Integration of Science and Religious Sciences Its Implications for Islamic Religious Education

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Abstract

Integration is a union of fusion, in this case it is the union or combination of two different types of science, namely Science and Religious Science. In terms of benefits, the two are very clear differences but have the same source from the owner, namely Allah Swt. In Islam everything will be subject to the principle of oneness. Where natural science is definitely sourced from the one substance, namely sunnatullah. And basically knowledge is not a separate one – separate but perhaps the way it is searched is different. In the old days before the Dutch colonized Indonesia there was no such thing as common knowledge and religion all combined simply called religious science. However, at that time the dichotomy of education became a middle ground to become a competitor and answer the existence of modern education by the Dutch Government at that time. And whether restoring such integration has a good impact on Islamic religious education and what are the implications. There are several implications of this integration, namely: 1. Implications for the curriculum, where students will be sent to the desire and ability to conduct research in fields of science and then look for connecting points in the area of religious reality, 2. Implications for the learning and teaching process, 3. Implications in the aspect of religious social education. With an integrative paradigm cultivates an attitude of mutual respect for differences.

Keywords: Science, Religion, Integration

A. Introduction

The interrelationship of religion and science is not new in Islam. As time goes by, the urgency of this discourse is increasingly being discussed. Many problems began to arise related to science and religion. At this time, the values of spirituality began to fade, so that it became a serious problem in the world of education in the millennial era. With the development of science with very rapid progress, the content of understanding secularism is closely inserted so that there is a possibility of dryness of the value of spirituality in students (Shinta et al, 2021). In addition, Dissent and debates about the integration between science and religion resurfaced.

Such a catastrophic change in the times marked by extraordinary technological advances is able to make something that makes humans so happy with the luxury facilities created by today's science (Fatimah et al, 2021). But western technology and science have been able to bring about an atmosphere of development of science by slowly eroding the moral and religious values of Islam. The inclusion of western culture in science as an insert that erodes our culture of intimacy, and makes humans adapt to technology instead of the other way around. It should be the role of religion as a compass to regulate it so as not to go out of the norm of this hanif religious adab. Therefore, it is necessary to integrate science with Islamic science so that science is not value-free and prevents the entry and development of secularism which we should support with an understanding of science based on dense godliness. With this science based on Islamic science, it leads us to progress that can lead us to glory and glory in the world and the hereafter.

The current erroneous and growing understanding is that the notion that "religion" and "science" are two different things or entities and this cannot be brought together leads to an absence of connection between the two. So that in the field there is a separation between schools that are specialized in separate sciences and for religion also stand alone. In other words, religion is not concerned with science and science does not care about religion (Abdullah, 2004: 3).

On the other hand, there are those who say that religion and science are sciences that stand in their respective positions because they both have different fields, namely science by relying on empirical data to state what is real and what is not.. On the contrary, religion accepts anything that is unreal or unreal or "uncertain" that plays into it only the variables of "faith" and "belief". This understanding wants to separate the two by stating that they will stand alone according to their respective independence as well as their differences that will lead to conflicts that resonate at their respective cores. This is due to the notion that science and religion have different ways of both approaches, experiences, and these differences constitute source of debate. Science is closely related to very abstract experiences, for example mathematics, whereas religion is more closely related to the ordinary experience of life. These fallacies continue to be exhaled by western scientists in order to have a separation between science and religion. Whereas if we hold on to muslim scientists and scholars in the past then there is no dichotomy of science and religion or physical and meta-physical never existed among others like Ibn Sina, Nashir al-Din Thusi and Qutb al-Din Syirazi (Shayed Hosein Nasr, 2006:84).

According to Muzaffar Iqbal (2007), in the view of Islamic epistemology, the integration of religion and science is something that is very likely to be realized, because it is based on the consection of godliness. In this case science, the study of nature, is considered related to the concept of oneness of Allah Almighty, as well as other branches of knowledge. The integration of science and Islamic religious values is necessary in the Islamic education system. Education is directed to explore, develop knowledge optimally, and be able to process in the achievement of education that develops as a whole both physically and spiritually.

The integration of science and Islamic religious values is the lifeblood of providing education in all institutions.

B. Definition and Typology of the Integration of Science and Religion

According to Baqir et. Al (2005) and Sudarminta (2003) in the discourse of science and religion, integration in its generic sense is an attempt to combine science and religion. J. Sudarminta, SJ., once proposed what he called "valid integration", but on other occasions criticized "naïve integration" (a term he used to refer to the tendency to banalize matching scripture verses with scientific findings). This phenomenon is almost similar to the term Bucaillism, which is the defensive-apologetic attitude of some Muslim intellectuals (Arifudin, 2016).

