Naquib al-Attas (1981;1991), Ziauddin Sardar (1984), and others, had made several vital effort to "Islamize" sciences. This concept, especially in Indonesia, was ultimately interpreted by establishing Madrasah and UIN. By the end of 2005, there were 29 PTAIN that had successfully transformed from IAIN and STAIN to UIN: UIN Syarif Hidayatullah Jakarta; Sunan Kalijaga Yogyakarta State Islamic University; Maliki UIN Malang; UIN Sunan Gunung Djati Bandung; UIN Syarif Kosim Pekanbaru; UIN Alauddin Makassar; UIN Ar-Raniry Banda Aceh; UIN Sunan Ampel Surabaya; UIN Raden Fatah Palembang; UIN Walisongo Semarang; UIN Sumatra Utara, Medan; UIN Mataram; UIN Imam Bonjol Padang; UIN Antasari Banjarmasin; UIN Sultan Thaha Saifuddin Jambi; UIN Raden Intan Lampung, Bandar Lampung; UIN Sultan Maulana Hasanuddin Banten, Serang; UIN Sayyid Ali Rahmatullah Tulungagung; UIN Prof. K.H. Saifuddin Zuhri Purwokerto; UIN Raden Mas Said Surakarta, Sukoharjo; UIN Sultan Aji Muhammad Idris Samarinda; UIN K.H. Achmad Siddiq Jember; UIN Fatmawati Sukarno Bengkulu; UIN Datokarama Palu; UIN Mahmud Yunus Batusangkar, Tanah Datar; UIN Sjech M. Djamil Djambek Bukittinggi; UIN K.H. Abdurrahman Wahid Pekalongan; UIN Syekh Ali Hasan Ahmad Addary Padangsidimpuan; and UIN Salatiga.

In its development, in the process of institutionalizing IAIN to UIN, each party tried to build its own integrative scientific paradigm. Or at least have their own concept to carry out the process of "Islamization" of science. UIN Jakarta with the concept of "Reintegration of Sciences in Islam"; UIN Yogyakarta with the concept of "Integration-Interconnection" with the spider web metaphor; UIN Malang with the concept of "Integration of Science in Islam" with the metaphor of the Tree of Science; UIN Bandung with the concept of "Revelation Guiding Science" with the metaphor of the Wheel; UIN Makassar

⁹ Suwito, *History of Islamic Education* (Jakarta: Prenada Media, 2005).

¹⁰ F Rahman, *Islam and Modernity: Transformation of an Intellectual Tradition* (Chicago: The University of Chicago Press, 1982).

with the concept of "Integration and Interconnection of Science and Religion" with the metaphor of the Pine Cell; UIN Pekanbaru with the concept of "Andromeda spiral".¹¹

This research endeavors to provide an interpretation of the Spiral Andromeda paradigm symbolized in the logo of UIN Suska Riau. As a paradigm, it should serve as a world view for every academician in carrying out their academic activities, ranging from the teaching process to their research endeavors. The research findings by Nazir and Hanafi on the research activities conducted by faculty members at UIN Suska Riau and UIN Malang, based on their respective scholarly paradigms, reveal low expectations.¹² They still "separate" themselves according to their disciplinary concepts, with secular concepts standing separately from secular scholarly concepts, and religious concepts doing the same. Therefore, it becomes crucial to reevaluate and reinterpret this paradigm, making it more implementable in academic work processes.

In a prior literature research conducted by Suharto (2015; and Suharto et al., 2016), it was noted that the scholarly paradigm of UIN Suska Riau, specifically the Spiral Andromeda paradigm, did not register within the purview of his research focus.¹³ Consequently, he asserted that several UINs in the Sumatra region, including UIN Lampung, UIN Aceh, UIN North Sumatra, and UIN Riau, lack a robust scholarly paradigm suitable for implementation within their respective institutions. As a result, this study also constitutes an endeavor to propagate the conceptual framework of the "Spiral Andromeda" paradigm within the discourse of scholarly integration in Indonesia.

Method

In general, the research methodology employed in this study is qualitative research. The approach utilized is a descriptive approach.¹⁴ This approach aims to comprehensively depict various phenomena, whether natural or human-made. These phenomena may take the form of activities, characteristics, changes, relationships, similarities, and differences between one phenomenon and another.¹⁵

The specific form of qualitative research adopted is library research. Paradigmatically, Zed defines library research as a series of activities related to the method of collecting bibliographic data, reading, note-taking, and processing various research materials.¹⁶ However, it is important to note that this research also requires additional data, such as interviews with the proponents of the Spiral Andromeda scholarly paradigm at UIN Suska, including figures like Prof. H. M. Nazir, Prof. Munzir Hitami, and others.

As a library research, the data processing in this study aligns with the construction and flow of the research, involving the examination of bibliographic references as the primary data source. The data analysis follows the steps outlined by Bungin¹⁷ and Moleong,¹⁸ encompassing the organization, categorization of data, and identification of patterns or themes with the aim of comprehending their significance.

Discussion

Our Scientific Dilemma; *Dichotomous Problem*

The term "science dichotomy" is a term formed from a combination of two words i.e., "dichotomy" and "science" where the word

¹¹ Mulyono Mulyono, "Model of Integration of Science and Religion in the Development of Academic Science of UIN," *Journal of Islamic Research* 7, no. 2 (2011).

¹² H. M. Nazir and Imam Hanafi, *Integration-based Research* (Pekanbaru: LPPM UIN Suska Riau, 2017).

¹³ Toto Suharto, "The Paradigm Of Theo-Anthropo-Cosmocentrism: Reposition Of The Cluster Of Non-Islamic Studies In Indonesian State Islamic Universities," *Walisono: Journal of Social and Religious Research* 23, no. 2 (2015); T Suharto, Z Abas, and A Faishol, "Epistemological Framework of Iain Surakarta's 'Gunungan Ilmu' Scientific Paradigm," *IAIN Surakarta*, 2016.

¹⁴ Suharsimi Arikunto, *Research Procedures: A Practical Approach*. (Jakarta: Rineka Cipta, 2016); Andi Prastowo, *Research Methods* (Yogyakarta: Ar-Ruzz Media, 2011).

¹⁵ Nana Syaodih Sukamadinata, *Educational Research Methods* (Bandung : Remaja Rosdakarya, 2012).

¹⁶ Mustika Zed, *Literature Research Methods* (Jakarta: Yayasan Obor Indonesia, 2008).

¹⁷ Burhan Bungin, *Qualitative Research Data Analysis*. (Bandung: Rajawali. Pers, 2012).

