Modern Islamic Civilization: A Strategy of Civil Reconstruction through Islamic Science and Education

Jauharotul Makniyah
University of Muhammadiyah Malang
jauharoh.makniyah11486@gmail.com

Abstract. Modern Islamic civilization in the analysis of Islamic scholars is experiencing theological discrepancy between the ideal of Islamic normative teachings and the actual phenomenon of the people. Theological discrepancy between teaching ideals normative Islam with the actual phenomenon of the people, becomes the character of Modern Islam civilization. The ideal of normative teachings of Islam is to realize that Islam is the religion rahmatan lli natural or beneficial for all nature as well with his people, while the actual phenomenon of the people describe a miniature neo-jahiliyah framed multi-dimensional crises that began with crises intellectual by not wanting to get around scientific progress and development technology, followed by methodological crises that are always late in learning and access information in a fast-paced century and then the economic crisis, crisis social (increasingly alienated, marginalized and uncritical) and ends with a crisis morals are increasingly hedonistic and leave traditional bases primarily religion. The malaise of the people was extended by Western occupation of the socio-political and psychological areas of the people by destroying worldviews people on the level of ontological, epistemological and axiological through westernization his science which is subjectivism-anthropocentric, dualism, mechanistic-deterministic, atomistic-reductionism, instrumentalism, materialism-scientism. Because the worldview of a people is the foundation in building and determine the direction of the development of its civilization in which world-views are built by the epistemology, the above phenomenon is something that must be paid for expensive for Muslims. Through interdisciplinary studies, the future reconstruction of civilization Islam requires the reconstruction of a paradigm of science and a system education by neutralizing both. Naturalization and acculturation paradigm of science and education system with religious values and Islamic culture will produce theistic science and holistic education systems. This is a strategic step for the reconstruction of modern Islamic civilization because, the linkage of science and values is a philosophical element in futuristic studies for those who try to answer future problems.

Keywords: reconstruction of Islamic civilization, theistic science, holistic education, science of people.

INTRODUCTION

Modern Islamic civilization in the analysis of Islamic scholars is experiencing a theological gap between the ideal of normative teachings of Islam and the actual phenomenon of the ummah [1]. Theological gap between the ideal of the normative teachings of Islam and the actual phenomenon of the ummah has become the character of modern Islamic civilization. The ideal normative teachings of Islam is that Islam is the religion of rahmatan lli ‘alamin. Whereas, the actual phenomenon of the ummah depicts a miniature neo-jahiliyah framed by a multi-dimensional crisis. It begins with an intellectual crisis without dealing with scientific progress and technological development followed by methodological crises. These crises are always about being left-behind in learning and accessing information in a fast-paced century. Then, economic crisis, social crisis (getting alienated, marginalized and uncritical), and moral crisis are increasingly hedonistic and leave traditional bases, especially religion [1].

The malaise of ummah is extended by Western colonization of the socio-political and psychological areas ummah by destroying the world view of ummah on an ontological, epistemological, and axiological level through the Westernization of science which is subjectivism-anthropocentric, dualistic, mechanistic-deterministic, reductionism-scientism, instrumentalism, and materialism-scientism [2]. Because the world view of people is the foundation to build and determine the direction of civilization development that the world view is built by its epistemology, as stated by Watloly, has pushed the progress of global civilization, the above phenomenon must be fulfilled by Muslims sincerely. So, the future reconstruction of Islamic civilization needs to emphasize the basics of its civilization in epistemology by naturalizing the Western-transferred sciences in the Islamic community. Naturalization is pursued by adapting and acculturating science to religious values and Islamic culture [3], by freeing scientific knowledge from Western materialistic interpretations and returning them to the world view.
context and Islamic ideology as suggested by Mehdi Golshani [4].

Mehdi made it theistic science, which then continued with the sanctification of the people through tracking back the struggle of people's thoughts on philosophy and science, and redeveloping the nature of religion which was limited to ritual-legal-formal. This is a logical consequence of the future reconstruction of Islamic civilization because religion and philosophy are two forces that can diverse world civilization [5]. To carry out this function, education is the most effective institution [6]. Education has a role in changing and transferring cultural values to each individual in society, and managing these cultures into mental attitudes, behaviors, and even personalities. As Agus Purnawadi showed [7] that education orientation has an important role in rectifying deviations that occur in socio-cultural institutions or individuals related to the perception of science, and its implementation in the practical life of humans. As the scientific paradigm requires the naturalization of science, the education paradigm also requires the naturalization of the education system. What we have applied is the Western world view is transferred into the Islamic world in the framework of westernization, with its distinctive characteristics namely mechanistic-humanistic [2].

