



Received: 2024-09-23

Accepted: 2024-12-27

Published: 2024-12-30

Original Article

Holistic Scientific Thinking: A New Path to Contemporary Islamic Studies

Rinda Fauzian^{a*}^a Doctoral Program in Islamic Studies at UIN Sunan Kalijaga Yogyakarta, Indonesia* Corresponding author, email: rindafauzian@gmail.com

ABSTRACT

In the study of contemporary Islam, a holistic scientific thinking approach offers a new perspective that seeks to integrate a variety of disciplines and dimensions of life. This approach focuses not only on separate scientific aspects, but also on the interrelationship between the spiritual, social, political, and economic dimensions of Islam. By combining scientific methods with Islamic values and ethics, holistic scientific thinking becomes relevant to understanding global challenges such as social change, environmental crises, and modern economic dynamics. This research explores the potential of holistic thinking as a new path in a more inclusive and sustainable study of Islam. This approach offers an alternative to the dualistic paradigm that often separates science and religion, thus enabling a renewed understanding of Islam in the context of the modern world.

Keywords: holistic scientific thinking, contemporary Islamic studies & disciplinary integration.

Introduction

The study of the philosophy of science is a study that will not stop in connection with the investigation of scientific knowledge. The birth of contemporary thinkers of the 19th and 20th centuries gave birth to unusual movements of thought. One reason is that the contemporary field is constantly undergoing boundary shifts as time progresses. This is because contemporary philosophical records written in the 1980s have somewhat different language subjects. Furthermore, contemporary terms have narrower and wider uses. The category of contemporary philosophy is not fixed or done at the same level. One reason is that the "contemporary" field is constantly undergoing boundary shifts as time progresses.¹ This is because the record of contemporary philosophy written in the 1980s has the subject of the language 'contemporary' has a narrower and wider use.²

¹ Modern philosophy must understand our times, give an overview of existing life and philosophical thinking, and make important prophecies for modern mankind and its society.. K.A. Sadykov dkk., "The Modern Philosophy Problems," *Procedia - Social and Behavioral Sciences* 185 (Mei 2015): 428–31, doi:10.1016/j.sbspro.2015.03.356.

² Milton Karl Munitz, *Contemporary Analitic Philoshopy* (Newyork: Macmillan Publishing CO, 1981), 2.

Contemporary philosophy in its narrow sense would only refer to what is being heatedly discussed at the moment. In its use it could be extended to include philosophical discussions about the past, for example, the last two or three decades.³ The greatest disagreement is likely to relate to the past and what is happening now. However, as one gains the advantage of a wider perspective on an increasingly long past, the broad lines begin to become clearer, the uncertainty decreases, and the possibility of differences exists.⁴ That's how today's philosophy works to give future answers.

The development of the philosophy of science in this contemporary period must lead to progressive change.⁵ In fact, all human thinking is relative. As long as there is better thinking, then the relativity of human thinking applies. The pattern of thought that is too fuzzy directs human thinking to the factist, even so if it is too inclined to the point of view that it directs to the way of thinking. This is what is important to do, occupying these points with systematic, objective and empirical thinking. Continuing the study of the aristocracy above, one of the interesting of the scientific thinking that is holistic is in the reading of turath. Turath need to be deconstructed to identify elements that are no longer relevant today. The dominance of traditional-based text epistemology is overly dependent on texts and does not adequately consider historical context or rationality. It is very important to take a logic- and demonstration-based approach to epistemology to explore the meaning of turath in a more rational and scientific way.⁶

The writer argues, reading turath with different perspectives becomes a gap in delineating holistic scientific thinking in order to find the expected meaning. Any discovery of the epistle will lead to the discovery that is expected of the meaning. Meaning this is a product of thought that cannot be obtained from one discipline alone, but must seek the interconnectivity of each discipline. Nevertheless, there will be a harmonization of every perspective in the reading of the Turath, thus giving the scientific contribution to the development of science in the present day. Thus, the focus of this paper is on "Holistic Scientific Thinking: New Path of Contemporary Islamic Studies".

Method

This research uses a qualitative approach to the method of literary study. (library research).⁷ This approach was chosen to identify, compile, and analyze various primary and

³ Munitz, *Contemporary Analitic Philoshopy*, 4.

⁴ According to Wilhem Dilthey in Martin, in understanding something one must use the humanities—das verstehen approach, that is, to understand ideas, thoughts, feelings of people, empirical evidence in culture through open attitude, discretion, and not bad thinking. Richard C Martin, *Islam and Religious Studies. An Introductory Essay*, "dalam Richard C. Martin (Ed.), *Approaches to Islam in Religious Studies* (Arizona, US: The University of Arizona Press, 1985), 8.