¹⁸ Lexy J. Moleong, *Qualitative Research Methodology* (Bandung: Remaja Rosdakarya, 2017).

dichotomy in that term stand for a verb, while the word science stands for the object. The lexical meaning of the word dichotomous is the clear division of something into two separate parts¹⁹. Thus, from the lexical meaning, the meaning of the term "science dichotomy" can be drawn into "clear division of science into two separate parts".

In the context of Islamic education, the terminology meaning of the term dichotomy of science is an implication of the separation of science from religion, which later developed into other dichotomous phenomena, such as the ulama-intellectual dichotomy, the dichotomy of religious sciences with general science, even the dichotomy (split) in the Muslim himself²⁰. What is meant by the dichotomy within this context is not referring to the meaning of "component", it refers to the meaning of "group", therefore, the dichotomy of science in the above sense is defined as the division of knowledge as a whole into groups of religious sciences and groups of non-religious sciences.

What is meant by religious sciences in this paper, however, are sciences that have grown and become part of the tradition of studying the Islamic religion. Fazlur Rahman called the group as the religious sciences (*Ulum Syar'iyah*) or traditional sciences (*Ulum Naqliyyah*)²¹, while Nurcholis Madjid called it as "traditional Islamic scientific discipline". The material object of these religious sciences is the teachings of Islam, while the formal object is vary which includes various scopes of orientation, namely; the science of kalam, which directs the discussion to the fundamental aspects of God along with their various derivations, then fiqh which deals with the formal aspects of worship and law as well, so that the emphasis on orientation is very exoteric. Regarding external matters, Sufism (Tasawuf) deals with aspects of religious appreciation and practices that are more personal in nature where the emphasis on

orientation is very isoteric. As for matters of a spiritual and philosophical nature include matters of a speculative contemplation about life and its environment in general²².

On the other hand, what is meant by non-religious sciences are sciences that do not - directly- make the teachings of Islam both as its material object nor as its formal object. Fazlur Rahman calls this group of sciences in terms of rational sciences (*Ulum Aqliyyah/Ghoir Syar'iah*). Those non-religious sciences are the rational sciences – apart from Islamic philosophy and kalam – such as natural sciences, social sciences and other sciences that are not included in the category of religious sciences²³.

As for the material object of this group of non-religious sciences – mainly- is an empirical phenomenon, while the formal object – like the religious sciences – is very diverse. From the aforesaid view, it shows that according to the dichotomous perception, religious education is merely related to aqidah (in the dogmatic sense), worship (in the meaning of mahdhah, pure), and morals (in the sense of social ethics, etiquette). It has absolutely nothing to do with peace issues, such as social, economic, cultural, political, historical and other sciences focusing on peace issues. On the other hand, "general" education – not religion – is only concerned with matters of worldly life. It has absolutely nothing to do with religious or divine values. Probably, since religion is seen as something sacred, people used to distinguish the nature of the group of religious sciences from the group of non-religious sciences with the term sacred for the first group, and profane for the second one.

According to Ahmad Watik Pratiknya, one of the reasons for the development of this dichotomy trend is the failure of humans (Muslims) to understand proportionally the

¹⁹ Saliman and Sudarsono, *Dictionary of Education, Teaching and General* (Jakarta: Rineka Cipta, 1994).

²⁰ Ahmad Watik Pratiknya, "Identification of Islamic Religious Education in Indonesia," in *Islamic Education in Indonesia; Between Idea and Fact*, ed. Muslih Usa (Jakarta: Tiara Wacana, 1991).

²¹ F Rahman, *Islam and Modernity: Transformation of an Intellectual Tradition* (Chicago: The University of Chicago Press, 1982).

²² Ibid.

²³ Hanna Djumhana Bastaman, *Integration of Psychology with Islam: Toward an Islamic Psychology*, (Yogyakarta: Pustaka Pelajar in cooperation with Insan Kamil Foundation, 2003).

relationship between science and religion. The relationship between science and religion seems to be more proportional when viewed not as a condition or status, but as a process. It is called a process because in the course of history, the term has undergone an evolution, both macro-evolution (development of understanding that occurs due to the development of civilization and culture between generations of humans), and micro-evolution (development of understanding at the individual level)

The dichotomy is getting worse, when many people take for granted the polarization of religion, science, and art. Whatever their ontological, epistemological, and axiological reasons, polarization causes a cohesive and adhesive human entity to break up into small pieces that are indeed destructive. Fazlur Rahman said that the symptoms (signs) of the dichotomy of science among Muslims were the result of the relative narrowness and rigidity of the education at madrasas that developed during the 10-20 century.

Meanwhile, Abdurrahman Mas'ud argued that the phenomenon of the dichotomy of science cropped up among Muslims in the first five centuries of Islam (7th century to 11th century), precisely at the end of the 11th century before the 12th century. However, one interesting thing is that Abdurrahman Mas'ud opposed the argument of Fazlur Rahman regarding the mention of madrasas as the cause of the emergence of the dichotomy. By pointing to the Madrasa Nizamiyyah, Abdurrahman Mas'ud explained that the conclusion stated that madrasas are the cause of the emergence of the phenomenon of the dichotomy of science is a biased conclusion.

Though Abdurrahman Mas'ud believed that there is indeed an extreme dichotomy between religious sciences and non-religious sciences in Madrasa Nizamiyyah, he said that pointing at madrasas as the solely cause of the emergence of the phenomenon of the science dichotomy is too simplistic. He argued that the dichotomization of science is an implication of broad aspects, such as religious expression, cultural expression, social life, and also political life.

Amrullah Ahmad explained, in more detail, that the problem of the dichotomy of Islamic education as follows:

First, the failure to formulate monotheism and to perform in monotheism. *Second*, the failure to formulate monotheism and to perform in it as mentioned earlier led to the birth of shirk which resulted in the dichotomy of Islamic thought (fikrah). *Third*, the dichotomy of the Islamic thought causes a curriculum dichotomy. *Fourth*, the curriculum dichotomy causes a dichotomy in the process of achieving educational goals. *Fifth*, the dichotomy of the process of achieving educational goals in daily interactions in educational institutions causes a dichotomy of educational abiturient in the form of multiple split personalities in the sense of polytheism, hypocrisy which is institutionalized in belief systems, systems of thought, attitudes, ideals and behavior which is often called secularism. *Sixth*, this dichotomous atmosphere is institutionalized in the management system of Islamic educational institutions which is characterized by the tradition of "stretching out" asking for funds or certain facilities and political support for objective or subjective reasons; signing out that there is a crisis in the provision of education going on. *Seventh*, educational institutions will graduate students with multiple personalities, which in fact allow to strengthen the secularistic, rationalistic-empirical-intuitive and materialistic life systems of the people. *Eighth*, such a way of life for the people, will give way to secular Western civilization polished with the name of Islam. *Ninth*, in the process of regenerating the ummah, there will be preachers (da'i) attempting to realize Islam in a form that separates social, political, economic, scientific and technological life where Islamic teachings only deal with the problems of the hereafter while science and technology are worldly affairs.

