A New Paradigm on Human Resources Management in State Islamic University

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ABSTRACT

This paper analyzes literature and field studies that focuses on the science-religion integration paradigm in state Islamic universities or Universitas Islam Negeri (UIN), which covers integration and interconnection discourse at UIN Sunan Kalijaga Yogyakarta, UIN Maulana Malik Ibrahim Malang, and UIN Syarif Hidayatullah Jakarta and relating this topic to human resources study. There are three objectives of this study: to delve into the science-religion integration paradigm, to know the epistemology discussion of science-religion integration in three Islamic state universities, and to study the importance of integration-interconnection paradigm in Muslim societies human resources. The study found that the epistemology of the integration-interconnection of sciencereligion is a dynamic discourse that will simultaneously continue to develop; secondly, the three Islamic universities have laid the foundations of an important paradigm of the relationship between science and religion, in terms of discourse and the curriculum of the three universities which will affect to the young human resource provision landscape. Third, the integration paradigm of Islamic higher education has offered a new paradigm of human resources management in Muslim societies. The integration of science and religion paradigm will provide non-dichotomous human resources through Islamic universities in the future.

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1. INTRODUCTION

Science nowadays is generally considered as an objective science that is structured and studied on order of the universe, rather than study on the product of human thought, and it keeps science away from religious knowledge. The shape and dichotomy of such knowledge have also been grown extensively in the twenty-one century science (Harrison, 2006, p. 81). There is an idea that science and religion are engaged in a hopelessly unwinnable war (Peters, 2018, p. 11), especially in evolutionism and universe creation discourse (Kaloi et al., 2022, p. 75), and it is difficult to explain integrally during biology lessons in the classroom (Woodford, 2020, p. 937). On the other hand, a scholar also thinks that religious teaching also involves science and vice versa (Erduran et al., 2019, p. 1). Therefore, in general, the contradiction between the two is fiction, except for arguments that have not been obtained. However, pre-modern science is different from modern science in terms of objectives, methodology, sources of inspiration, and philosophical assumptions about people, knowledge, and the reality of the universe (Bakar, 2003, p. 73). Osman Bakar explains the difference between pre-modern sciences with modern science is the science position in relation to other types of knowledge. In the pre-modern civilization, science is never separated from spiritual knowledge. Otherwise, in the pre-modern science discovered an organic unity between science and spiritual knowledge, at least, there is the comity model between people of faith and scientist (DiMaggio et al., 2018, p. 15). For example, in Islamic scholar history, many religious leaders also figure in science. At that time, medical science is always coupled with theology. Doctors often concurrently with metaphysical experts, philosophers, and wise men. Thus, the title hakim (plural: hukama) or Judge can not be carried by people who are only experts in one branch of science course (Siddiqi, 1986, p. 19).

In modern science, there is a strong impression that spiritual knowledge and science are two difficult entities to put together. Even there are scholar who thinks that impossible for science to be in line with religion (Yves Gingras, 2017, p. 1). Both are in their respective territories, the formal object-material, research methods, criteria for justification, the role played by scientists, and the status of each theory, even to the implementation agency. In other words, science does not care about religion, and religion does not care about science (Abdullah, 2003, p. 3). This phenomena is also not favorable for the development of the Muslims world. In the era of globalization, the mastery of science and knowledge of the religion are right and indispensable. Muslims should not just be spectators outside the development arena. The challenges of globalization require the Islamic educational system's precise and quick response. Muslims scholar need to look back at the past Muslims, a golden era (The Golden Age) for more than seven centuries. The golden age of this could happen, among other things, because Muslims understand Islam in a holistic manner. Therefore, religion and science could be in line. Islamic civilization with the true Islamic teachings will strengthen the unity of religion and science.

An Islamic scholar in universities could look at 'the mirror' bridging the present knowledgescience-Islamic development through Islamic science history. History is a material consideration to determine the pace in the future. This article tries to analyze the issue with the socio-historical approach, specifically to the traditions of the religion of Islam in the classical period -where interrelationships between science and religion have happened. This paper is also expected to be a reference in term of integrative concept in Islamic education. the future context is different, at least this paper is part of academic effort between religion and science, since the two disciplines have no gap that is particularly detrimental to Muslims today.

2. FINDINGS AND DISCUSSION

Integration Islam and Science: an Initial Development

Islam is a set of ethics and ideas that drive all aspects of human life, ushering in the formation of Islamic civilization. Islamic civilization and the contribution of science and technology will never be realized without the driving force of the moral values of Islam (Kettani, 1984, p. 66). This is what Azra (1999) states distinguishes between Islam and other religions, which emphasize science issues. Koran and Hadith is a source for Islamic science that has a dual role in the development of the sciences. All

Muslims assume that principle of scientific development is contained in the Koran. It will also include the esoteric interpretation (*ma'nawi*), which enables unraveling the mysteries it contains and the search for meaning in more depth, which is useful for the development of science paradigm. Second, the Koran and the Hadith is conducive to the development of science by emphasizing the virtues and the virtues of studying in any terms that led to the affirmation of Tawhid. In short, both the principal source create a distinctive atmosphere that encourages intellectual activity in conformity with the spirit of Islam. Therefore, the entire metaphysics and cosmology that rise from the Koran and the Hadith is the basis for the construction and development of Islamic sciences (Azra, 1999, p. 13).

Creating a distinctive atmosphere that encourages intellectual activity in conformity with the spirit of Islam. It needs to be explained here that the word 'ilm as it exists in the Koran and the Hadith appears in its generic sense rather than referring exclusively to religious studies. In Islam, the only limit to seeking knowledge is usefulness. Islam merely prohibits Muslims from involving themselves in the search for a branch of science whose dangers outweigh the benefits. According to Golshani, a science is to be useful when it can help humans play its role in the world determined by Allah (Golshani, 2003, p. 13). In other words, a science should be developed as far as the science supporting humanity task on earth (*khalifatan fi al-ard*). As for science, such as a phenomenon of nature, it is mentioned in the Koran, such verses referred to by *al-ayat al-kawniyah*, numbering approximately 150 subsections (Nasution, 1986, p. 30).