⁵ According to Sourous, scholarly leadership is not progressive because it merely cuts on sermons and religious ceremonies that are not substantial for progress. Abdolkarim Soroush, "Liberal Islam," in *The Evolution and Devolution of Religious Knowledge*, ed. Charles Kurzman (New York: Oxford University Press, n.d., 1998), 244-251.

⁶ Mohammad Abed Al-Jaberi, *Takwīn al-'Aql al-'Arabi* (Markaz Dirasat al-Wahda al-'Arabiyya, 1984), 45-47; Syafiq A Mughni, *Berfikir Holistik dalam Studi Islam*, dkk. *Studi Islam Kontemporer Perspektif Insider/ Outsider* (Yogyakarta: IRCiSoD, 2017). 7.

⁷ John W. Creswell, *Research Designe Qualitative, Quantitative, and Mixed Methode Approaches* (London: Sage, 2009).

secondary sources relevant to the concept of holistic scientific thinking and contemporary Islamic studies. Sources studied include classical and contemporary Islamic literature, academic journal articles, books, and recent research results related to the integration of science and religion in the Islamic context.

The research uses content analysis methods to explore holistic scientific thinking concepts in the works, focusing on how these concepts are applied to contemporary Islamic studies. This analysis is carried out through the stages of data collection, thematic categorization and conceptual refinement. Data is collected through observation and documentation, with primary data sources in articles in journals and books that study Contemporary Islamic studies, as well as secondary data sources from articles in journals, books, and other scientific writings that study religious studies. The researchers also used an interdisciplinary approach by blending philosophical, theological, and sociological perspectives to understand the various dimensions of holistic thinking and how it can become a new paradigm in Islamic studies. Thus, this method is expected to be able to depict in depth the potential of holistic scientific thinking as a comprehensive analytical framework for contemporary Islamic studies as well as its relevance in the face of modern challenges.

Results and Discourse

Epistemology of Islamic Studies

The biggest problem in the study of Islam was right or wrong is my country. It's because the truth claim voltage is so high that it's easy to eradicate the opinions and findings of others. Especially in religious matters, the problem is increasingly emerging when one finds it difficult to distinguish between *ad-din* and *al-fir al-din*. Religion is final, it is true, but religious thinking is semi-permeable. It can be changed, it can be true, it may be wrong.⁸ Borrowing the term Charles J. Adams, we should be able to separate between inward experience and outward behavior.⁹ Religion/Islam as an inward experience is a final one, because it is a product of God.¹⁰ On the other hand, outward behavior is a tradition that must be criticized until it meets the expected meaning. I argue, if not using the Philosophy of Islamic Sciences, it would be difficult on the expected meaning, tending to high access to truth claims and shifting paradigms. The importance of the philosophy of Islamic sciences as a basic building in understanding and studying *al-fikr al-din* until the end of *al-qiroat al-muntijah*/producing knowledge that is beneficial to mankind.

If drawn to the grass root, the beginning of the rise of the voltage truth claim and the shifting paradigm that is happening in various parts of the world is a question of authoritarianism. It is authoritarianism that endorses the act of using the power of God by a group or individual who states that his view is most right, and the other view is wrong.

⁸ There is no single method in producing Islamic law, because *la yunkar taghayyurul ahkam bi taghayuril zaman wa makan*, meaning Shariah is permanent, but understanding and implementation of shariah/ fikh, indeed follow changes and always evolve. Khaleed Abou El-Fadl, *Atas Nama Tuhan; dari fikh otoriter ke fikh otoritatif*, terj. R Cecep Lukman Hakim (Jakarta: Serambi Ilmu Semesta, 2003), 65.

⁹ Adams, "Islamic Religious Tradition", dalam Leonard Binder (Ed.), *The Study of the Middle East. Research and Scholarship in the Humanities and the Social Sciences*, 33.

¹⁰ Religion as an object of study must be shown as something respected, but also as a subject of criticism of science.. John Hinnells (ed.) *The Routledge Companion to the Study of Religion* (London and New York: Routledge, Taylor & Francis Group, 2005), 243.