Thus, the future reconstruction of Islamic civilization requires reconstruction in the paradigm of science and the education system by neutralizing both of them [8]. In addition to the reasons described above, the interconnection of science and value is a philosophical element in futuristic studies for those who try to answer future problems.

The Concept of Theistic Science

Theistic science in Mehdi Goishani's terminology [4] is a science with a word-view framework as found in the Ithribani religion (Islam, Judaism, and Christianity), that is a science that views God as the Creator and Sustainer of the universe. The science that does not limit the universe in the realm of matter, attributes goals to nature universe, and accepts moral order for the universe.

The idea of theistic science as a form of science naturalization, as an acculturation process from a science, comes from outside to a culture that applies in the new domain, which the whole process is then fully assimilated in the demands of the country's culture.

This idea becomes very urgent when modern human civilization with its Cartesian-Newtonian paradigm hegemony imposes it as the only scientific paradigm to another paradigm of a particular civilization. The hegemony of this paradigm becomes problematic not only when recruiting as the only modern science paradigm, but also because of the paradigm assumptions that are subjectivism-anthropocentric, dualism, mechanistic-deterministic, atomic-reductionism, instrumentalism, materialism-scientism, all of which is the antithesis of the theistic, world view science framework [9].

The paradigm of subjectivism-anthropocentric science has shaped the world view of the people with the Cogito ergo sum principle that places humans as the center of the world, dividing the science of reality into subjects and objects, humans and nature, by placing superior subjects over objects, and then separating consciousness and matter, mind and body, soul cogitation and extent objects, and values and facts.

The assumptions of the Cartesian-Newtonian paradigm have implications for relations of science and religion which are more directed towards conflict. Scientific theories are considered to be contrary to the doctrines of religion, especially the Abrahamic religion, and religious teachings are considered contrary to scientific theories.

This conflict then turns into a world view of hegemony and lame civilization because it dichotomizes the teachings of religion and science which are essentially the philosophical foundation of a civilization [10] because it is historically the peak of Islamic civilization when Muslims have a holistic world view of science. The whole purpose of science is seen as the discovery of unity and coherence in the natural world, with integral epistemology: experimental, rational, and intuitive, to understand the various levels and hope for their existence [4].

In Capra's terminology as quoted [9], the above phenomenon refers to a perceptual crisis which then shapes and directs human civilization to an unstable civilization. To describe this tangled thread of modern perception and civilization, the reconstruction of perceptions, which then leads to the process of naturalization of modern science, becomes theistic science.

Barbour mentions four typologies: Conflict, Independence, Dialogue, and Integration [11]. Whereas, John F. Haught [12] mentions other four typologies: Conflict, Contrast, Contact, and Confirmation. In the thesis of Barbour [11], the first typology of relations between science and religion is that conflicts occur mainly between scientific materialists in science and biblical literalism in understanding religion. Meanwhile, in the thesis of Haught [12], the first typology occurs between scientific skepticism in science and biblical literalism supported by concordism in religious understanding. This approach believes that science and religion basically cannot be referenced, as scientific skeptics claim that religion is based on assumption, a priority or belief. Whereas, science does not want to take things for granted. Religion relies much on wild imagination, while science relies on observed facts. All three
religions are too emotional, passionate, and subjective; while science strives to be impartial, impassionate, and objective. Whereas, literalists argue that scientific theories are contrary to religious teachings, in the case of scientific theory must be rejected. The first typology of the relation between science and religion historically occurred in the case of Galileo in the 17th century and Darwin in the 19th century.

In the second typology, the relation of science and religion, which in Barbour’ term is called Independence and in Haught’s is called Kontras, argues that actually there is no conflict between science and religion because both respond different problems so that they are independent. The second typology emerges from a critical analysis of both parties towards the first typology of relations between science and religion. Variable X is a conflict of science and religion because science and a religious belief system merge. [12] Haught states that independence is the middle way to reconcile both in harmony. Barbour states that the relationship is independent because they differ in the domain referred to and the method used [11].