Basically, this *kawniyah* paragraph contains impetus to man to pay attention and think about the natural surroundings. Through observing the surroundings, people will come to the conclusion that the events, like rain on the earth and animate plants, exchange of the night with the day, lunar and solar and so on, does not arise for granted but must be created and driven by a substance was behind the nature of this material, which is a substance that is called God Creator and Mover of the universe. With mindful incidents, people's faith in God will be thicker. This is the basic purpose of the paragraph, contained in the phenomena of nature. However, like the phenomenon is not explained further about the process. Humans should think of that process. Therefore, less precise, Harun Nasution said that the Koran contains verses discusses the issue of science. Perhaps, the right is that any of the verses of Koran that refer to a natural phenomenon that is also a discussion of science. Thus, the role of reason in Islam has a high position. The right is that any of the verses of Koran that refer to a natural phenomenon is also a discussion of science. Thus, the role of science. Thus, the role of reason in Islam has a high position. The right is that any of the verses of Koran that refer to a natural phenomenon is also a discussion of science. Thus, the role o

The sense that civilization also received high honors attracted the attention of scholars and scholars of Islam (Nasution, 1986, p. 52). In addition, between Islamic tradition and the Greek tradition have some similarities. According to Marshall GS Hodgson (2002, p. 234), the prophetic tradition Abrahamic traditions- including the Islamic and Greek philosophical and scientific patterned- had initially been associated with the problems of comprehensive life orientation. In fact, mathematical and scientific traditions of the past Cuneiform are a crutch for the visions of broader religious. Since centuries first Islamic century or eight century until Fourth Islamic Century, the center of world culture and civilization development in Baghdad, Cordova and Cairo.

Baghdad, Cordova and Cairo functionate and act as science and study centers because the caliphs and Muslim scholars are science lovers (Siddiqi, 1986, p. 19). Caliphs such as al-Mansur, al-Rashid and al-Ma'mun had a major role in supporting scientific research which all aim at and assist in creating a scholarly tradition of a scientific nature. The progress of science in Baghdad began by promoting the activity of translation of books written in Greek, Persian, Indian, and even China into Arabic that lasted less than a century (133H / 750M-236 / 850M). According to Muzaffar Iqbal, sciences such as astronomy, medicine, mathematics are fields of study that have been established before it was translated into Arabic. Muslims perform translations is to enrich the Islamic tradition, not to give birth to these sciences (Iqbal, 2018, p. 23). Mathematics are fields of study that have been established before it was translated into Arabic. In this crucial process, Muslims scholars hold the two main things that can assimilate fully within different cultures. First, they are still in the outline of the foundations of Islam. They are focusing on facts rather than assumptions. They collect and assess the works related to medicine, mathematics, astronomy, and geography, but keep away from magical and mythical things. Second, Muslims retain the Arabic language as a universal language. They translate the book of science into Arabic and develop the language as a scientific power to communicate effectively and efficiently in the world community (Kettani, 1984, p. 68).

Some of these figures example Jabir ibn Hayyan (103/721-200/815), Abu Yusuf Ya'qub ibn Ishaq al- Kindi (185/801-260/873), Tharkhan bin Muhammad bin Muhammad Abu Nasr Al-Farabi (258/870-339/950), Abu Ali al-Husain bin Sina (370/980-428/1037), are among the examples of the classical Muslim scholars in whom there is a spirit of unity between knowledge (religion) with science. They study of science also means have to pay attention to the verses of the Koran that discusses nature and incidence. Nature is a unity power field in which the wisdom of God can be seen anywhere. In other words, science and theories raised by scientists Muslim instigation of religious teachings and to declare God's wisdom (Nasution, 1986, p. 68), then it seems that the real role of Islam in the development of science and technology is to provide insight and active encouragement. Insight and encouragement are what has aroused among Muslim scientists in the Period of Golden Age (7th Islamic century). Encouragement comes from the Koran and Sunnah of the prophet has been able to create a model of Islamic civilization during the Golden Age. Instead "create" the scholars or great philosophers such as Ibn Rushd, Ibn Sina, al-Ghazali, Ibn Khaldun and so forth, Islamic civilization was also able to bring the pioneer of science, such as al-Khawarizmi (Mathematics, Algebra), Ibn Hayyan (Physics-Optics), al-Biruni (Physics-Astronomy), Ibn Sina (Medicine) that the world recognizes their work. The combination of human intellect and curiosity has given the human motivations that are very interesting to know and understand the natural environment and the causes of its creation. Therefore, the reason to assume that science and religion are almost simultaneously in touch with the "creation of man". Evolution of assorted civilizations encountered on this earth, and human progress, broadly based or centered on religion and science (Sadar, 1984, p. 15).

The above has described how religion and science develop together. In the golden age of Islam, religion and science support each other. They still uphold the value system of Islam as well. At least there are five unique feature classic view of Muslims toward science and religion. The fifth trait in question is universalism, tolerance, internationalism, a high regard for science and scientists, and the nature of Islam on the end and aim of science (Kettani, 1984, p. 85). Islamic universalism comes from the fact that a relationship of togetherness that can be received in life. All Muslims are connected in a single bond in the great national community, the ummah. The word ummah, in the Koran have been defined as those who "advocate what is right and avoid what is wrong, and faith in God. Thus, the ummah is not just a "nation" or a religious community.