Exaggerate the interpretation of God's law by reading it textually. According to El-Fadl, authoritarianism is the negation of God's ontological reality and the assumption of the will of God by the deity, so that the deputies refer to themselves.¹¹

One of the big problems is the dichotomy between religious knowledge (naqli) and rational knowledge (aqli).¹² In the history of Islam, there are two intellectual traditions that are often viewed separately: knowledge based on revelation (Al-Quran and Hadith) and knowledge acquired through reason and empirical observation. This contradiction poses the challenge of integrating the two sources of knowledge. For example, in classical Islamic philosophy, there are attempts by thinkers like Al-Farabi, Ibn Sina, and Al-Ghazali to unify reason and revelation, but in modern contexts, this dichotomy is often exacerbated by differences of view between traditionalist scholars and modernist intellectuals.¹³

The epistemological question of who authorized the interpretation of Islamic sources is also a matter of debate. Does that authority belong to scholars, thinkers, or to the general public? In contemporary Islamic studies, authority is often influenced by political, social, and cultural factors, which affect the way knowledge is recognized or rejected. This poses problems in determining the valid scientific authority in the field of Islamic studies.¹⁴ The issue of epistemology is also related to the approach to the sacred texts of Islam, namely the Quran and the Hadith. There is debate as to whether the interpretation of these texts should be done literally or contextually. Hermeneutic approaches that emphasize the understanding of texts based on historical, social, and linguistic contexts still raise resistance among certain groups who prefer literal or normative approaches.¹⁵ The differences in this approach imply a wide range of areas of Islamic studies, ranging from Islamic law to ethics.

In an increasingly plural and interconnected world, another epistemological problem facing Islamic studies is how to deal with the plurality of knowledge of different cultures, religions, and other intellectual traditions. The interaction between Islam and Western knowledge, modern philosophy and science, often leads to epistemological conflicts. The question that arises is whether it is possible to accommodate non-Islamic knowledge ideas into the framework of Islam without damaging the core of its teachings? It also covers issues such as postmodernism, relativism, and deconstruction that test the boundaries of Islamic knowledge.

¹¹ El-Fadl, *Atas Nama Tuhan; dari fikih otoriter ke fikih otoritatif*, terj. R Cecep Lukman Hakim, 205.

¹² Siswanto Masruri, "Piramida Integrasi Keilmuan Islam dan Sains," *Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains*, vol. 1 (Yogyakarta, 2018), xiii.

¹³ Fatkhur Roji dan Ibrahim El Husarri, "The Concept of Islamic Education According to Ibn Sina and Ibn Khaldun," *Nazhruna: Jurnal Pendidikan Islam* 4, no. 2 (24 Juli 2021): 320–41, doi:10.31538/nzh.v4i2.1342; Restu Aulad Al-Fattaah, Muhammad Iqbal, dan Muhammad Rusydi, "Interaksi Sufisme, Ekologi dan Teologi di Era Postmodernisme: Antara wahdat al-wujūd Ibn 'Arabi dan sūluk al-Ghazali," *Al-Banjari : Jurnal Ilmiah Ilmu-Ilmu Keislaman* 22, no. 1 (11 Juli 2023): 1–20, doi:10.18592/al-banjari.v22i1.7671.

¹⁴ A Afriansyah, "Konstruksi, Kontestasi, Fragmentasi, dan Pluralisasi Otoritas Keagamaan Indonesia Kontemporer," *Studia Islamika*, no. Query date: 2023-04-22 21:15:25 (2021); I Burdah, N Kailani, dan M Ikhwan, "Ulama, politik, dan narasi kebangsaan: fragmentasi otoritas keagamaan di kota-kota Indonesia," no. Query date: 2023-04-22 21:15:25 (2019); D Haryadi, "Otoritas Keagamaan Baru: Habitasi dan Arena Dakwah Era Digital," *Islamic Insights Journal*, no. Query date: 2023-03-28 10:05:16 (2020), <https://pdfs.semanticscholar.org/935b/88dee05ed2aaf27cef454481937646978700.pdf>.

¹⁵ S.R. Burge, "The Search for Meaning: Tafsīr, Hermeneutics, and Theories of Reading," *Arabica* 62, no. 1 (4 Maret 2015): 53–73, doi:10.1163/15700585-12341336.

The epistemology of Islamic studies must also struggle with the challenges of relevance in the modern world. The knowledge derived from the Islamic tradition, whether legal, theological, or philosophical, must be able to answer contemporary issues such as human rights, social justice, democracy, and technology. The epistemological challenge here is how knowledge rooted in the past can remain relevant and adaptive to changing times without losing the essence of Islamic values.¹⁶ The differences in this approach imply a wide range of areas of Islamic studies, ranging from Islamic law to ethics.

In an increasingly plural and interconnected world, another epistemological problem facing Islamic studies is how to deal with the plurality of knowledge of different cultures, religions, and other intellectual traditions. The interaction between Islam and Western knowledge, modern philosophy and science, often leads to epistemological conflicts. The question that arises is whether it is possible to accommodate non-Islamic knowledge ideas into the framework of Islam without damaging the core of its teachings? It also covers issues such as postmodernism, relativism, and deconstruction that test the boundaries of Islamic knowledge.