The history of colonialism in Indonesia is no less important in playing a role or exacerbating this institutional dichotomization process. Several schools established by the Dutch were actually intended to produce employees to meet the needs of the Dutch government to work with them. Although the Indonesian people have enjoyed

several educational systems that were promoted by the Colonial, for example, the class system, the use of blackboards, tables, benches, and familiarity with the general sciences, however, the Dutch neutrality towards religion was less consistent²⁴. This was a result of the influence of Snouck Horgronje's analysis which divided Islam into three categories i.e., Islam in terms of worship, social, community, and political power²⁵. In terms of worship and social affairs, the Netherlands did reduce the power of pressure on Muslims, but in the terms of Dutch politics it tended to suppress. This condition was actually not beneficial for the journey of Indonesian Islamic education.

For instance, the Netherlands did not clearly recognize alumni from traditional education, so they cannot work as factory workers or as bureaucrats. With the discrimination in various lines of life due to colonialism and feudalism, several Indonesian thinkers emerged to reject the colonialism system. Another condition that made it difficult for Muslims was the existence of strict policies and controls from two institutions established by the Netherlands to administer religious education i.e., the *Van Onderwijst en Eeredinst Department* for religious education in public schools and the *voor Indlandsche Zaken Department* for religious teaching in Islamic educational institutions (Islamic boarding schools and madrasas). One of the policies used as a means of control issued by the Dutch Colonial later was the Teacher Ordinance policy in 1905 and 1925. Through this policy, religious teachers were forced to possess a teaching permit as required by the colonial government. As a result, not a few of teachers were eliminated and could qualify to teach according to the existing licensing institution, indeed this policy was actually no more than political.

In 1932, the Colonial government enacted the so-called Wild School Ordinance (*Wilde*

School Ordonantie), one of the policies was to demand or require every education provider to have a license from the government. Furthermore, the school itself was also required to make some reports on the condition of the school and the curriculum applied. When the reports were not accompanied by complete data, which of course must be "in tune" with Colonial policies, the incompleteness of the reports was often an excuse for the colonial government to close educational activities carried out by the community²⁶.

When Indonesia has achieved its independence²⁷, this kind of colonial policy was still defended by the founders of this Republic. *Departemen van Onderwijst en Eeredinst* (Education Department) and *Departemen voor Indlandsche Zaken* (Department of Religion) have been re-established to organized and manage the dichotomous education respectively. It means that Islamic religious education will be taught in public schools separately, likewise, general education will also be taught separately in religious schools. Meanwhile, there will be pesantren that just teach religious sciences. This practice continues to the present times²⁸.

It is interesting indeed, if you look at the attraction of interests in the early days of this country. "Religious education at schools is an old question and continues to be a difficult problem". The source of the difficulties occurred because of the "demand that the religious character should be given a definite and certain form". This debate was also influenced by a long debate in formulating the form of the Indonesian state at the beginning of independence. There were groups who want Islam to be the basis of the state, namely by putting forward the word Islamic law in the basis of the State, where there were also those who argued that Indonesia has special features, so the idea of an Islamic state must be rejected. From this debate, Pancasila as an intermediary was initiated. Until

²⁴ Aqib Suminto, *Dutch East Indies Islamic Politics* (Jakarta: LP3ES, 1986).

²⁵ Riski Amal, Syukur Kholil, and Katimin, "Snouck Hougranye Political Communication in Conquering Aceh Resistance 1873 -1904," *International Journal of Humanities and Social Science Invention (IJHSSI)* 8, no. 7 (July 2019).

²⁶ Maksun, *Madrasah; History and Development* (Jakarta: Logos, 1999).

²⁷ Tatang Suratno, "The Education System in Indonesia at a Time of Significant Changes," *Revue internationale d'éducation de Sèvres* (2014).

²⁸ Muhammad Kholid Fathoni, *Islamic Education and National Education* (Jakarta: Ministry of Religious Affairs of the Republic of Indonesia, 2005).

1959, ideological conflicts between the national figures in the constituent assembly continued. No wonder then, the debate was included in another "space", including in Islamic education.

Nevertheless, In the late 1980s, there was a new spirit in the model of Islamic education in Indonesia with the initiation of the Integrated Islamic School ²⁹. This was initiated by campus da'wah activists who are members of the Campus Da'wah Institute (LDK), Bandung Institute of Technology (ITB), University of Indonesia (UI), and several other well-known universities who were members of the Jamaah Tarbiyah community who had deep concerns about the condition of education in Indonesia. Although in its practice, the curriculum applied by the Integrated Islamic School was basically a curriculum adopted from the curriculum of the Ministry of Education and Culture with various modifications here and there. From the view of the curriculum structure, this kind of Integrated Islamic School was indeed an integral part of the national education system. It accepted all subjects from the national curriculum. The curriculum, however, was compiled by the National Education Standards Agency (BSNP) which was later used as Minister of Education and Culture Regulation No. 22 of 2006, in which there were 8 subjects for elementary school plus local content and self-development, 10 subjects for junior high school/ Madrasah Tsanawiyah, plus local content and self-development, 15 subjects for high school/madrasah Aliyah added with local content and self-development ³⁰.

This scientific integration model has been criticized by several Muslim scientists. This kind of integration of science does not depart from two systems of knowledge without concepts Click or tap here to enter text. The aforesaid practice is not

far from what Muhammad Abduh did when he was about to "modernize" education applied at al-Azhar, which he said "merely" incorporates some general lessons that the West has learned ³¹. This, according to Syed S. Hussain and Syed Ali Asyraf, still gives birth to two educational systems, which in the end, competition from the two systems will actually weaken the scientific foundations of Muslim society ³².

Basic Concept Of Integration; *‘Ilm, Ma’rifat, and Hikmah*

The term *ilm*, in the Qur'an, means clarity, because it is rooted in the origin of the word which is characterized by clarity. For example *'alam* (flag), *'ulmat* (cleft lip), *'a'lam* (mountains), *'alamat* (address), etc.. Linguistically, the word *ilm* which comes from Arabic consists of several basic meanings i.e., knowing, acknowledging, giving signs and instructions. It is a maṣḍar form of the word *'alima-ya'lamu-'ilman*, which is an antonym of the meaning of *nāqid al-jahl* (having no knowledge) ³³.

Terminologically, *ilm* according to al-Rāghib al-Aṣḥānī is, as formulated in the *Mufradāt Alfāz al-Qur'ān*, namely:

Ilm is knowing the essence of something which in terms of its object consists of two, firstly, knowing the substance of something; secondly, determine something based on the presence or absence of something else.