Interestingly, in this classical period, could not be found Muslim scientists introduced in Madrasah. The progress of science is introduced as a result of individual research-development and Muslim scientists who are driven by the spirit of scientific inquiry in order to prove the truth of the teachings of the Koran especially those that are *kawniyah* (Azra, 2000, p. ix). In subsequent developments, history of Islamic education has been patterned into two forms. The first pattern is integralistic-encyclopedic curriculum development, which strengthened by scientists such as Ibn Sina, Ibn Rushd, Ibn Khaldun and so on. The first pattern is confronted with scientific development pattern specific religion-parsialistic developed by experts of Hadith and Fiqh experts (Abdullah, 2003, p. 5). Diametrically separation between them and other causes which are political-economical, resulting in low quality of education and the decline of the Islamic world in general. It should also be explained here, since the advent of the *madrasah* (college) in 1064, the Madrasah Nizam al-Mulk, "non-religious" sciences in particular, the natural sciences and exact science- which is the root of the development of science and technology, those are already in a marginal position.

Parts of Koran and Sunnah can be interpreted in this way. Thus, the sound of the verse: "We have no knowledge except what You have taught us" (2: 32) can be understood as "any effort to seek knowledge that is not contained in the Koran is deemed not feasible. According to Hofmann (Hofman, 2002, p. 76), this is one of the causes of resentment towards science and philosophy by most Islamic scholars to express the fact that the Prophet never consciously and repeatedly refused to answer questions related to it. This tendency was strengthened by introducing the power case -the poor through forbidden innovation (heresy). According to the prophet Muhammad, a muslim should be able to distinguish in principle between a good innovation (*bid'ah hasanah*) and forbidden and bad innovations (*sayyi'ah*). Since then, every attempt to renew always suspected that innovation can not be accepted; and the term heresy then interpreted as "bad innovation".

Along with the passing of the middle Ages, charges of heresy be used as a powerful weapon against progress. Thus, a major cause of the decline of Islamic civilization primarily comes from the attitude of Muslims towards the principles of teaching "None fault lies in Islam. All the fault lies in the way we become Muslims", said Muhammad Iqbal (Cantay, 1986, p. 328). In addition, the views of Muslims who put more emphasis on the religious sciences (*ulum al-shar'iyah*) or traditional sciences (*ulum al-naqliyah*) rather than rational sciences or secular sciences (*ulum al-'aqliyah* or *ghair al-syar'iyah*) increasingly critical power fading Muslims.

Fazlur Rahman (1985, p. 39) says that the loss of rational sciences (*ulum al-aqliyah*) in Islam is caused by many internal factors. These factors, among others, existence of views have been expressed as spacious and life is short, then the person should be given priority, and the priority was given to the religious sciences that are key to the triumph of life after or *akhirat*. In other words, there is a "consciousness" rational science that is not conducive to spiritual prosperity. Second, the spread of Sufism which -demi to foster internal spiritual life and religious direct- generally hostile to rational sciences and all forms of intellectualism. Third, owner's diploma religious sciences have the opportunity to work as a religious task person (*qadi*), or *fatwa* task person (*mufti*), whereas other sciences are only available vacancies in the palace alone. Fourth, the attitude of some very important religious figures such as al-Ghazali stated that metaphysical speculation is not as certain as a mathematical proposition. Fifth, the Koran is not studied in isolation, perhaps because people are afraid it will bring disruption to the status quo in the field of theological education and social services.

Efforts to articulate between religion and science must be fixed to proceed to the integration of science. Indeed, this is not an easy task, but not impossible to achieve. Therefore, how to think Muslims should be changed. The basic nature of Islam that is open, universal, tolerant, and upholds science values should be returned. This can be eliminated by expanding the horizons of thinking Muslims. It is strongly associated with our Islamic education system. An attempt need to be made for education renewal (pedagogy). Islamic higher educational institutions should redefine the job descriptions of the scientific pattern integrally. During this Islamic studies-particularly in IAIN- with job descriptions of the science in it tends to wear pattern as asserted by Marshall GS Hodgson (Minhaji, 2003, p. ix) which is translated as the following: First, education is generally understood as a specific teaching and memorization statements and formulas that have been sufficiently taugt in perspective without being followed by the process of thinking. Second, that education [Islam] is [only] aim normative. In addition, Islamic educational institutions should be more open with the knowledge deemed secular. Modern secular education in general as it has evolved in the West must be accepted and the attempt to "Islamize" -that it, fill it with certain key concepts of Islam (Rahman, 1985, p. 155). This approach has two aims, even though the two are not always able to distinguish one from the other. First, character development students or students with Islamic values in the lives of individuals and society. Second, to enable the experts that modern educated to cultivate each field of study with Islamic values on devices higher; using Islamic perspective, to change both the content and orientation of their studies.

Islamic education should be independent. Political interference as long as this happens to be eliminated. Just an example, al-Azhar education in the meantime can not escape the effects of the political elite in Egypt. This has serious impacts on the "independence" of al-Azhar as an academic institution, which in turn influences affect authority (Azra, 1999, p. 244). The effort to be free from the political intervention started when al-Maraghi proclaim the *al-Wasathiyah* as a paradigm of this historical academic university (As'ad, D. I. Ansusa Putra, & Arfan, 2021, p. 125). At the same time,

Islamic higher education in Indonesia or IAIN tries positioning itself as an independent academic institution. IAIN institutions are still bound by biased political interests (Minhaji, 2003, p. ix). Meanwhile, although between religion and modern science, there are differences, in the crevices of the differences that still leaves the possibility of similarity in methodology. According to Ian Barbour, methodological similarities between religion and science can be seen: (i) in terms of experience and interpretation, they both have two-way interaction, with models and analogies, though they can not be sorted explicitly; (ii) a community, have an essential position for both, where the paradigms provided will greatly affect the opinions of its members. English-language translations on each community have used realistic and referential, both in the "summary the data" and disclosures fictitious; (iii) how the concepts are built, both in science and religion, simultaneously evaluated using criteria of coherence and adequasi experience simultaneously. Thus, religious beliefs should be considered historical events, a religious experience, and the conditions of life itself. He is open to the synthesis or a metaphysical system that should be assessed more carefully (Barbour, 1996, p. 116). Islamic educational institutions should be given the freedom proportionally. Stultify it saintific inquiry within the Islamic community to include the thoughts that smelled sectarianism. However, now that almost every aspect of life has been institutionalized, including in education, the educational institution shall have the authority to formulate policies widely independently. Therefore, Islamic educational institutions should be given the freedom proportionally.