Thus, the attempt to connect and integrate science and religion, does not have to mean uniting or even mixing, because the identity or disposition of each of the two entities does not have to be lost, or some people will even say, must be maintained. Otherwise, it is possible that what is obtained from the result of the relationship is "not this and not that", and it is no longer clear what its functions and benefits are. The desired integration is "constructive" integration, this can be interpreted as an integration effort that generates new contributions to science and religion that can be obtained if the two are inseparable (Baqir et. al, 2005: 19). In the case of the Islamic epistemological paradigm, the integration between religion and science is something that is possible, since it is based on the idea of Oneness (tawhid). In this regard, science, the study of nature, is considered related to the concept of Tawhid (The Oneness of God), as are all other branches of knowledge (see Muzaffar Iqbal, 2007).

Science in the context of Islamic civilization is seen as a scientific and intellectual tradition that constantly seeks to apply different methods according to the disposition of the subject being studied and ways of understanding the subject. Muslim scientists, in instilling and developing diverse sciences, have used every path of knowledge open to man, from the ratioization and interpretation of Scripture to observation and experimentation (Bakar, 1994: 25). Nevertheless, the view of the plurality of methods in traditional science gained general recognition among historians and philosophers of contemporary science. Some have extended it to even accept Scripture as an inseparable component of the plurality of methodologies. As Paul Feyerabend revealed in his book Against Method, that in today's society, science occupies the same position as the religious position of the middle ages. Science has absolute power. Although in society a person can choose religion or not, but he still inevitably has to choose science. So that science does not perform its function to liberate man, but instead enslaves him (Zubair, 2002: 117).

The wahdah al-ulum (unity of sciences) paradigm has been practiced by classical Muslim scientists such as Ibn Sina, al-Kindi, and al-Farabi. They studied the Greek sciences that emphasized the logos-contemplative-nonexperimental but were adapted and modified to the scientific recommendations of revelation emphasizing empirical observations of natural facts. The two shades of science are bound together by revelation. They learn all the knowledge and then dialogue it until it enriches each other. Dialoguing all sciences makes a scientist even richer

in insights. That's why classical Muslim scholars are actually scholars, philosophers, and scholars who are experts. In other words, the paradigm of unity of sciences will give birth to an encyclopedic scientist, who masters many sciences, views all branches of science as a holistic whole, and dialogues all those sciences into rich compounds. Unity of sciences does not produce a scientist who puts all the science in his brain like a newspaper clipping that does not greet each other, but is able to process it into a solid and deep description of a scientific phenomenon (Adinugraha et al., 2018)

In traditional science, the cosmological aspect is capable of being a "tool of conceptual integration" because its purpose is "to hold a science that shows the interconnectedness of everything and the relationship of the levels of the cosmic hierarchy to each other and finally to the highest principle. Thus it becomes a knowledge that allows the integration of diversity into integration (Nashr, 1987: 350). The theological integration initiated by Barbour, namely the latest scientific theories sought for theological implications, and then a new theology was built with the attention of traditional theology as one of the sources. Thus, Barbour-style "integration", has a very specific meaning, aimed at producing a theological reform in the form of a theology of nature. Barbour, distinguishes it from natural theory, whose main purpose is to prove religious truths based on scientific findings. When it comes to religion, Barbour's attention is almost limited to theology. And when it comes to science, his attention is mainly drawn to what the content of the most up-to-date theories in the natural sciences conveys (Abidin et.al, 2005: 21). Ian G. Barbour built a conception of the integration of science and religion, by formulating integration can depart from the side of science, namely Nature Teology or vice versa departing from the side of religion, namely Teology Nature. With the alternative of its union is with philosophy i.e. with Process filloshofy. There are at least five important issues that Barbour raises in concluding about the importance of Natural Theology, namely: *First*, the position of nature in Theology, namely that theology must begin with historical revelation and personal experience, theology must also include a theology of nature that does not discourage or ignore the cosmic order of the universe. *Second*, the temperament of nature as a dynamic (new) process means that it does not remain always changing, namely the view that nature has flexibility as well as structure, novelty, and openness, as well as regularity. *Third*, that there is God's Supreme Dominion in Nature, which is sustainable Creation. *Fourth*, namely the important role of metaphysics, in this case, Barbour proposed the Philosophy of Process in his theology. *Fifth*, that is, God acts as creative (Barbour, terj, 2006:645-655).

Some of the research above shows how big the relationship between the two sciences is which is basically a complete unity. So the intention to integrate knowledge is very appropriate but a way is needed to do it. From finding the connecting point between the two to how a teacher carries out an imaginative learning process combining science and religion. This requires research and the creation of various books will be the integration of knowledge.