Ilm in the first sense as defined above, refers to the QS. al-Anfāl [8] Verse 60:

...the enemy of Allah and your enemy, and others beside them whom ye know not. Allah knoweth them.

²⁹ Imron Rasyadi, "Public Enthusiasm for Integrated Islamic Schools," *Al-Hayat: Journal of Islamic Education* 5, no. 2 (2021); Hendra Kurniawan and Fauziah Nur Ariza, "Integrated Islamic Schools: Development, Concept, and Implementation," *Ittihad* IV, no. 1 (2020); Amrullah, "Integrated Islamic Schools, A Critical Review," *Journal of Islamic Education Tadrib* 1 (2015).

³⁰ Asep Muljawan, Suhendar Sulaeman, and Saiful Bahri, "Education Quality Management Model at Integrated Islamic High Schools in Banten Province," *Asian Social*

Work Journal 8, no. 2 (2023); Sinta Ningsih and Ai Rohaniah, "Education Financing Management in Integrated Islamic Schools," *Edumaspol: Journal of Education* 7, no. 1 (2023).

³¹ Muhammad Rasyid Ridho, *Tarikh Al-Ustadz al-Imam Syaikh Muhammad 'Abduh* (Mesir: Dar al-Maarif, 1931).

³² S. A. Ashraf and S. S. Hussain, "Crisis in Muslim Education," in *Modern Asian Studies*, 1979.

³³ Louis Ma'luf, *Al-Munjid Fi al-Lughah* (Beirut: Dar al-Masyriq, 1998).

Science in the second sense, refers to the QS. al-Mumtahana [60] Verse 10:

... When believing women come unto you as fugitives, examine them. Allah is Best Aware of their faith. Then, if ye know them for true believers, send them not back unto the disbelievers...³⁴

The definition of *ilm* in the first verse quoted above, is directly related to the substance to be known i.e., the unknown or yet to be known enemies, not their nature or characteristics. Because, their nature and characteristics are known i.e., hypocrites (they also pray, fast, and say the shahada). Whereas the meaning of *ilm* in the second verse contains a message to undergo a test for women who emigrated from Mecca because they left their husbands who were polytheists. This test is done by looking for signs, or indications that show that they are truly women of faith. Thus, *ilm* in this verse is not directly related to the essence, but is related to a nature or condition that accompanies (attached) to that essence.

If the definition of *ilm* is explored further through the verses of the Qur'an, there are 105 times the terms of *ilm* or *al-'ilm* mentioned in the Qur'an. In fact, in *Mu'jam al-Mufahrath li Alfāz al-Qur'ān al-Karīm*, this number increases to 744 times if the derivation is also included. According to, the word science in various forms is repeated 854 times. Furthermore, in the *Encyclopedia of the Qur'an: Study of Vocabulary and its Interpretation*, it is also stated that in the Qur'an the word 'ilm and its derivatives (does not enter nature, al-alam and address), is mentioned 778 times [Click or tap here to enter text..](#) The terms of *ilm* and its derivation in the Qur'an can be detailed as follows: the term '*alima* is mentioned 35 times; the term '*yalamu* is mentioned 215 times; the term '*ilām* is mentioned 31 times; the term '*yalamu* is mentioned once; term '*ilm* is mentioned 105 times; the term '*ālim* is mentioned 18 times; term '*malūm* is mentioned 13 times; the term '*ālamīn* is mentioned 73 times; the term '*ālam* is mentioned 3 times; the term '*alām* is mentioned 49 times; the term '*alim* or '*ulema* is mentioned 163 times; the

term '*allama* is mentioned 4 times; the term '*alama* is mentioned 12 times; the term '*yalimu* is mentioned 16 times; the term '*ulima* is mentioned 3 times; the term '*mulam* is mentioned once; and the term '*ta'allama* is mentioned 2 times.

From the explanations that have been described, it can be understood that the word *ilm*, comes from the basic words '*ain*, '*lam*, and '*mim*, which are taken from the word '*alamah*, which means a sign, clue, or indication by which something or someone is known. Therefore, '*malam* means "road signs" or "something by which a person guides himself or something that guides someone". In line with that, '*alim* can also be interpreted as "guidance"³⁵. This is why the word '*ayah* (plural: '*ayat*), which means a sign, always refers to the verses of the Qur'an (qauliyah) and natural phenomena (kauniyah).

Amin & Siregar have grouped several verses related to the meaning of *ilm*;

Firstly, knowledge attributed to Allah The Almighty. This one can only be known by Allah alone. The existence of this knowledge is mentioned in the QS. Hud [11] Verse 14:

And if they answer not your prayer, then know that it is revealed only in the knowledge of Allah; and that there is no Allah save Him. Will ye then be (of) those who surrender?

Secondly, knowledge revealed by Allah to His Prophets and Messengers. This kind of knowledge is special and its existence is contained in the holy scripture and the teachings of His apostles. For example QS. Al-Baqarah [2] Verse 145:

... And if thou shouldst follow their desires after the knowledge which hath come unto thee, then surely wert thou of the evil-doers.

Thirdly, knowledge that is based on angels given by Allah, the essence of which only Allah knows. This is mentioned in QS. Al-Baqarah [2] Verse 32:

³⁴ Ibid.

³⁵ Wan Mohd Nor Wan Daud, *The Philosophy and Practice of Islamic Education* Syed M. Naquib Al-Attas (Bandung: Mizan, 2003).

They said: Be glorified! We have no knowledge saving that which Thou hast taught us. Lo! Thou, only Thou, art the Knower, the Wise.”

Fourthly, knowledge possessed by human being as contained in Q.S. al-Qaṣaṣ [28] Verse 78:

“...I have been given it only on account of knowledge I possess...”

The meanings of *ilm* which were interpreted from the aforesaid verses have indicated that *ilm* or knowledge in the human soul is not realized along with the existence of humans themselves. Humans were born without having any knowledge and at a later stage humans acquire knowledge through teaching from God, Allah The Almighty. Thus, it does not mean that God's teaching of knowledge to humans occurs automatically. The Qur'an actually hints at several ways how humans find this *ilm* or knowledge. Here, it can be concluded that *ilm* in the Qur'an is usually used in two terms: knowledge attributed to Allah and knowledge ascribed to humans.

On the other hand, the term 'science in the Qur'an also refers to the meaning of *ma'rifah* and *al-Hikmah*. In the context of the *ma'rifah*, it has been confirmed in QS. Yusuf [12] Verse 58:

And Joseph's brethren came and presented themselves before him, and he knew them but they knew him not.