Spider Web-Integrative Scientific Theo-Anthropocentric

Science born from the mother religion into science objective (objectified). Science is not perceived by other religions, non-religious and anti-religious as the norm but as a mere objective scientific phenomenon. Convinced religious backgrounds into a source of knowledge is not a problem. Thus, the objectification of science is the science of the faithful for the whole man, not only for believers only. Examples of objectification: acupuncture (without having to believe in the concept of Yin-Yang Taoism), yoga (without having to believe Hindhuism), bee stings (without having to believe in the Koran praised the bees), banking Shariah (Islamic Ethics without having to believe about the economy). During this time the intelligentsia had been deceived. Secular sciences that claim to be free value turned out to be behind it has interests dominate the culture (such as Orientalism), economic interest (such as the expansion history of the powerful nations in the era of globalization), and military interests or war (such as nuclear sciences). A new scientific paradigm that is integrated and not merely combines God's revelation with the results of human thought. It is expected that the concept of integral and reintegration of scientific epistemology would simultaneously resolve the conflict between extreme secularism and religions are rigid and radical in many ways.

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Below is an example of science that integralistic together scientists figure prototypes integrative generates. Shariah Economic Sciences, which had no real practice of the union between the revelation of God (Divine) and the findings of the human thinking. There Bank Muamalat Indonesia, National Bank of Indonesia or BNI Shariah, Shariah Mandiri Bank, Takaful Shariah, the efforts of agribusiness, transportation, marine, and so on. Religion incorporate ethics in economic behavior, such as sharing system (al-mudaraba), and collaboration (*al-Musharaka*). There, a process of objectifying religion ethics of religious knowledge can be beneficial to people of all faiths, non-religious or even anti-religious. In the future, these scientific work patterns are required to enter the wider territories as Psychology, Sociology, Anthropology, and Environmental.

Illustration relationship cobwebs teo-antroposentris scientific patterned-integralistik, there illustrated the visibility and scientific horizon integralistic yangluas (not myopic) as well skilled in both traditional and modern sectors of life because mastered one basic knowledge and skills that can sustain life in the information- globalization. Besides, illustrated figure who is skilled in handling and analyzing the issues of human and religious touch of modern and post-modern era with mastering new approaches provided by the social sciences and humanities contemporary. In each step taken, there is a moral-ethical basis of religious objective and sturdy. The existence of the Koran and al-Sunnah has always been a guide and a foothold view of life (*weltanschauung*) human diversity together in a single breath of science and religion. Everything is devoted to the well-being of humans irrespective of ethnic background, religion, race or class.

Spider Web Scientific and Religion Integralistic

The activities of science in the universities, particularly in Islamic Higher Education such as UIN, IAIN and STAIN in Indonesia, based on the spider web scientific-religion intergralistic picture, only focused and limited to the ring 1 and the circular path tier 2 (Kalam, Philosophy, Sufism, Hadith, Tarikh, Fiqh, Tafsir, Lughah) focused in space for classical humanities. In general, IAIN not been able yet to share in the discussion forum of the social sciences and humanities contemporary as illustrated in the loop line 2 (Anthropology, Sociology, Psychology, Philosophy with a variety of approaches are offered). As a result, an Islamic outlook unbridgeable chasm between classical Islamic sciences and Islamic sciences, have taken advantage of new analysis of the social sciences and humanities contemporary. The gap of knowledge is an impact of the dynamics of socio-religious life in Indonesia, even many alumni of IAIN or UIN become leaders in the community wherever they are.

This encourages master program to bridge the scientific insights, but not all IAIN and STAIN can do. Due to the limited resources of faculty who understand Islamic outlook, so it will have an impact on the many difficulties because in addition to the limitations of Human Resources, as well as the mind set of students is so strong Tier 1 will study the classic text-normative untouched by the insights of the social sciences and humanities. Social issues, Political, Economic, Religious, Military, Gender, Environment, Social Sciences, Humanities Contemporary Post-Modern, as depicted in circular path layer 3 is almost untouched by social and Islamic studies in this country, especially in the IAIN and STAIN.

Phrases like to be religious today is to be Interreligious, was still very absurd and unthinkable, even impossible to think about the circumference of layer 2 scientific tradition, although globalizationera force religious people to think actual. In the future, the difficulties encountered would be further complicated by the reality that the religious sciences are not designed to be integrated with the sciences and technology that weights the skills to live. *Kauniyyah* sciences (Science and Technology) is separated away from the core sciences *Qauliyyah* (Text-screenplay). Developments such as these are unfortunate because the students have to cross from the basic pattern of the Koranic teachings that always integrate general sciences and religious sciences. *Al-ulum al-kauniyyah, al-ulum al-insaniyyah, al-ulum al-diniyyah, and al-ulum al-tarikhiyyah* fused solid in-vocabulary lexicon of the Koran.