The epistemology of Islamic studies must also struggle with the challenges of relevance in the modern world. The knowledge derived from the Islamic tradition, whether legal, theological, or philosophical, must be able to answer contemporary issues such as human rights, social justice, democracy, and technology. The epistemological challenge here is how knowledge rooted in the past can remain relevant and adaptive to changing times without losing the essence of Islamic values.

The problem above is that there must be conceptual refinement. The sciences of Islam will flourish if the activity of genuine doubt is carried out continuously. Inquiry as an approximation, which does not perceive someone else's thinking is final, but must dig its truth and validity properly. The traits of the science are growing, because of the presence of innovation.¹⁷ According to Abeed Aljabiri, something can be called innovation, while there are values of novelty and authenticity.¹⁸ Both will not be obtained without scientifically correct thinking. This is the function of the philosophy of science in the development of Islamic sciences, so as not to lose innovation in giving answers to the questions facing mankind, especially questions in Islamic studies in particular.

Critical thinking will guide the development of a tradition of science and innovation. It's hard for a scientific tradition to exist without dialogue, investigation, scepticism, and if you look at the product of other people's thoughts, it's all right. Even so, innovation will be difficult to be born if reason is not used to discover scientific novelty and thought that has accountable authenticity.¹⁹ It's all derived from a structured, empirical and logical thinking process.

¹⁶ Abdullah Saeed, *Islamic Thought: An Introduction* (London and New York: Routledge, 2006).

¹⁷ A society with a higher capacity for innovation is characterized by higher individualism, willingness to take risks, readiness to accept change, long-term orientation, low power/status/hierarchy (low power distance), weak avoidance of uncertainty, openness to new information, frequent travel, positive attitude towards science, the value of education to society, religion.. Husnu Tekin dan Omer Faruk Tekdogan, "Socio-Cultural Dimension of Innovation," *Procedia - Social and Behavioral Sciences* 195 (Juli 2015): 1417–24, doi:10.1016/j.sbspro.2015.06.438.

¹⁸ Mohammad Abed Al-Jaberi, *Problematisasi Pemikiran Arab Kontemporer*, penerjemah: Aksin Wijaya (Yogyakarta: Pustaka Pelajar, 2015), 7.

¹⁹ The idea of eligibility to be pursued, adopted from the recent debate on scientific searches in the philosophy of science, refers to a form of prospective epistemic value. Julia Sánchez-Dorado, "Creativity,

Reducing the number of thinkers like above and increasing the amount of thinker-thinkers who have critical thinking is a pretext for the development of civilization. It's because, thinkers presented by tenacity, authority, and apriori are born of dogmatism purely. In the meantime, thinkers who use their genuine doubts will rethink through the investigative phase. It is reasonable to acknowledge that human thought is fallibilism, which means it is provisional, non-absolute and entitled to revision/criticism.

Adding thinkers who have critical thinking, is the same as expanding and producing epistemology or cultural knowledge systems. Using simultaneously the ability of aql mukawwin to shape culture, engage aql shawwan to gather the basic principles, the principles that form the foundation of the active mind. Meanwhile, no epistem is produced if these two senses are not dialectical or influenced by internalized dogmas. As a result, there has been a distortion of thought and a crisis of mind that has led to rigidity.

Meanwhile, the moderation of diversity and Islamism will appear from the process of critical thinking that produces new knowledge or fresh ijtihad.²⁰ One of its operationalization is the integration-interconnection between ulumuddin, natural sciences and social sciences. The expected result is a change in cognitive-intellectual growth, the emergence of a sense of justice, non-fanaticism, human rights, gender justice, as well as a rise of humanity that weighs on conscience consciousness. The patterns of bayani, irfani and burhani can be used as a formula in the realization of a moderate Muslim society. If that's done, is there still any non-moderate Muslims? If there are still non-moderate Muslims, it means that criticism of thought is not done and everything stops on artificial doubt (relying on tenacity, authority and apriori), thus tending to return to truth claims, conservative turn, and intolerance.

Holistic Scientific Thinking Framework in Contemporary Islamic Studies

Al-Aql is a device of thought, while the object is al-fikr. Al-Fikr contains ideology and epistemology, these two things are called the product of thought. Al-Jabiri also adheres to a "al-jinsiyah al-tsaqafiyah" (cultural entity), according to which a thinker does not belong to a particular culture unless he thinks in that culture (*at-tafkir dakhiluha*). That is, not thinking about the problems that exist in a certain culture, but thinking through that culture (*at-tafkir bi washatatihi*).²¹ From here we are brought to the holistic scientific-thinking nature,²² which can give the right value of benefits as well as open up new civilizations especially in the study of Islam.