The term *ma'rifah* in the verse above connotes "a person's perception" ³⁶. In line with this, al-Aṣḥānī stated that *ma'rifah* is knowledge of something by way of thinking and contemplating. The meaning of the word *fa'ārafūhum* in the verse above is that the prophet Yusuf knew his brothers and sisters whom they had apparently abandoned himself (Yusuf). However, the prophet Yusuf did not hold a grudge against them in the slightest. From this explanation, it can be understood that *ma'rifah* is not only in the sense of perception and is not *ilm*

gained through thinking and contemplating activities. *Ma'rifah* is knowledge obtained through the five senses in the form of sight. It is said so as the prophet Yusuf, in the verse, knew and acknowledged his brothers after seeing them in person.

Some scholars have given a terminological explanation that *ma'rifat* means knowing and acknowledging various sciences (*ilm*) in detail ³⁷, or interpreted also as knowledge or direct experience of the so-called Absolute Reality of God ³⁸ where it is often used to indicate one of the *maqam* (levels) or *things* (psychological conditions) in Sufism. Therefore, in Sufistic discourse, *ma'rifat* is defined as knowledge of God through the heart. In Sufism, efforts to appreciate *ma'rifat* to Allah (*ma'rifatullah*) become the main goal and at the same time become the core of Sufism teachings.

Besides the term *ma'rifah*, the Qur'an also mentions the term *al-hikmah* which is synonymous with *ilm*. It is based on Q.S. Luqmān [31] Verse 12, *wa laqad ātaina luqmān al-hikmah...* Ibn Kaṣīr, explained that the term *al-hikmah* in this verse means *al-fahmu wa al-'ilm* (understanding and knowledge). Substantially, the notion of *al-'ilm* is indeed included in the term *al-hikmah* which in everyday language is often interpreted as a lesson. People who can take lessons are people who can learn from their experiences. Another source that confirms that the understanding of *ilm* as *al-hikmah* is the word of God in QS. al-Baqarah [2] Verse 32:

They said: Be glorified! We have no knowledge saving that which Thou hast taught us. Lo! Thou, only Thou, art the Knower, the Wise.”

In the above verse the word *ilm* is presented in three forms i.e., '*ilm* (knowledge), '*allama* (teaching) and *alīm* (Knowing), it ends with the word *al-ḥakīm* whose root is *al-ḥikmah*. Anṭāwi Jauharī interpreted that the last two words

³⁶ Indah Wahyu Ningsih, Nanat Fatah Natsir, and Erni Haryanti, "The Idea of Islamization of Science," *JIP - Scientific Journal of Education Science* 5, no. 1 (2022); Mohammad Syam'un Salim, "Khabar Sadiq; A Method of Transmission of Knowledge in Islam," *Kalimah* 12, no. 1 (2014); Ahmad Warson Munawir, *Kamus Al-Munawwir* (Surabaya: Pustaka Progresif, 2002).

³⁷ Syihabuddin Umar ibn Muhammad Suhrawardi, *Awarif Al-Ma'arif; A Classic of Tasawwuf*, (Bandung: Pustaka Hidayah, 1998).

³⁸ Abudin Nata, *Akhlak Tasawuf* (Jakarta: Rajawali Pers, 1996).

i.e., *al-'alīm* and *al-ḥakīm*, are referred to *asmā al-ḥusnā* which essentially contains one meaning³⁹.

In line with this understanding, the word *al-hikmah* which means knowledge is also found in the QS. al-Baqarah [2] Verse 269:

He giveth wisdom unto whom He will, and he unto whom wisdom is given, he truly hath received abundant good. But none remember except men of understanding.

From the meaning point of view, *al-hikmah*, which is spread in various verses in the Qur'an, it refers to the notion of knowledge. For instance, according to Ahmad al-Maraghi, *al-hikmah* is knowledge accompanied by various secrets and legal benefits so that it can encourage people to practice it according to the instructions⁴⁰. Hasbi as-Syidiqy has interpreted *al-Hikmah* as the secrets of the Shari'ah and its intentions with behavior and character to be a role model for believers, both in words and deeds. Hamka has said that *al-hikmah* is good lessons. Imam has interpreted *al-hikmah* as useful knowledge that can encourage people to work. Meanwhile, Shihab has interpreted *al-hikmah* as knowledge of good and bad as well as the ability to apply the good and avoid the bad. Whoever is bestowed with knowledge of the two paths, he has gained *al-hikmah*.

According to A. Hasan in *Tafsir al-Furqan*, *al-hikmah* means wisdom. Muhammad Jalaluddin al-Qasimi has interpreted *al-Hikmah* as strengthening (deepening) knowledge and deeds, and in another way, knowing the truth and practicing it. Someone, with *al-hikmah*, will be able to manage two affairs (the world and the hereafter) and also explain the hidden meaning. Meanwhile, according to Muhammad Abduh, *al-Hikmah* is true knowledge that is able to drive useful desires towards goodness.

Still related to the understanding of *ilm* and its relation to the verses quoted above, Dawam Rahardjo in the Encyclopedia of the Qur'an, stated that:

In the Islamic tradition, "ilm" is not only known as something that is positivist, but also known as *al-Hikmah*, high knowledge, knowledge of wisdom, and *al-ma'rifah*, experience of true reality.

However, in addition to the verses and meanings of 'ilm' mentioned above, the actual description of the Qur'an about it has been illustrated in how Allah gave knowledge to Adam, when the Angels were unable to say out those "names". This is actually the essence of human creation i.e., to study the universe, the laws of its inner structure, and historical processes. All of that, in turn, is used for "devotion to God" is the reason that makes humans as the best creatures where even the angels, except the devil, prostrate before Adam, as a human symbol.

The characteristic that distinguishes humans from other creatures is their capacity to name things. It emphasizes the human capacity to discover the properties of things, their interrelationships and the laws of their behavior. When we name something a rock, a tree, or an electron, we will find out how it behaves, we can find out more about it, we can even predict it. In other words, humans are different from other creatures when they have creative and scientific knowledge about things (exact science), about their inner structure (psychology), and about human external behavior as a continuous process in a society (history).

Even a human being has to come to an understanding of the ultimate reality. When we are unable to talk about God except with parables and symbols-symbols that He shows, God communicates with humans through "verse". Here, humans are responsible for revealing the verse and understanding it. To reveal the reality behind the verse (the ultimate reality), humans have to use the potential of their minds, by linking the three realities above based on the fundamental principle of unity and totality⁴¹.

The calling to understand the reality of nature has been stated in the Qur'an. The first verse revealed to the Prophet Muhammad was "Read !