The relationship between religion and the state there are too rigid. The management of religious education in Indonesia is left entirely to the Department of Religion and submitted to the Department of Education. Until now, a national dialogue on the budget of religious education was allocated smaller and has not been taken from an integral part of the "Education " budget. The dynamic of the Islamic Higher Education, particularly after the inauguration of UIN Jakarta in May 2002 and UIN Sunan Kalijaga Yogyakarta on June 24, 2004, all components of the nation, especially the Ministry of Religious Affairs and the Ministry of Education, should develop a blueprint for a clear plan ahead to anticipate transformation the other Islamic higher education, and the Ministry of National Education technically and academically supposed to be main actor to take responsibility managing new State Islamic University.

Ministry of Religious Affairs as managing task force for IAIN and STAIN need to think systematically about rearranging the traffic arena of religious education and general education under

the auspices of the Ministry of Religious Affairs. For primary school to upper secondary level, Institutional seems already well established. However, the issue is slightly complicated for the university level, as part of a long history until this era of globalization-information. It should be noted that Muslims have lagged by two important events of the history of world civilization, the era of the Green Revolution and the Industrial Revolution. The university should immediately take strategic steps forward with corrective action-evaluative against the scientific paradigm which is owned now this nation and give new offers to meet the journey is still far ahead.

Spider Web: Integration Interconnection



Figure 1 Spider Web: Integration Interconnection

At first, the spider web is a strategy to study who deliberately designed to facilitate the transfer of early study knowledge and experience. This strategy is generally applied in a school or an outbound study. In this context, methods of spider web offer a study strategy that integrates-kan a theme into all subjects. In the outbound learning activities (school of nature), a study of all objects in nature can be attributed to a theme that will be elaborated in the subjects that will be used, whereas in the early study Conceptually, this method produces a concept map. The most important characteristics of a concept map web spider that is not according to the hierarchy unless it is in a category; and categories are not parallel (Kholil, 2008).

Referring to the definition above, a web spider horizon offered by Amin Abdullah is a concept map. As a concept map web spider, of course, this map can be interpreted as follows; (1) that every item contained in the map that has the relationships, though not entirely, from each other; this is referred to Amin Abdullah with integrative science; (2) that science rests on the Koran and Sunnah and hierarchies associated with several knowledge in accordance with the level of abstraction and applied her; (3) items that are contained in a single layer, the correspondence seen circumference of abstraction or a theoretical level; and (4) lines that divided the one item to another within a single layer of the ringcan not be understood as the dividing line. As seen in the figure, the content cobwebs this scholarship on four layers consists of circles; three form a track. Rim layer 1 (innermost) is the Koran and Sunnah, which are the main sources of Islamic knowledge. On top of the ring tier 1 tier 2 is a ring that forms online and loads 8 Ushuluddin scientific disciplines, namely Kalam, philosophy, Sufism, Hadith, Tarikh, Fiqh, Tafsir, and *Lughah* or linguistic. The 3rd layer rim is the pathway consisting of theoretical knowledge; Sociology, Hermeneutics, philology, Semiotics, Ethics, Phenomenology, Psychology, Philosophy, History, Anthropology, and archeology. While circumference layer 4

(outermost) is the expenditure of knowledge applicative pathways, which consists of; Issues Religious Pluralism, Sciences and Technology, Economics, Human Rights, Politics / Civil Society, International Law,

According to Amin Abdullah, the cobwebs pictures above illustrate scientific patterned relationship theo-anthropocentric-integralistic. There envisaged that the visibility and integrative scientific horizon is so vast (not myopic) as well as skilled in the life of traditional and modern sectors because mastered one basic knowledge and skills that can sustain life-information era of globalization. In addition, the figure depicted skilled in handling and analyzing issues that touch the human and religious modern and post-modern era with mastering new approaches provided by the natural sciences, social sciences and humanities contemporary. Above all, in every step taken, always accompanied by religious moral-ethical foundation objective and robust, because of the presence of al-Koran and Sunnah are interpreted in a new way (hermeneutic) has always been a cornerstone of departure worldview (*Weltanschauung*), religious man, together in a single breath of science and religion.

All are dedicated to human welfare together irrespective of ethnic background, religion, race orclass (Amin Abdullah, 2011: 14). Initiated scientific structure refers to the tradition of Islamic scholarship that distinguishes the discipline to three categories, namely, '*Ulum ad-Din* (Religious Knowledge), al-Fikr al-Islâmiy (Islamic Thought) and Dirasat Islamiyya (Islamic Studies). Definition of 'Ulum ad-Din is a representation of "local tradition" Islam is based on "language" and "texts" or religious texts; The next *al-Fikr al-Islamiy* is a representation of humanity struggle of Islamic thought based on "rational-intellectual", while *Dirasat Islamiyya* or Islamic Studies is a new scientific clusters based on the paradigm of critical social science comparative involving the entire "experience" (Experiences) mankind.

In the understanding of Amin Abdullah, *Dirasat Islamiyya* or Islamic Studies differ from the actual meaning of 'Ulum ad-Din commonly known so far. When called '*Ulum ad-Din* (Religious Knowledge), generally give birth to directly referring to the understanding of the sciences of religion (Islam) as Aqidah and Shari'ah by using auxiliary science and deductive logic language to and derive the religious laws of the scriptures. From there, sciences cluster religion (Islam) as Kalam, Fiqh, Tafsir, Hadith, Koran, Farâidl, aqidah, morality, worship, and so on to help him Arabic science (Nahwu, Neuroscience, *Balagha, Badi*', 'Arudl).

In the process, when the base material or staples (Ushuluddin) Islamic religious was collected and arranged systematically and academically structured approach involving the history of thought (Origin, Change and Development), the academic 'Ulum ad-Din' develop into a subject that is PTAI widely known in the neighborhood asal-Fikr Islamiy (Islamic Thought). By quoting Fazlur Rahman and Abdullah Saeed, Abdullah Amin, revealed that Islamic Thought or *al-Fikr al-Islâmiy* have a structure of knowledge and the body of knowledge that is solid and comprehensive-whole of Islam. '*Ulum ad-Din* often only emphasize or select certain sections or the two of them from the body of knowledge about Islam that the whole-formulated comprehensive.