In religious studies, it's important to study faith and tradition. Faith (belief) is an internal aspect (inward experience), while tradition is an external aspect (outward behavior). Inward

Pursuit and Epistemic Tradition," *Studies in History and Philosophy of Science* 100 (Agustus 2023): 81–89, doi:10.1016/j.shpsa.2023.05.003.

²⁰ Abdullah Saeed, *Islamic Thought: An Introduction* (London and New York: Routledge, 2006), 150.

²¹ Kant's explanation of the hypothetical use of reason helps us see how to address the problems associated with the various Kant explanations of particular laws. Andrew Cooper, "Hypotheses in Kant's Philosophy of Science," *Studies in History and Philosophy of Science* 99 (Juni 2023): 97–105, doi:10.1016/j.shpsa.2022.04.007.

²² In this contemporary era, holistic principles using philosophical approaches can be used as a means of renewal. It is not confined to Islamic law alone, but can extend to other studies. Jasser Auda, *Maqashid al-Syariah as Philosophy of Islamic Law a Sistem Approach* (London, Washington: IIT, 2008).

experience is an inner dimension in religion, is also a domain of personal awareness of feelings and responsibilities.²³

In introducing thought as the basis of religious studies, It is very important to connect the construction of holistic and critical thinking as Charles S. Peirce put forward things that were considered important in the production of thought, among others: (a) belief, that is, belief combined with a strong moral order. (b) habit of mind, a belief that has been considered true then crystallizes into a habit in assuming something is true and believed. (c) doubts. Doubts present over something believed to be true and considered to be mainstream. To understand this doubt to become a believed truth, Peirce revealed four methods that were considered relevant, namely tenacity, authority, a priori, and investigation. (d) inquiry. In searching for meaning, this stage must be done, because at this stage it is not the search for truth but the value obtained that can be used practically. (e) the logic of theory, in this section is a product of logical knowledge through long thinking processes and is used as an application of the study material.²⁴

As for the operationalization of the five points above, belief is a proposition that is judged correct by someone. He can reveal the habit of reason, as opposed to doubt. The component consists of a subject and a predicate.²⁵ Belief is believed to be a firm proposition and considered true giving birth to the so-called act of habit in thinking (habit of mind). In producing belief, it needs to be balanced with the exercise of imagination continuously under certain circumstances.²⁶ When this is accustomed, then will produce a culture of thinking that can explain the next problem that is considered unclear level of truth or in other terms still questionable.

There's something that's farther from belief than doubt, which is not accepting propositions at all. Doubts don't completely affect our behavior either. Belief determines us to act in a certain way while pure ignorance which is the opposite of belief has no influence at all. We can't start with complete doubt. We must start with all the real difficulties we face when we enter the philosophical age. These prejudices must be eliminated by someone, because they are often questioned or questioned.

The second important way to distinguish beliefs and doubts is through behavioral differences. There is a difference to be noticed in the way a person acts, not just in the inner feelings or sensations that they experience. Having a belief, as we have seen, means having certain habits of thinking that make a believer expect certain consequences. Individuals act in a way that is consistent with their beliefs when relevant events occur. On the contrary, when a person is in a state of doubt, the behavior of the person does not show the regularity of the response that is characteristic of a person who has a belief.

Doubt is not a taboo thing, but in the way of doubting oneself it already includes cleansing itself from the prejudice that demands it to the wrong path. The doubts present in one's mind are important to be used as a basic material in acquiring positive potential argumentative. The method that can be used in solving the question is by four methods, among others: (1) the method of tenacity. This method is a way to acquire knowledge in a very convincing way, even

²³ Adams, "Islamic Religious Tradition", in Leonard Binder (Ed.), *The Study of the Middle East. Research and Scholarship in the Humanities and the Social Sciences*, 33.

²⁴ Munitz, *Contemporary Analytic Philosophy*, 14-66.

²⁵ Munitz, 27.

²⁶ Munitz, *Contemporary Analytic Philosophy*, 29.

though what he believes is not necessarily true. The greatest possibility of this belief is the belief that comes from things that are generally happening. (2) authority. In this method, trust is obtained from an authoritative source. (3) apriority. This method is known as metaphysical philosophy, truth obtained from intuition without any empirical evidence, and (4) investigation. This method is known as the term scientific method, which has a systematic procedure, a definite step of work, using reasoning, measuring empirical and logical truths.²⁷

A set of scientific methods built and designed, will not reach the summit of the search for meaning without research. In this case, Peirce calls it inquiries. Inquiry was originally based on beliefs and doubts. Benefits of doubt or benefits of doubt can lead to serious research. This serious research is research that gives rise to a cautious attitude in producing knowledge because there is reasoning activity in it. Truth or knowledge must be accepted temporarily, as long as new knowledge is not born. That is, all theories are not treated as absolute, a priori and only temporary. In this case Peirce calls it the term principle fallibilism.