It is a mistake if we are contrary to science and religion, as what the Concordism school did between the two. In the third typology, according to Haught, the relation of science and religion seeks dialogue, interaction, and possibility of adjustment between the two, especially the ways in which science influences religious understanding and theology [12]. Both science and religion talk to each other like two friends who work together in a very extensive study carried out in the name of reason about the nature of reality [13].

In this case, Barbour states that Dialogue portrays the relation of science and religion more constructively than Independence and Conflict [11]. He proposes several reasons why the Dialogue approach (as the third typology term) portrays the relationship of science and religion more constructively than the Independence approach. First, there are similarities in presuppositions between the two. However, both are efforts to understand reality which is a source of knowledge for science and religion [14]. Although the domain of reality is studied differently, both of them assume that life is a unified whole, not as mutually disjointed parts, and having an order and being understood. Second, the emergence of problems or limit questions is raised by science and cannot be answered because it has exceeded its own method. As John Polkinghome’s says, quoted by Leahy [13], that from science itself problems arise to exceed their ability to be answered. During this time, scientific advances in the last period denied the validity of materialism commonly held before, and led to the validity of religious truth.

In the fourth typology, the relation of science and religion based on Haught’s term [11] is called Confirmation, while Barbour’s term [12] is called Integration. A logical consequence of the typology of Dialogue or Contact recognizes the role of the subject in constructing an understanding of reality and recognition of the conceptual and methodological parallels in science and religion. In this case, Barbour [11] divides typology Integration into three different versions. First, Natural Theology. It claims that the existence of God can be concluded and (or supported by) evidence of natural design, which nature makes us more aware of it. We need to understand that Natural Theology intends to agree on several theses that make the slogan 'God of the gap'. The existence of the God is considered as the end of a scientific weakness which argues about reality, especially scientific arguments about historical creation was developed by Descartes, Newton, and his followers. Second, Theology of Nature. This version argues that the main point source of theology lies outside science, but scientific theories can have a strong impact on the reformulation of certain doctrines. Third, Systematic Synthesis. This version confirms that science or religion contributes to the development of inclusive metaphysics; a set of general concepts that can interpret various aspects of reality in a comprehensive manner. Science and religion essentially look for the rational fundamentals of world travel and it has been realized that science and religion are the two regions we experience as a whole in understanding reality. Of course, this awareness requires a more systematic explanation of constructive and integrative interactions between science and religion.

The Concept of the Reconstruction of The Future of Islamic Civilization in Synthetic Concept of The Theistic Science and The Concept of Ummat Sainification

As explained in the introduction, the future reconstruction of Islamic civilization requires a reconstruction in the paradigm of science and education system by naturalizing them with a coherent working mechanism between the two. According to Purwadi [7], there is no other alternative to improve an educational system paradigm if education is still used as an important medium in world view transformation, except remodeling or looking for alternative paradigms of modern science. The education system is integrated with a curriculum that eliminates the boundaries among various disciplines or subjects, and presents learning materials in the form of units or whole. An alternative candidate with a holistic-integrative spirit is same as the holistic paradigm of theistic science. With the roundness of the subject matter, hopefully, he can form a holistic world view of the community so that he becomes an "integrated" person who lives in harmonic surroundings [15].
The integrated curriculum is carried out through teaching units. A unit has a meaningful purpose for children, which is usually poured in the form of a problem to stimulate them to always think to solve a problem. To solve this problem, children carry out a series of interrelated scientific activities (research) involving all disciplines so that they obtain a holistic conclusion.