C. Research Methods

This research uses a qualitative approach method by collecting data and studying literature and literature studies to get a description of several models of integration of science and religion that have been carried out. Previously, literature studies were compiled by collecting information through journals, books, and other libraries related to the topic that had been selected. While the presentation of data is carried out in the form of a narrative. The results of the discussion and conclusions in this article are the result of analysis and surveys from various scientific sources in accordance with the title that has been chosen.

D. Results of the Discussion

Integration of Science and Religion In The Context Of Islamic Education

According to al-Kailani, if you look at the existing Islamic educational studies, most of them still seem to be descriptive, normative, and adoptive and in the shadow of "West centric" or vice versa, "Salaf centric" (Al-Kailani, 1988: 66-67). The thousand-year-old salaf tradition, which experienced bottlenecks in the last centuries, actually has a rich and highly sophisticated intellectual treasure, and the output of the Islamic education system is original figures, very synthetic and creative figures in Islamic civilization (Rahman, 2000: 83). From these historical facts there is a basic assumption that Islamic education has a special experience of the organic unity between science and religion. Because pre-modern sciences such as China, India, and Islamic civilization have fundamental differences with modern science, for example in terms of their goals, methodologies, sources of inspiration, and philosophical assumptions about human beings, knowledge, and the reality of the universe (Bakar, 1994: 73).

It is this fundamental difference that creates its own complexity, because the new education in Islam is grafted from other living organisms in the West, which have their own cultural background and internal structure and consistency. (Rahman, 2000: 83). Although islamic education in the past had experience in the process of adopting Greek philosophy and science with its own terms. However, Islamic education faces modern Western sciences at a disadvantage—psychologically and intellectually− because of political dominance, economic aggression and Western intellectual hegemony. As a result, new education that carries the spirit of modern science that has a minus view of religion is not well integrated into the Islamic education system. It was at this point that there was then a dichotomization between the fields of religion and modern science in the world of Islamic education. This ultimately caused losses between the two, due to the absence of mutual integration, so that Islamic education experienced various crises, including conceptual crises, methodological or pedagogical institutions, and orientation crises. In short, Islamic education is indeed experiencing functional degradation which is considered much more acute than the same thing experienced by the general education system which does not straightforwardly include a religious dimension (read: Islamic) (Arif, 2008: 230-233).

In relation to the integration of religion and science, what Islamic education needs today is an education system called Interdisciplinary Science in Islam (Interdiscipline Sciences in Islam). This integrative paradigm is time to be developed in this modern century as a proptotype of the rise of a new civilization

that will shift the current civilization that according to the author is already on the verge of bankruptcy judging from various physical and non-physical indicators. With a new educational system in which the curriculum taught is a complete union between the value of revelation and science. So it is hoped that alumni of Islamic educational institutions will be able to describe the methods of science and religion in the form of ways of thinking and behavior (akhlaq) in an integrated and holistic manner in society so that in the future a better community order will be created.

Thus, Islamic education in the future should give priority to learning materials that will help to produce scientists, technologists, and engineers, as well as other professional groups, whose roles and contributions are very important for economic progress. But it also means that an Islamic educational institution is not merely interested in producing some kind of scientist, technologist, or engineer, who speaks religion qualitatively, no different from those produced by most general education. But, it should be in his interest to educate scientists, engineers, as well as technologists of a "new kind" internalized in him policy and knowledge, spiritual faith and rational mind, creativity and moral insight, innovative power and ethical goodness, as well as ecological sensitivity fully developed harmoniously without breaking down the possibility for them to achieve excellence and excitement in their respective fields and specialties.

The Integration of Science and Religion and Its Implications for Islamic Education

The relationship between existing Islamic education, whether in the realm of hadharat an-nash, hadharat al-ilm, or hadharat al-falsafah, needs to be viewed from the perspective of dialogue or even integration. Therefore, Islamic education as affirmed by M. Amin Abdullah, must be closely related to the praxis-social dimension, because it always has a social impact and is required to be responsive to social reality so that it is not limited to the scope of theoretical-conceptual thinking as understood so far (Abdullah, 2000: 1) In addition, education should be used to introduce learners to traditions, cultural, social and cultural conditions, which in the same time have been reduced by modern science, technology and industrialization. So education must now be directed at positive forces to build a new cultural culture and eliminate social pathologies. George S. Counts asserts that education must have a vision and prospects for radical social change and implement the project (Ozman dan Craver, 1995: 176).

With the integrative paradigm in the scientific context between transmitted knowledges and acquired knowledges, it is hoped that a holistic and non-partial academic atmosphere will be created. So that the barriers of specialization of a particular field of knowledge do not result in the formation of myopic-narcissistic insights, nor does the range of knowledge limit itself to facts or the recognition of immanent finality, all of which is seen only in its "pragmatic" meaning. However, it is also the existence of the meaning or finality of science that is transcendent, that is, something that is outside (beyond) science which is the significance and direction of something in its "teleological" sense. (see Leahy, 2006: 37).