³⁹ Tantawī Jauharī, *Al-Jawāhir Fī Tafsīr al-Qur'an* (Mesir: Muṣṭafā Al-Bāb Al-Halabī wa Aulāduh, 1350).

⁴⁰ Ahmad Mustafa Al-Maraghi, *Translated Tafsir Al-Maraghi* (Semarang: CV. Toha Putra, 1993).

⁴¹ Imam Chanafie Al-Jauhari, *Islamic Hermeneutics; Building God's Civilization on the Global Stage*, (Yogyakarta: Ittaqa Press, 1999).

In the name of thy Lord Who createth" (QS. Al-'Alaq: 1). Hence, since the very beginning, Muslims have been challenged to bring texts, in the form of the universe. The universe itself means "sign" that shows the outside reality⁴². In a poem, Hamka mentioned about it;

*Blooming, the dawn is breaking
The waves crash, the mountains soar, the sky
is green
The forest is silent thickets, the clouds drift
away
The water flows, it's like pinging down the
slopes by the wind
The child cries in his mother's lap, the mother
sings
Remembering his father
Sweat is running down the forehead of a person
who just came home
From his work and his son ran to the yard and his
son ran to the yard welcome his father
home.....*

*Anywhere... Anywhere! Looking up
Or bend down
Only one that appears in the eyes, in the heart:
"Allah!"
Only one voice could be heard: "Allah!"
"My Lord, You have not made all this in vain"*

However, the mind possessed by humans is not everything. Since the important role of humans is to rebuild the scientific picture of objective reality and create a moral order based on that scientific knowledge. Utilizing the universe with a scientific framework without being accompanied by a good order, or knowing "names" without making use of them, will be something which according to the Qur'an is *'abath*, a useless, even dangerous satanic act. This is exactly what Iqbal stated that *'aql* (scientific reasoning) without *'isyq* (positive moral creativity) is a misguided satanic act, and the West clearly follows this according to Iqbal. While *'isyq* without *'aql*, is not only something sterile, but something that is clearly

self-deceiving, and Iqbal points out that Muslims for centuries have committed this "deception".

Therefore, for Muslim scientists, they should not base their scientific activities solely on cognitive and skill an sich, but all of them should be done on the basis of their intrinsic intentions and motivations that come out of the deepest conscience to fulfill Allah's rules. Thus, between science and con-science is a unity and totality which leads to the soul of rabbaniyyat. (Q.S. Ali Imran: 79). When developing and exploring theoretical and practical concepts, one should not only stop at the fact but also the fact behind the fact, when presenting the spiritual or metaphysical meaning of every physical statement.

The principle of *Tauhidiah* does not separate science from religious moral values. Between science and ethics, everything is an absolute unity. Science and scientific activities are manifestations of human devotion to God. There is no boundary between knowledge and deed, there is no veil between knowledge and faith. The implication is that a person with knowledge has a commitment to his God, as well as wholeheartedly accepts the moral law that He has given. With this he grows as a man who loves peace, he will be able to live in harmony, being stable and virtuous, having full confidence in God's infinite mercy, His incomparable justice, and lives in harmony with nature.

Thus, in addition to rational beings, humans are spiritual, who appreciate God's "commandment" as caliph *fil ardl*, who has unlimited power to control and regulate the universe based on God's authority, who is able to present God in his consciousness at any time, in amazement at the beauty, awesomeness and harmony of the universe, who bases his activities on the light of God's "names". Understanding the interrelation between God, humans, and the universe, becomes an absolute awareness for education in developing science.

This principle is similar to what Chalen E. Westate called "Spiritual Wellness", which is

⁴² Komaruddin Hidayat, "Beyond the Names of Islam and Postmodernism," in *Dekonstruksi Mazhab Ciputat*, ed. Edy A Efendi (Bandung: Zaman Wacana Mulia, 1999).

defined as a personal manifestation that is reflected in openness to other dimensions of life. He also suggested that there are four dimensions of "Spiritual Wellness", (1), Meaning of Life, namely the ability to manifest oneself meaningfully in every dimension of life in an integrated and complete manner. (2), Intrinsic Value, which has intrinsic values as a combination of behavior. (3) Transcendence, namely the ability to transcend or make relationships with a wider and sublime dimension. And (4), Community of Shared Values and Support, is the ability to conduct community relations with the support of shared values.

Andromeda Spiral; A Paradigm Of Scientific Integration

The existence of a university is a reflection of the universal human. That is why the main vision of an Islamic university is the transformation of scientific treasures as a whole in order to create organic intellectuals, as Ali Shariati [Click or tap here to enter text.](#) called *raushanfikir*, or Al-Jilli called it *insan kamil*. In fact, Mohammad Iqbal, a famous poet philosopher from Pakistan, called it a prophetic intellectual. Hence, the function of the university is not merely the transfer of knowledge and life skills but rather the transformation of universal values. Now, Islamic Higher Education (PTAI) is faced with various challenges which in essence involve: National macro problems, economic, political, moral, cultural crises, and so on⁴³. On the other hand, Islam as a religion with universal teachings and values is faced with the fact that some Muslims have a narrow and dichotomous view of religion and religious knowledge⁴⁴.

This is, however, a problem that has been widely discussed recently among Islamic universities, which concerns the dichotomous perspective on religion (*al-din*) and science (*al-'ilm*), by placing each religion and science separately. The teachings of Islam which are ideologically believed to be universal, in fact, at the practical level are indeed positioned

marginally and are seen as unable to provide significant contributions to the development of human civilization.

Meanwhile, the rapid progress of science and technology, which we can see today, is not seen as a contribution from Islamic universities, but rather a product of the work of universities that do not carry the label "Islam". Islamic universities, especially in Indonesia, are still focusing on the development of religious sciences *an sich*, such as *ushuluddin*, *sharia*, *tarbiyah*, *adab* and *da'wah*. If only the field of "religious" science is being developed, it will invite the perception that Islam, which is said to be universal, turns out to be narrow. Therefore, according to Imam Suprayogo, through various discussions or seminars, it is necessary to explore and find new formats or perspectives regarding the form of integration of the two types of knowledge - religious knowledge and scientific knowledge - where the truth for the first type is absolute as it originates from God the All-Knowing, while science on the other hand is a scientific finding whose truth is relative because it is the result of human findings of research activities and the power of reason which can be re-verified any time⁴⁵. Muslims must be willing to change their perspective as described above in order to get out of the shackles of adversity.

In this way, the presence of a scientific paradigm based on integration becomes necessary (*dharuri*). This paradigm asserts that scientific buildings with all their varieties, both religious, social and humanities, as well as nature cannot stand alone. However, cooperation, greeting each other, needing each other, correcting each other and interconnectedness between scientific disciplines will be more able to help the complexity of life as well as provide efforts to solve them.