Sometimes the emphasis is only on Kalam thought only to abandon the study of Philosophy, in Jurisprudence with abandon Sufism, or the Hadith with no debate and struggle to know about the Hadith. Not infrequently, the reduction occurred by simply selecting one of the patterns of thought or mindset of 'science' in accordance with 'interest' groups respectively. One interesting thing of this scientific theory web spider is the placement of the Koran in the middle of the complexity of scientific developments. This is an important affirmation for every Muslim, the Koran because it was believed to be the source of truth, ethics, law, wisdom, and knowledge. Nevertheless, Amin Abdullah asserted that Islam never made God's revelation the only source of knowledge and forgot God. According to this view, the two kinds of knowledge are derived from God and humans. The combination of both is what is called theo-anthropocentrism. The combination was well as reflecting the spirit of difference.

With reference to Kuntowijoyo, Amin Abdullah stated that modernism that emphasizes differentiation in many areas of life is not in accordance again with the spirit of the age. In the postmodern context and the efforts to build science, resacralisation movement is required, deprivatization religion and the end is de-differentiation (reconciled). Suppose differentiation requires separation between religion and other sectors of life. In that case, this is the reunification of the dedifferentiation of religion with other sectors of life, including religion and science. New scientific paradigm that initiated this, Amin Abdullah is to unite, not simply combine, divine revelation and discovery of the human mind (the science of holistic-integrative). Such unification would not lead to downplay the role of God (secularism) or exclude humans so alienated from themselves, from the local community and the local environment. Thus, the concept of scientific epistemology integralism and reintegration is once again going to resolve the conflict between secularism and fundamentalism negative extreme religions are rigid and radical in many ways.

Theory of spider web by Amin Abdullah also become an academic reference for science development efforts in the future, which also received support from the theological religion (read: Islam). In theory, it is described that the horizon cobwebs of knowledge of Islam in this era of society changes, supposing that in the first period (before 1950) Islamic Studies still be exclusive (only promote the teaching of *'Ulum ad-Din*, Fiqh, Kalam (theology), Tafsir and Hadith (five fields of study). Then the second period (1951-1975) in addition to Islamic studies as the core, but has started to get acquainted - yet still run alone or no dialectic between regions - the study area of humanities, social sciences and natural sciences.

While the third period (1976-1995) Islamic Studies region developed into eight the areas' Ulum ad-Din, fiqh, and so on. The third period is also referred to as the era of auxiliary sciences. Then in the fourth period (1996-present) sciences core of Islamic Studies that eight of these fields have already started dialectic with the area of science and technology (al-'ulum al-kauniyyah / natural sciences) as well as another study area (Humanities and social sciences). (Muhammad Azhar, 2009: 13) In connection with a circumference of three layers of spider web of science, Amin Abdullah tried to answer doubts about the possibility of building a couple of the scientific disciplines, such as anthropology, sociology, and psychology, which can produce theories. His questions whether Islam can be studied scientifically? If what is meant Islam here is "behavior" of individuals, "tradition" of society (Turath) -good in its political dimension, philosophy, economics, socio-culture-which is inspired by the teachings of Islam, why not? If that can be studied and researched is the aspect of historicity-Caliphate humans Muslim, why not justified? In this regard, Amin Abdullah added that religion no longer limited to just explain the relationship between man and God, but also involves an awareness group (Sociologist), awareness search the origin of religion (Anthropological), the fulfillment of the need to establish a strong personality and equanimity (Psychological), even the teachings of a particular religion could be the extent of the ethical teachings linkages with style view of life gives a boost Strong to obtain welfare degree (Economics) (Abdullah, 1996: 10).

Furthermore, Amin Abdullah explains some of the functions of knowledge called on the circumference of the three layers on top as the body and the method or approach to knowledge. According to Amin Abdullah, philosophy can be defined by: first, as a stream or the result of thought, which is a system of thought that is consistent and to a certain extent, as a closed system (closed system). Second, as a method of thinking, which can be characterized seek basic ideas that are fundamental (fundamental ideas), forming critical thinking (critical thought), and upholding freedom and intellectual openness (intellectual freedom). Thus, it can be said that philosophy is methodical knowledge, to know the coherence of the whole reality. Philosophy is a rational reflection (thought) over the whole of reality to achieve the essence (truth) and gain wisdom.

Tree of Science of UIN Maulana Malik Ibrahim Malang

Barbour's theological view of nature received criticism from Huston Smith and Seyyed Hossein Nasr. The critic on the claim that theology is constantly evolving as interacting or learning of science will give the impression that theology is below science. As a supporter of the perennial philosophy, these two figures hold that theology in esoteric concept has truth perennial. Theology should be the yardstick for scientific theories, and not vice versa (Bagir, 2005, p. 21). This is the first view to be compared toward the Tree of Science from UIN Malang. Second, religion confirms the science

presented by John F. Haught. Integration desired by Haught not only merging science and religion, and avoiding conflict, but putting the religion as a whole supporting scientific activities. Answering various views alleges that science causes many problems in life, such as environmental damage, Haught precisely stated that religion provides "confirmation" to the development of science. Although religious confirmation, religion should not interfere in the field of real work of science as religion can not add anything to the list of science discoveries. Religion does not provide information to scientists as well as information that can be collected by science itself (Haught, 2004, p. 28)

Third, Islamization of knowledge was developed by Muhammad Naquib al-Attas and Isma'il Raji al-Faruqi. Islamization of knowledge, according to al-Attas was intended as an attempt dewesternization, because western views has infiltrated all aspects of science. Science must be cleared from the aspect of secularism, by putting back the authority of revelation and intuition (Al-Attas, 1981, p. 148). Islamization of al-Attas in the context of integration can be said to be "monistic integration". It negates the dualism of knowledge between science (*fard 'ayn* and *fard kifayah*), science and science '*aqlîyah* and *naqlîyah* as expressed by al-Ghazali. Every science has the same ontological status. The difference is on the hierarchy of science, Such as *naqlîyah* have a higher level of truth than science '*aqliyah* (Kuswanjono, 2010, p. 74). Sardar reject the view of al-Attas and al-Faruqi that one purpose of the Islamization of science program is to establish the relevance of Islam in every field of modern science to be relevant to Islam (Sardar, 1989, p. 101).