The inquiry process is a search process based on scientific methods. However, what is sought is meaning rather than truth, which is a pragmatic but operative theory of fertilization. That is, the term pragmatic meaning is essential in scientific research. When it comes to finding the scientific truth, the most important thing is to find the meaning of the belief itself. So the meaning, or even the clarity of the idea, is part of the logic of research.²⁸

The Scientific Research Procedure that Peirce built was intended to solve the problems and difficulties experienced by modern epistemology. So his pragmatic method focuses on the value gained and its usefulness in solving various modern issues and generating value. Meanwhile, the operationalization of Peirce's thought-skeleton begins with a conscious belief and continues to produce a habit of mind. The habit of thinking will find and face doubts (Doubt). In this process, one has not reached the summit of meaning as Peirce meant.

Doubts or doubts are a reflection point for scientific thinking and unstoppable thinking. If these present doubts are analyzed through investigation or scientific methods, by systematic, logical and empirical scientific procedures, then they will have the expected meaning. In this process Peirce named with genuine doubt or real doubt that produces true meaning. According to Abdullah, in the position of artificial doubt one will experience the independence of thought and assume that the belief that he found before is considered as the genuine truth.²⁹

As for the flow of the framework of thought that Peirce has narrated, the author can matriculate it in the form of the diagram below.

²⁷ Munitz, 35-42.

²⁸ Munitz, 48.

²⁹ M Amin Abdullah, *Islamic Studies di Perguruan Tinggi Pendekatan Integratif-interkoneksi* (Yogyakarta: Pustaka Pelajar, 2010).

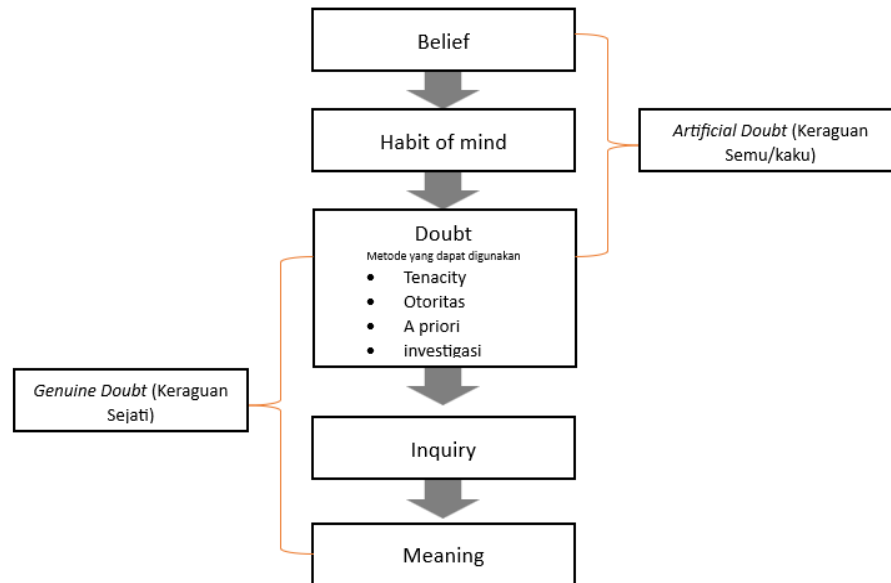


Diagram 1 presented based on Peirce's framework reading

Briefly the above picture is interpreted, everyone has different beliefs and different thinking habits anyway. When his habit of mind is high, he will be overwhelmed by the doubts that are present at that time. If this doubt is understood only as a limit of tenacity, authority and a priori, then he will return to his belief as the belief he has justified. But, if you understand such doubts by investigative methods or by an inquiry approach, at this level you will find the meaning of the beliefs that it considers to be true. It is no longer the truth it produces, but the meaning or value it acquires to use to identify other beliefs.

The most important thing in Peirce's idea of thinking is the principle of fallibilism that can minimize the truth claim of science. In other words, any science produced must be regarded as tentative, inclusive, non-absolute and capable of dialogue with the problems that arise. This is the framework that Peirce offers to readers to generate progress of science that can continue to evolve and become theory in answering global problems, not just scientific problems but can rise to religious, social, cultural, economic problems, etc.

The principle of fallibilism is not only applicable to the general sciences, but must be applied to the sciences of Islam. It means that all the knowledge that exists is not limited to one discipline only. While, according to Amin Abdullah, the sciences of Islam are not restricted to religious activities only, but greater than that, the activity of science.³⁰ Existing designs also need to be considered and must be reviewed to balance *truth claims* in one science. So what is expected is that science is born not for the purpose of *truth claims*, but provides answers to problems that occur or in pragmatic language it is called realist and practical.³¹

³⁰ M Amin Abdullah, *Studi Agama* (Yogyakarta: Pustaka Pelajar, 1996).