Each Islamic higher education institution may state specific pattern in developing the connection of the sciences in various ways. UIN Sunan Ampel takes the integration of Islamic and

⁴³ Mardia Mardia, "Islamic Higher Education Management In The Spectrum Of Blue Ocean Strategy," *Ulumuna* 15, no. 1 (2011).

⁴⁴ Imam Suprayogo, "Building the Integration of Science and Religion," in *Integration of Science and Religion:*

Interpretation and Action, ed. Zainal Abidin Bagir (Bandung: Mizan, 2005).

⁴⁵ *Ibid.*

general sciences with the concept of an integrated twin tower. Nur Syam revealed that the integrated twin tower is a meeting point between two scientific towers i.e., the tower for religious science and the tower for general science, social/humanities. The meeting point is in the form of a dialogue bridge between the two which is realized through epistemological construction. Visually, the meeting point is depicted by a curved line at the top of the two interconnected scientific towers. The result of the linking of the two scientific towers provide multidisciplinary Islamic knowledge such as sociology of religion, philosophy of religion, Islamic economics, Islamic politics, and others.

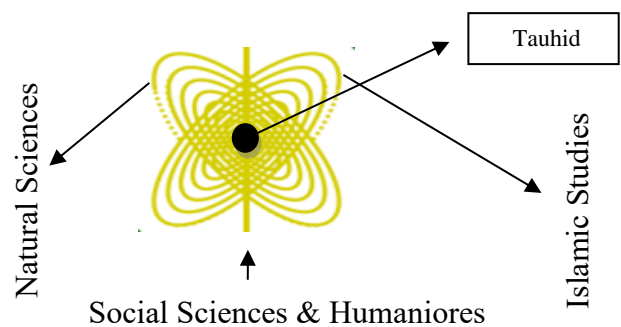
Meanwhile, UIN Sunan Kalijaga develops the concept of an interdisciplinary approach through interconnection and interrelation, where UIN Sheikh Maulana Malik Ibrahim Malang with an interdisciplinary approach through the concept of the tree of knowledge Likewise, UIN Syarif Hidayatullah develops knowledge integration ⁴⁶. Although the concepts or labels vary, in fact, there is a common content or core in viewing the relationship between the natural sciences, social sciences and culture/humanities i.e., the desire to build greetings between the three fields of science through a process of synergy, interconnection and interrelation. Whatever concept or labeling is used, there will always be such a longing for the realization of scientific disciplines that will later greet and approach each other, so that claims about the strict separation between the three fields are not impossible now and especially in the future.

UIN Suska Riau develops the Spiral Andromeda scholarly paradigm. The term Andromeda Spiral comes from a galaxy like the galaxy we live in today. The Andromeda Galaxy is the closest galaxy to our Galaxy. The distance between the Andromeda Galaxy and Earth is 2.5 million light years from Earth. The Andromeda Galaxy is a spiral, just like our galaxy. The diameter of the spiral is estimated to be 220,000 light years. That means the Andromeda Galaxy is 2 times larger than our Galaxy. The Andromeda

Galaxy is made up of gas, dust, and stars. It has more stars than our Galaxy. It is estimated that there are trillions of stars there. The Andromeda Galaxy was first discovered by Mr. Abd-al-Rahman al-Sufi. He is an astronomer from Iran. Mr. Abd-al-Rahman al-Sufi wrote a book about the stars in 964. In that book, he wrote about a small cloud. Well, that little cloud turned out to be the Andromeda Galaxy.

Normatively, the andromeda spiral paradigm derives from the verse of Surah Fushshilat verse 53, mentioning: 1) the science of *afaq* which gave birth to the natural sciences, 2) the science of *anfus* which gave birth to the social and humanities sciences, and 3) the science of revelation that gave birth to the divine sciences (Islamic Religious Sciences). These three concepts, depart from one point i.e., al-Haq, the One God.

The paradigmatic concept is symbolized by the following symbol:



Based on the picture, it can be seen how a scientific discipline does not actually stand alone, but is able to dialogue, communicate, and coexist between other scientific disciplines. This concept, similar to what was put forward by Amin Abdullah that inter-disciplinary sciences, both from secular science and religious scholarship, will be interrelated with each other, "greet greetings to each other", complement each other's weaknesses and strengths. Thus, the science of religion (Islamic science) no longer dwells on classical texts, but also touches on contemporary social sciences. With this paradigm, the three main areas

⁴⁶ Mulyadi Kartanegara, *Science Integration, A Holistic Reconstruction* (Jakarta: Arasy Mizan dan UIN Jakarta Press, 2005); Research Team of UIN and LP3ES,

Roadmap of Islamic Universities in Indonesia (Jakarta: LP3S dan UIN Press, 2023).

of science i.e., natural sciences, social sciences, and humanities will no longer stand alone but will be interrelated with one another ⁴⁷. Those three will also become more and more melting all together even though they will not be united, at least, there will be no more superiority and inferiority in science, and there will be no more claims to the truth of science. In this paradigm, scientists who pursue this science will also have attitudes and ways of thinking which are different from before.

The Andromeda spiral image shown above, depicts three spirals whose axes meet at one point. These three Andromeda Spirals have a philosophical meaning of integrating three scientific fields – religion, science, and humanities – which are both based and sourced from one common point of monotheism i.e., the Oneness of Allah the Almighty as the Creator and Source of inspiration for knowledge. It is a belief that all knowledge verily comes from Allah the Almighty. With this integration concept, the graduates of UIN Suska Riau will become individuals equipped with strong religious beliefs and are professional in their respective scientific fields.

Based on the word of God in QS. Fushshilat verse 53, the object of knowledge spreads out to three types of verses (signs of greatness) of Allah, namely: *first*, verses or signs of God's majesty that are in the horizon or the universe (afaq, macro-cosmos), which turns into to natural science; *second*, is the verse or sign of God's majesty that is in man himself (anfus, micro-cosmos) which then gives birth to Social Science and Humanities; and *third*, is the verse of Allah which He revealed directly to His messenger and prophet, which in this case to the Prophet Muhammad in the Qur'an. These three verses or signs of God's majesty are objects and at the same time become areas of scientific study which can be classified or grouped into three major groups, namely: 1) natural sciences, 2) human sciences including history, and 3) religious sciences. These three sciences in Islam, although recognized as having different degrees and scope of study, should not conflict with one another because all three are essentially

integral. Natural sciences and human sciences are extracted from the verses of Allah that exist in the universe, (macro-cosmos, afaq) and the verses of Allah and His words (read QS al-Kahf Verse 109) will not contradict one another in the Qur'an that He revealed.