Fourth, Islamic studies are expressed by Kuntowijoyo through social science prophetic. This model is opposed to the concept of Islamization, which is the movement of the context of the text to be movement toward the context of the text, that text of al-Qur'ân and Hadith serve as a paradigm for the development of science. There are two methodologies that could be relevant in Islamic knowledge process, integralization and objectification. Integralization is the integration of the scientific richness of human revelation (God's instructions in the Koran and its implementation in the Sunnah of the Prophet). While objectification is to make Islam as a mercy for all people (Kuntowijoyo, 2007, p. 49).

Fifth, the concept spiders web of Amin Abdullah which is science-integralistic theoanthropocentric. Amin Abdullah tries to show two things: first, the ideals to be achieved from theoanthropocentric-integralistic, the unification of whole science that exists in this world. Second, the real condition of the scientific activity of religious education in IAIN and STAIN. In reality, religious education only focuses on the circle 1 (al-Qur'ân and Sunnah) and loop 2 (Kalam, Philosophy, Mysticism, Hadith, Tarikh, Fiqh Tafsir, Lughah), the approach still the classic humanities.



Figure 2 tree of knowledge

Based on these five ideas, the concept of integration of public science and the science of religion is used as a blueprint for scientific development in UIN Malang is an attempt to eliminate the dichotomy of science. Thus, Islamic knowledge (*al- 'Ulum al-Islamiya*) developed by UIN Maulana Malik Ibrahim is a science built based on the teachings of Islam, Koran and Hadith, and the same knowledge is built on observation, experimentation, and logical reasoning. If Koran and Hadith were placed as the source of knowledge, then there would be no dichotomization degrading position of Scripture. The Koran is universal still another source of knowledge of a technical nature, such as knowledge gained through observation and experimentation,

Based on the pattern of scientific development, to strengthen the institutional system, UIN Maulana Malik Ibrahim formed nine *Arkan al-Jami'ah* (pillars college) as a pillar of development, namely: a). Human resources excellence; b). Mosque; c). Ma'had as spiritual development, intellectual and professional life; d). Library; e). Laboratory as a research vehicle; f). Scientific meeting places; g). Office as a center of academic services; h). The development centers of art and sport; and i). Broad funding base and strong (Imam Suprayogo, 2009, p. 90).

The development of Islamic sciences in the format interconnect integration is to be adopted at least on the concept of what he called a *hadharat an-nas, al-'ilm* and *al-falsafah*. These three concepts are employed in synergy and fused. Intended to *hadharat an-nass* (text culture) is a strong effort to explore, understand and weigh the actual content of religious texts as a form of religious commitment and Islam. The fruit of righteousness knowledge obtained tend intellectualist-theological, sociological intellectuals ignore. *Hadharat al-'ilm* is cultural knowledge characterized by a strong effort to explore the field of science involved for the sake of professionalism, objectivity, and scientific demands innovation as science. Work orientation tends to be on the social-humanities realm of science and technology that is built on facts or faulty social phenomena that tend to ignore the option for human life and the environment. Lastly, *hadharatal-falasafah* (philosophical-ethical culture) is characterized by a strong effort to weigh and load the relation between science with ethical transformative-emancipatory. Accentuation of its orientation on ethical, moral responsibility in the practice of everyday life of the people.

UIN Jakarta and Malang, more on tools, such as language, as the tree of science and social with epistemological work from UIN Jakarta State Islamic University. The third is devices to assess an absolute science synergy, because if it does not, science and values will never be integrated-interconnected. Building the symbol, episteme and devices of the science-religion paradigm, will be always be remembered by the values-based moral messages. The findings of science and technology continue to grow. In such a way, student in major of science early study no longer fixated on facts and data, need to be learned methodically and rationalized depending on science benefit itself.

3. CONCLUSION

Study on science-religion relation through dichotomy has turned out to the untenable epistemology. Science is a result of a human mind which is not separated from values, including religion values. The existence of science itself actually lives and thrives in a not vacuum-values society. Integration between science and religion values in the ontological and existential gaze following the rise of new paradigm in state Islamic university transformation. The structure of science in the integration interconnection paradigm supported by the two reasons above indicate the necessity of the interrelationship of science and values. Scientific paradigm integration interconnection, which today has become the paradigm of knowledge in Islamic educational institutions, especially in Islamic Higher Education, could be placed as one of the alternative options for study science and values paradigm. Another option is also the tree of knowledge of UIN Malik Ibrahim Malang.

Based on *hadharat an-nass* (text culture), *hadharat al-'ilm* (cultural science) and *hadharatal-falasafah* (philosophical-ethical culture) followed by a philosophical approach to implement scientific-analytical and explanatory and explorative religious and social values in study's of human, it could be constituted a study on structure of science, is no longer an abandon values. In such a way, the negative derivative

produced by the separation away science from religion could be eliminated. Otherwise, it will rise up the integration of science-religion values in favor of divinity, humanitarian and ecology, as Muslim responsibility toward universe sustainability (*rahmatan li al-'alamin*). This integration paradigm also offered a new human resources paradigm in Muslim societies and will provide young human resources which are not dichotomous between the world and the hereafter.