³¹ I believe that in order to gain the usefulness of knowledge for mankind, religion must have a healthy dialogue with other religions and have a solid foundation. Mohammad Arkoun, *Aina Huwa al-Fikr al-Islami al-Muashir* (Beirut: Al Asyqi, 1987), 39.

A science-building scheme without the concept of fallibilism would lead to independent thinking. The philosophy of science will be transformed into the claims of truth/belief made by previous scientists. Perceiving it was all the truth he believed, thus breaking the eye of the chain to get to the next meaning. This is the condition that may result in an independent thinking or an artificial position of doubt. But if the door is closed, it is the same as shutting down the freedom of thought and forcing others to submit to the truth they have believed.

In religious terms, it is known as taqlid and ijtiḥad. The term taqlid strongly hangs his belief in the truth that exists. Habit of mind is created to understand beliefs that already exist without identifying doubts that arise. So not uncommon, people whose positions are fearful are easy to blame others and are exclusive. Meanwhile, ijtiḥad frees man to produce knowledge or theory. In fact, even the secondary text in this case Hadits reward one good if wrong, and two good if right. True in the sense of adjusting to the scientific methods done.

The danger of fear is the return of the critical mind of man to the belief in the existing truth. The reading of this model will never produce anything meaningful, but will only “submit” and become a material of repetition of what was previously mainstream or in other terms *al-Qira’at al-taqlidiyyah al mutakarrirah*. This is because the method of understanding such beliefs and doubts is limited to tenacity, authority, or even a priori, so that there is no activity of reconsideration to continue beliefs that are considered true. Meanwhile, ijtiḥad continues doubts until the investigation and ends with meaningful and useful, or in other words emerging development of science and productivity of knowledge (*al qira’at al naqdiyyah al mutijah*). It's like closing the ijtiḥad is closing yourself to thinking. Thus, it will be revealed in the Scriptures.

Conclusion

Science is meant to open up reality, so what is called reality is not just objects, phenomena, facts, concrete empirical data. Every time science undergoes significant advances, with a record of thinking humans are used and continuously evolving. The development of good science is a science that continues to be useful to all creatures. It's as Peirce invented, the principle of fallibilism that can minimize the truth claim of science. In other words, any science produced must be regarded as tentative, inclusive, non-absolute and capable of dialogue with the problems that arise. *Belife* is used as a true belief and gives birth to actions called habits of thinking (*habit of mind*). Doubt is not a taboo thing, but the way of doubting oneself already includes cleansing yourself from the prejudice that demands it to the wrong path. The holistic scientific thinking approach in contemporary Islamic studies offers a new paradigm that is more inclusive, inclusive, and relevant to understanding the complexity of global challenges. By combining the spiritual, rational, social, and empirical dimensions, this approach is able to overcome the dichotomy between religious knowledge and modern science, as well as open up a space for interdisciplinary dialogue. Holistic thinking not only enriches Islamic studies, but also provides an alternative to attempts to respond to contemporary issues such as social, ecological, and economic change in a more comprehensive way. In this context, holistic scientific thinking is a new way to renew a more adaptive and contextual understanding of Islam to the changing times without sacrificing its fundamental values. Holistic scientific thinking is the implementation of a set of scientific methods built and designed, to reach the summit of the search for science and to reproduce new knowledge (*al qira’at al naqdiyyah al mutijah*). This is the activity that is expected for scientific progressivity to continue to grow, along with the development of the era itself.