Implementatively, an educator (lecturer) must therefore be more daring to intertwine various approaches in delivering his lecture methods and materials. The three objects of science must twist each other, open up, carry out "objectification" of the truth possessed by each scientific discipline. Each science may understand the limitations, shortcomings, and weaknesses inherent in each of them as well as be willing to take advantage of the findings offered by other scientific traditions and have the ability to correct the shortcomings inherent in themselves. Thus, the rigidity, errors, inaccuracies, anomalies inherent in each science can be reduced and corrected by input and criticism from other types of disciplines.

Hence, the final process of the search or academic transformation carried out must be able to arrive at the meaning of each transmitted material, with a broader meaning, especially the conclusion or goal that God is the ultimate source (the ultimate reality). It then becomes part of the integration-based scientific development process. And the ending is that:

First, the results of each study may increase knowledge about Allah and lead to piety to Him. It is impossible for a servant to immediately believe in the existence of an Unseen God, and it is also impossible to acknowledge His oneness without prior knowledge (Q.S. Muhammad [47]: 19).

Second, the results of each study must be able to increase piety to Allah as explained in His word that piety to Him can only be obtained with knowledge that is practiced in everyday life. On the other hand, knowledge that is not practiced will further distance a person from his Lord and become the cause of getting tormented (Q.S. Fâthîr [35]: 28; Q.S. al-Mulk [67]: 10).

⁴⁷ Abdullah, "Islamic Studies in Higher Education in Indonesia: Challenges, Impact and Prospects for the World Community."

Third, the results of each study may provide progress in people's lives, especially the Muslim community. The Prophet said: "Whoever dies while seeking knowledge to bring Islam to life, he will be in Paradise one degree below the prophets."⁴⁸ This hadith clearly explains that useful knowledge that a Muslim has to seek must be oriented towards the advancement of Islam. A Muslim who in seeking knowledge is oriented to the advancement of Islam will be guaranteed to get a high degree in heaven.

Fourth, the science will surely provide guidance and enlightenment and welfare to the community. In his hadith the Prophet Muhammad stated: "The most beloved of people to Allah are those who are most beneficial to others, and the work most loved by Allah is to bring happiness to a Muslim, or to remove distress from him, or to pay a debt for him or to relieve hunger from him".⁴⁹

This concept is based on the fact that the Qur'an itself states that it is a book that explains everything (*tibyân li kull shay'*). But this statement of the Qur'an must be critically understood. Explaining everything does not mean that the Qur'an explains the problems of life in detail, because in reality it is not so. The Qur'an as an eternal book cannot explain in detail the problems of life that develop and change continuously until the world ends. The Qur'an explains all things only means that this holy book lays out basic principles, moral values and general provisions. Most of them convey stories or the history of previous people's lives. These are intended to be lessons, examples, and material of thought (*'ibrah*) for humans. The Qur'an states very explicitly that it is a guide for humans (*hudâ li an-nâs*) and it stands to spread universal mercy (*rahmah li alâlamîn*).

This statement explains that the Qur'an is a reading book that is open for every human access in the quest to seek realization of a life system that gives grace and prosperity. In general, welfare is then interpreted as happiness in this world and in

the hereafter, all of which can only be obtained with knowledge as the main capital, as conveyed by Imam al-Shâfi'î, quoted by al-Sharbînî in his commentary: *Whoever wants prosperity in this world, let it be with knowledge and whoever wants happiness in the hereafter, let it be with knowledge too*⁵⁰. As the last holy book, the Qur'an is like a miniature of the universe containing various disciplines. The Qur'an is a noble reading and can be claimed by anyone, even if it will face the challenges of increasingly sophisticated scientific progress. Even the first word in the first revelation has told humans to read and reason about science, this what *iqra'* means⁵¹.

In light of the aforementioned considerations, paradigmatically, the integration of the Spiral Andromeda scholarly framework yields implications. *Firstly*, the transition of IAIN to UIN necessitates a paradigm shift in scholarly pursuits, transcending the erstwhile confinement to Islamic Studies and embracing a more expansive scope encompassing multidisciplinary, interdisciplinary, and transdisciplinary dimensions. Islamic studies at UIN are thereby urged to cultivate an awareness of human dignity, facilitate heightened engagement with diverse religious communities, foster equality among citizens, and address similar concerns.

Secondly, from an institutional perspective, the transformation of IAIN into UIN should ideally catalyze a paradigm shift, asserting that UIN is the collective ownership of all citizens, ensuring equal rights for all. There should be no differentiation based on treatment, ethnicity, race, or religion within UIN. The historical progress in the Islamic civilization's intellectual pursuits essentially originated from the willingness of scholars of that era to be open to all branches of knowledge and the commitment to creating collaborative spaces for all scholars, irrespective of ethnic background, language, or religion.

⁴⁸ Abû Muhammad 'Abd Allah b. 'Abd al-Rahmân b. al-Fadl b. Hirâm al-Dârimî, *Sunan Al-Dârimî* (Arab Saudi: Dâr al-Mughnî li al-Nashr wa al-Tawzi, 2000).

⁴⁹ Sulaymân b. Ahmad b. Ayyûb b. Muthîr al-Lakhmî al-Shâmî al-Thabrânî, *Al-Mu'jam al-Kabîr* (Kairo: Maktabah Ibn Taymîyah, n.d.).

⁵⁰ Muhammad b. Ahmad al-Sharbînî, *Tafsîr As-Sirâj al-Munîr*, vol. 4 (Beirut: Dâr al-Kutub al-'Ilmiyah, n.d.).

⁵¹ Inu Kencana Sjafi'ie, *The Qur'ân is the Source of All Disciplines of Science* (Jakarta: Gema Insani Press, 1994).

Conclusion

The Spiral Andromeda scholarly paradigm, initiated by UIN Sultan Syarif Kasim, bears resemblance to the "Spiderweb" paradigm developed by Prof. Amin Abdullah at UIN Sunan Kalijaga. The commonality lies in the imperative convergence of all disciplines (religion, science, and social humanities). They intersect and meet each other. However, despite this similarity, the philosophical and normative foundations of these two scholarly paradigms do not share a common ground.

Nevertheless, the implementation of the UIN Suska Riau paradigm is carried out with an emphasis on belief affectio or faith and oneness of God (tauhid). It involves the development of various branches of knowledge with a religious approach, ensuring that the essence of knowledge is imbued with Islamic values. All of these are applied under the principle of IDI (Islam dalam Disiplin Ilmu or Islam in the Discipline of Knowledge). This is a tangible manifestation undertaken by UIN Sultan Syarif Kasim in scholarly integration. It is not surprising, therefore, that the pattern of nurturing and developing an environment oriented towards a civilized society is realized through the Ma'had al Jami'ah.

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