Thus, the integrative paradigm will be able to bridge the sharp gap between general education and religious education, because madrasah as a form of renewal of the Islamic education system (Boarding) in the modern period still faces institutional-scientific and methodological problems. As a result, this institution has not been able to completely solve the problem of scientific dichotomous dualism, the functional problem of "cultural heritage", and the dominance of justifiableindoctrinative methodology in academic activities (Arif, 2008: 264). In addition, the integrative Islamic educational paradigm will give birth to an inclusive attitude, so that it does not respond to developments only in reactionary ways, let alone make itself the living ground of radicalism (Azra, 88-89)

Implications in terms of curriculum, can be in the form of compiling a syllabus around two fundamental issues, namely (1) epistemology, and (2) ethics. The topics included in epistemology mainly talk about the epistemological status of applied and engineering sciences, their conceptual relationship with the principles of tawhid (that is, the knowledge of metaphysics and cosmology) that govern the physical (natural) world, with scientific methodology and creative thinking (including mathematical inspiration) and with the epistemological implications of certain aspects of human creativity in applied science and contemporary engineering, particularly in genetic engineering (Burn, 1994: 259). No less important is how the existing curriculum will lead students to have the desire and ability to conduct research in fields of science to then find "connecting points" with objective realities that occur in religious areas. Meanwhile, the implications in the teaching and learning process, where one of the interesting ideas of Ian G. Barbour, regarding the important role of creative imagination as an alternative method other than deductive and inductive methods, because in the formulation of theories, creative imagination goes beyond a very logical process of reasoning (Barbour, 2006: 197)

Meanwhile, the implications in the aspect of socio-religious education, with an integrative paradigm, students will be invited to think holistically and not partially in living the plurality of beliefs and religions. For example, by making regular visits to places of worship of different religions, and getting an explanation of the ethical principles shared by all religions. With it, students are also given an understanding, that there is one thing that unites all religions in a bond called the "experience of oneness" where each religion has different interpretations according to the perspective of their respective scriptures. In addition it is taught that peace in the world can be achieved by the experience of oneness by each individual.

Each individual. In this process education plays a decisive role in the process of integration of science and religion, a process that will appreciate the theoretical results of knowledge and eternal practical experience-divine qualities unearthed from each other's personal experiences. In another form, it can be by inviting students to look for symbols of harmonization that unfold in the natural world, to then be interpreted into models of integration between science and religion.

We teach students to learn to integrate science and religion into field activities even while playing. With this, it is possible to grow in the understanding of students, that science and religion will grow together, to adapt to each other. More than that, this process will make students understand that any model of integration of science and religion must reflect reality, not theoretical ties. The integration of religion and science is cognitive and spiritual work that occurs simultaneously without any time gap. Before "separating" and "issuing" un-Islamic ideides and concepts, one must first be able to identify them and have a deep understanding of the Islamic worldview and all its key elements and concepts. So it is clear that there is a need for research by Muslim scholars on how to separate the empty un-Islamic concept from Islamic science and divinity into an Islamic concept. After the emergence of a clear curriculum concept in accordance with Islamic values, teachers should also create teaching methods that are in accordance with integrated Islamic values in a unified manner. So the emergence of such a thing as mutual respect in religion.

E. Conclusion

The integration of science and Islamic religious values is necessary in the Islamic education system. Education is directed to explore, develop knowledge optimally, and be able to process in the achievement of education that develops as a whole both physically and spiritually everything related to science is actually also explained in the Quran. Science is based on human reason, mind and logic, and it is Islam that will balance it through the soul and feelings. Studying science must be accompanied by religious science, without religious science will only become a paralyzed science, which means that everything learned about science has no benefit and will instead cause misguidance. There is a lot of science related to Islam. Explanations of science are also found in the Quran, ranging from health sciences, medicine to astronomy. Therefore, it is worth remembering that science without religion is blind, and religion without science is paralyzed.

With the integrative paradigm in the scientific context between transmitted knowledges and acquired knowledges, it is hoped that a holistic and non-partial academic atmosphere will be created. The integration of science and technology has implications for Islamic education, including: first, it has implications in terms of curriculum, leading students to have the desire and ability to conduct research (research) in fields of science to then find "connecting points" with objective realities that occur in religious areas. Secondly, implications in the teaching and learning process, teachers develop creative imagination. The role of teachers with the power of creative imagination is able to create certain methods so that their students can absorb lessons quickly and completely. And the third implication in the aspect of religious social education. With an integrative paradigm, students will be invited to think holistically and not partially in living the plurality of beliefs and religions so as to foster mutual respect and respect for differences in religious beliefs.

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