REFERENCES

- Abdullah, M. A. (2003). Etika Tauhidi sebagai Unit Dasar Epistemologi Ilmiah dan Agama Publik: Dari Paradigma Positivistik-sekularistik ke Arah Teoantroposentrik-Integralistik. In J. Wahyudi (Ed.), Menyatukan Ilmu Kepulangan dan Agama Publik: Upaya mendamaikan Islam dan Sains. Sunan Kalijaga Press.
- Al-Attas, S. M. N. (1981). Islam dan sekularisme. Pustaka.
- As'ad, D. I. Ansusa Putra, & Arfan. (2021). Being al-Wasatiyah Agents: The Role of Azharite Organization in the Moderation of Indonesian Religious Constellation. *Journal of Islamic Thought* and Civilization, 11(2), 125–145.
- Azra, A. (1999). Pendidikan Islam: Tradisi dan Modernisasi Menuju Milenium Baru. Studi Wacana Logos.
- Azra, A. (2000). Grouping Discipline Ilmu Agama Perspektif IAIN. In M. A. Abdullah (Ed.), *Antologi Studi Islam: Teori dan Metodologi*. IAIN Sunan Kalijaga Press.
- Bagir, Z. A. (2005). Bagaimana cara mengintegrasikan ilmu pengetahuan dan agama? In J. Wahyudi (Ed.), *Integrasi Ilmu Pengetahuan dan Agama: Interpretasi dan Tindakan*. MYIA-CRCS dan Suka Press.
- Bakar, O. (2003). Tauhid dan Sains: Esai tentang Sejarah dan Filsafat Ilmu Pengetahuan Islam (Y. Lipuro, Trans.). Pustaka Hidayah.
- Barbour, I. G. (1996). Masalah dalam Sains dan Agama. Prentice-Hall Inc.
- Cantay, H. B. (1986). Budaya Islam di Wilayah Turki. In K. W. Morgan (Ed.), & A. Salamah & C. Anwar (Trans.), *Islam Straight*. Pustaka Jaya.
- Erduran, S., Guilfoyle, L., Park, W., Chan, J., & Fancourt, N. (2019). Argumentation and interdisciplinarity: Reflections from the Oxford Argumentation in Religion and Science Project. *Disciplinary and Interdisciplinary Science Education Research*, 1(1), 8. https://doi.org/10.1186/s43031-019-0006-9
- Golshani, M. (2003). Filsafat Ilmu menurut Quran (A. Efendi, Trans.). Mizan.
- Harrison, P. (2006). "Science" and "Religion": Constructing the Boundaries. *The Journal of Religion*, 86(1), 81–106. JSTOR. https://doi.org/10.1086/497085
- Haught, J. F. (2004). Encounter Science and Religion: From Conflict to Dialogue (F. Borja, Trans.). Mizan.
- Hodgson, M. G. (2002). *The Venture of Islam: Faith and History in a World Civilization Classical Period of Islam* (Mulyadhi, Trans.). Paramadina.
- Hofman, M. W. (2002). Menengok kembali Islam kita (R. Astuti, Trans.). Pustaka Hidayah.
- Imam Suprayogo. (2009). Paradigma Pembangunan Keilmuan di Perguruan Tinggi. UIN Malang Press.
- Iqbal, M. (2018). Islam and Science. Routledge. https://doi.org/10.4324/9781315195698
- Kaloi, M., Hopper, J. D., Hubble, G., Niu, M. E., Shumway, S. G., Tolman, E. R., & Jensen, J. L. (2022). Exploring the Relationship between Science, Religion & Attitudes toward Evolution Education. *The American Biology Teacher*, 84(2), 75–81. https://doi.org/10.1525/abt.2022.84.2.75
- Kettani, M. A. (1984). Islamic values and Western sciences. In Z. Sardar (Ed.), *The Touch of Midas: Science,* values, and environment in Islam and the West. Manchester University Press.
- Kholil, A. (2008). *Peta Konsep untuk Mempermudah Konsep Sulit dalam Pembelajaran*. Anwar Kholil Blog. http://anwarholil.blogspot.com/2008/04/peta-konsep-untuk-mempermudah-konsep.html
- Kuntowijoyo. (2007). Islam sebagai Ilmu Pengetahuan: Epistemologi, metodologi, dan etika. Tiara Wacana. Kuswanjono, A. (2010). Integrasi Filsafat Sains dan Agama dari Perspektif Mulla Sadra. Lima.
- Minhaji, Akh. (2003). Transformasi menuju UIN IAIN: Pengantar. In M. A. Abdullah (Ed.), *Menyatukan Kembali Ilmu Agama dan Publik*. Sunan Kalijaga Press.
- Nasution, H. (1986). Intelek dan Wahyu dalam Islam. UI-Press.

Peters, T. (2018). Science and Religion: Ten Models of War, Truce, and Partnership. Theology and Science,

16(1), 11-53. https://doi.org/10.1080/14746700.2017.1402163

- Rahman, F. (1985). Islam dan Modernitas: Tentang Transformasi Intelektual (A. Mohammad, Trans.). Pustaka Jaya.
- Sadar, M. H. (1984). Is there a conflict? In Z. Sardar (Ed.), *The Touch of Midas: Science, values, and environment in Islam and the West*. Manchester University Press.
- Sardar, Z. (1989). Sains, Teknologi dan Pembangunan di Dunia Islam. Penerbit Pustaka.
- Siddiqi, N. (1986). Tamaddun Muslim: Antologi Budaya Islam. Bulan Bintang.
- Woodford, P. J. (2020). Philosophy in the science classroom: How should biology teachers explain the relationship between science and religion to students? *Cultural Studies of Science Education*, *15*(4), 937–950. https://doi.org/10.1007/s11422-020-09997-1
- Yves Gingras. (2017). Science and Religion: An Impossible Dialogue. Polity Press.