References

- Abdullah, M Amin. *Islamic Studies di Perguruan Tinggi Pendekatan Integratif-interkoneksi*. Yogyakarta: Pustaka Pelajar, 2010.
- . *Studi Agama*. Yogyakarta: Pustaka Pelajar, 1996.
- Adams, Charles J. "Islamic Religious Tradition", dalam Leonard Binder (Ed.), *The Study of the Middle East. Research and Scholarship in the Humanities and the Social Sciences*. New York: John Wiley & Sons, 1976.
- Afriansyah, A. "Konstruksi, Kontestasi, Fragmentasi, dan Pluralisasi Otoritas Keagamaan Indonesia Kontemporer." *Studia Islamika*, no. Query date: 2023-04-22 21:15:25 (2021).
- Al-Fattaah, Restu Aulad, Muhammad Iqbal, dan Muhammad Rusydi. "Interaksi Sufisme, Ekologi dan Teologi di Era Postmodernisme: Antara wahdat al-wujûd Ibn 'Arabi dan sūluk al-Ghazali." *Al-Banjari : Jurnal Ilmiah Ilmu-Ilmu Keislaman* 22, no. 1 (11 Juli 2023): 1–20. doi:10.18592/al-banjari.v22i1.7671.
- Al-Jaberi, Mohammad Abed. *Problematisasi Pemikiran Arab Kontemporer, penerjemah: Aksin Wijaya*. Yogyakarta: Pustaka Pelajar, 2015.
- . *Takwīn al-'Aql al-'Arabi*. Markaz Dirasat al-Wahda al-'Arabiyya, 1984.
- Arkoun, Mohammad. *Aina Huwa al-Fikr al-Islami al-Muashir*. Beirut: Al Asyaqi, 1987.
- Auda, Jasser. *Maqashid al-Syariah as Philoshopy of Islamic Law a Sistem Approach*. London, Washington: IIT, 2008.
- Burdah, I, N Kailani, dan M Ikhwan. "Ulama, politik, dan narasi kebangsaan: fragmentasi otoritas keagamaan di kota-kota Indonesia," no. Query date: 2023-04-22 21:15:25 (2019).
- Burge, S.R. "The Search for Meaning: Tafsīr, Hermeneutics, and Theories of Reading." *Arabica* 62, no. 1 (4 Maret 2015): 53–73. doi:10.1163/15700585-12341336.
- Cooper, Andrew. "Hypotheses in Kant's Philosophy of Science." *Studies in History and Philosophy of Science* 99 (Juni 2023): 97–105. doi:10.1016/j.shpsa.2022.04.007.
- Creswell, John W. *Research Designe Qualitative, Quantitative, and Mixed Methode Approaches*. London: Sage, 2009.
- El-Fadl, Khaleed Abou. *Atas Nama Tuhan; dari fikih otoriter ke fikih otoritatif, terj. R Cecep Lukman Hakim*. Jakarta: Serambi Ilmu Semesta, 2003.
- Haryadi, D. "Otoritas Keagamaan Baru: Habitiasi dan Arena Dakwah Era Digital." *Islamic Insights Journal*, no. Query date: 2023-03-28 10:05:16 (2020). <https://pdfs.semanticscholar.org/935b/88dee05ed2aaf27cef454481937646978700.pdf>.
- Knott, Kim. "Insider/Outsider Perspectives" dalam John Hinnells (ed.) *The Routledge Companion to the Study of Religion*. London and New York: Routledge, Taylor & Francis Group, 2005.
- Martin, Richard C. *Islam and Religious Studies. An Introductory Essay,* dalam Richard C. Martin (Ed.), *Approaches to Islam in Religious Studies*. Arizona, US: The University of Arizona Press, 1985.

- Masruri, Siswanto. "Piramida Integrasi Keilmuan Islam dan Sains." Dalam *Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains*, 1:xiii. Yogyakarta, 2018.
- Mughni, Syafiq A. *Berfikir Holistik dalam Studi Islam dalam M Arfan Mu'ammam, Abdul Wahid Hasan, dkk. Studi Islam Kontemporer Perspektif Insider/ Outsider*. Yogyakarta: IRCiSoD, 2017.
- Munitz, Milton Karl. *Contemporary Analitic Philoshopy*. New York: Macmillan Publishing CO, 1981.
- Roji, Fatkhur, dan Ibrahim El Husarri. "The Concept of Islamic Education According to Ibn Sina and Ibn Khaldun." *Nazhruna: Jurnal Pendidikan Islam* 4, no. 2 (24 Juli 2021): 320–41. doi:10.31538/nzh.v4i2.1342.
- Sadykov, K.A., Zh.T. Aubakirova, Zh. Berestenov, E. Asembai, dan U. Aimbetova. "The Modern Philosophy Problems." *Procedia - Social and Behavioral Sciences* 185 (Mei 2015): 428–31. doi:10.1016/j.sbspro.2015.03.356.
- Saeed, Abdullah. *Islamic Thought: An Introduction*. London and New York: Routledge, 2006.
- Sánchez-Dorado, Julia. "Creativity, Pursuit and Epistemic Tradition." *Studies in History and Philosophy of Science* 100 (Agustus 2023): 81–89. doi:10.1016/j.shpsa.2023.05.003.
- Soroush, Abdolkarim. "Liberal Islam," in *The Evolution and Devolution of Religious Knowledge*, ed. Charles Kurzman. New York: Oxford University Press, n.d., 1998.
- Tekin, Husnu, dan Omer Faruk Tekdogan. "Socio-Cultural Dimension of Innovation." *Procedia - Social and Behavioral Sciences* 195 (Juli 2015): 1417–24. doi:10.1016/j.sbspro.2015.06.438..