In unit teaching, intentionally, the children are educated to think scientifically according to the steps called Dewey "The Method of Intelligence." It is similar to the research method Arikunto put forward which starts with selecting problems, preliminary studies, formulating problems, formulating basic assumptions and hypotheses, choosing approaches, determining variables and data sources, determining data, and drawing conclusions in the form of research report [16]. Educational activities [17] in Islam are known as *bat'sul masa 'il*. If we carry out the integrated curriculum, it is clear that the priority is to think on facts that are self-seeking rather than memorizing merely facts or traditions of scientific activity to the people. In integrated curriculum system (in the term of the relation between science and religion included in Integration or Confirmation), this is the integration of the education system with Separate-Subject Curriculum as a curriculum that presents subjectively lessons or separate subjects. When the typology of science and religion relations is classified in Independence or Contrast, a correlated curriculum presents intensive lessons among certain subjects by removing the identity of the subjects in a particular field of study. When the typology of the science and religion relations is classified in Dialogue or Contact, a separate-subject implementation is carried out to provide in-depth understanding of certain disciplines and unit curricula. Occasionally, it also requires the application of correlated curriculum on a regular basis to deliver the implementation of the integrated curriculum.

From this framework, the writer concludes that the reconstruction of Islamic civilization requires a reconstruction of the paradigm of science through the naturalization of the sciences transferred from the outside into the Islamic community. By adapting and acculturating science to religious values and Islamic culture [18], freeing these sciences from Western materialistic interpretations, and returning them to the world view and ideology of Islam, Muslims can produce science with a theistic science paradigm that can be used as values or ideas for reconstruction. They reconstruct the education system paradigm by making the integrated curriculum as the form of naturalization of the education system. This system is adapted and cultured with the values (worldview) of the Islamic education system and the theological paradigm to produce agents of change (*insan kamil, khalifatullah fil ardhi*).

REFERENCES

[1] Machendrawaty dan Safi‘i, *Pengembangan Masyarakat Islam: Dari Strategi Sampai Tradisi*. Bandung: Remaja Rosda Karya, 2001.
[2] M. Arifullah, “Hubungan Sains,” *Kontekstualita*, vol. 21, no. 1, 2006.
[3] M. Kertanegara, *Menyibak Tirai Kejahilan: Pengantar Epistemologi Islam*. Bandung: Mizan, 2003.
[4] M. Golshani, *Melacak Jejak Tuhan dalam Sains: Tafsir Islami atas Sains*. Bandung: Mizan, 2004.
[5] A. Tafsir, *Filsafat Umum: Akal dan Hati Sejak Thales sampai Capra*. Bandung: Remaja Rosda Karya, 2001.
[6] S. M. N. Al-Attas, *Filsafat dan Praktik Pendidikan Islam*. Bandung: Mizan, 2003.
[7] A. Purwadi, *Teologi Filsafat dan Sains*. Malang: UMM Press, 2002.
[8] T. Noor, “Pergeseran Paradigma Global dan Pengaruhnya terhadap Dunia Pendidikan,” *Majalah Ilmiah Solusi*, vol. 10, no. 21, hal. 1689–1699, 2012.
[9] H. Haryanto, *Paradigma Holistik: Dialog Filsafat, Sains, dan Kehidupan Menurut Shadra dan Whitehead*. Bandung: Mizan, 2003.
[10] E. Masini, *Studi Futuristik: Kebutuhan, Perkembangan, dan Metode Mengarahkan Masa Depan*. Yogyakarta: BKF Multimedia, 2004.
[11] Ian G. barbour, *Juru Bicara Tuhan: Antara Sains dan Agama*. Bandung: Mizan, 2000.
[12] J. F. Haught, *Perjumpaan Sains dan Agama: Dari Konflik ke Dialog*. Bandung: Mizan, 1995.
[13] L. Leahy, *Sains dan Agama dalam Konteks Zaman Ini*. Yogyakarta: Kanisius, 1997.
[14] I. Marsudi, “Tipologi Hubungan Sains dan Agama dalam Perspektif Ian G. Barbour,” *Afkaruna*, vol. 7, no. 1, 2011.
[15] S. Nasution, *Asas Asas Kurikulum*. Jakarta: Bumi Aksara, 2001.
[16] S. Arikunto, *Prosedur Penelitian: Prosedur Praktis*. Jakarta: Renika Cipta, 2002.
[17] P. L. Harris dan M. A. Koenig, “Trust in Testimony: How Children Learn about Science and Religion,” *Child Dev.*, vol. 77, no. 3, hal. 505–524, 2006.
[18] M. Billah, “Makna Teologis M. Fethullah Gulen dalam Narasi Agama dan Sains,” *Teosofi*, vol. 1, no. 2, 2011.