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Noeng Muhadjir's Islamic Educational Philosophy and Its Paradigmatic Impact: A Case Study from Universitas Ahmad Dahlan, Indonesia

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ABSTRACT

Purpose – This study aims to examine Noeng Muhadjir's perspective on constructing Islamic educational philosophy and its implications for developing scientific paradigms at Universitas Ahmad Dahlan (UAD). His ideas remain highly relevant amid the persistent dichotomy in Islamic education, which is still dominated by textual-theological reasoning and lacks empirical-rational contextualization.

Methods – This study applies an abductive approach combining library (deductive) and field (inductive) research. Data from Noeng Muhadjir's works and interviews with UAD leaders are analyzed philosophically to explore how his educational philosophy shapes UAD's scientific paradigm, as reflected in the Science Unification guideline.

Findings – Noeng Muhadjir's Islamic educational philosophy, inspired by Ibn Rushd's Peripatetic tradition, is based on monism, metaphysical realism, and theocratic humanistic ethics. He integrates empirical-rational ('aqliyah) and divine-revelatory (naqliyah) reasoning to develop theocratic humanistic science and technology. At UAD, this thought underpins the unification of general and religious sciences grounded in Islamic and Muhammadiyah values (AIK) to advance science, humanity, and universal values.

Research implications/limitations – This research advances the development of an Islamic educational philosophy that is empirical-rational in method yet spiritual in orientation. Based on Islamic Peripatetic principles, it positions Islamic education as integrating both religious and general sciences through empirical and experimental approaches. This perspective ultimately eliminates the dichotomy between wājib 'ain (religious knowledge) and wājib kifāyah (general knowledge), viewing both as equally vital elements of a unified Islamic epistemology.

Originality/value – Until now, much research and development in Islamic educational philosophy has tended to rely on Western philosophical frameworks rather than being grounded in authentic Islamic philosophical thought. In response, Noeng Muhadjir proposes Islamic Peripatetic philosophy as a genuine form of Islamic philosophy that serves as the foundation for developing an Islamic educational philosophy rooted in empirical and rational reasoning.

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Introduction

In the history of Islamic civilisation, "especially Islam in Andalusia," Islam contributed to the advancement of science and technology in the West (Europe) through the tradition of Islamic peripatetic philosophy developed by Ibn Rushd (Muhadjir, 2014). Conversely, the tradition of logical-empirical thinking developed in the West and then shifted its orientation from theosophical science to secular humanism (Afandi, 2015). However, in the Islamic world, it led to a pattern of fiqh thinking and a Sufi orientation. One of the main causes of this is the loss of memory of the scientific tradition that once flourished during the heyday of science in Islam. As a result, the development of Islamic educational philosophy in Islamic universities is largely based on Western philosophy rather than the Islamic philosophical tradition (Hanif et al., 2025). In fact, Islamic and Western philosophical foundations have different characteristics, as described by Cook and Halstead (Cook, 1999; Halstead, 2004), but so far, books on Islamic educational philosophy are generally still imported from (Western) theory (Khoirudin, 2023), giving the impression of being adoptive-justificatory without the development of theories based on Islamic philosophy or empirical research.

Another equally important issue is how the degradation of Islamic educational philosophy has been influenced by orthodoxy conflicts, where in the orthodox tradition, epistemological studies do not recognise epistemological criticism, and everything is considered established and fixed. This is what has led to the decline in the value of Islamic educational philosophy. Added to this is the influence of Western thought, which has a negative view of the relationship between science and religion, where it is considered an insult to add religious thinking to empirical science, which is a Western concept. This has had a significant impact on the infiltration of Western thought into Islamic educational philosophy (Alloush, Ahmed, Mohi, & Imran, 2024; Kosherbayeva et al., 2024).

Ibn Rushd's epistemological criticism of Al-Ghazali reached its climax when orthodoxy dominated the way of thinking among Muslims, resulting in stagnation of thought among Muslims, as viewed broadly from Ibn Rushd's model of criticism. This model was utilised by non-Muslims and refined accordingly, so that the efforts made yielded tangible benefits in the form of advancements in knowledge for non-Muslims. On the other hand, dichotomy still plagues the mindset of Muslims, and this pattern is increasingly developing in the scientific realm. This should not be the case in the current development of Islamic educational philosophy.

This phenomenon can be seen in Muhaimin's dissertation on the typology of Islamic educational philosophy in Indonesia (Muhaimin, 2002). This dissertation provides an overview of how Islamic educational philosophy has typologies that draw heavily on Western theory. This dissertation was later developed by Moch Tolchah in curriculum development (Tolchah, 2015) to serve as a reference that provides an overview of curriculum development with a more focused emphasis on Islamic education. Meanwhile, too many Islamic education theories are built on normative-apologetic foundations that idealise normative revelatory dictums and glorify the (deductive) thinking of figures such as Ibn Sina, Ibn Khaldun, Al-Ghazali, and so on, thereby tending to ignore empirical

relevance and institutional significance. Studies of contemporary educational philosophy based on the thoughts of figures can be found in Zainal Abidin's research on Ismail Raji Al-Faruqi (Abidin, 2008), Yusef Waghid and Nuraan Davids on Fazlur Rahman (Waghid & Davids, 2018).

Although numerous studies have been conducted on Islamic educational philosophy, there has been no study that explores the institutional basis of the philosophical ideas of local figures, such as Noeng Muhadjir. Most studies discuss Islamic educational philosophy in general, from both historical and practical perspectives, where Islamic educational philosophy is utilised as a tool to observe scientific developments in humans and institutions. However, few discuss the implications based on the institutional foundations of these figures' ideas.

Noeng Muhadjir is one of many figures who focus on Islamic educational thought. Through his genuine thinking, Noeng Muhadjir presents arguments for the development of Islamic educational philosophy grounded in Islamic philosophy. Therefore, this study will examine the idea of the construction of Islamic educational philosophy from Noeng Muhadjir's perspective. Unlike most studies related to educational philosophy, this study will examine its implications for universities, namely Ahmad Dahlan University (UAD), of which Noeng Muhadjir is the founder. This aligns with Christopher A. Furlow's work, "Islam, Science, and Modernity: From Northern Virginia to Kuala Lumpur" (Furlow, 2005). Furlow's findings became the initial hypothesis of the study, which posits that the socio-cultural context of institutions influences the development of "science integration" at Ahmad Dahlan University. This aligns with Jonathan P. Berkey's research (Berkey, 2003), which suggests that Islamic educational institutions serve as a medium for the formation of Muslim identity. Based on the findings of Furlow and Berkey, this research will further explore the implications of Noeng Muhadjir's Islamic educational philosophy on the development of science integration at UAD.

In studies of the transformation of Islamic higher education institutions in Indonesia, the case of the change from IAIN to UIN (State Islamic Institute to State Islamic University) always has implications for changes in philosophy and scientific paradigms. This is evident, for example, in the dissertations of Khozin (Khozin, 2016), Eko Sumadi (Sumadi, 2021), and Nur Arifin (Arifin, 2020). It should be noted that the institutional transformation of IAIN to UIN (arena) in Indonesia always involves a figure (person, agent) as a thinker of scientific paradigms (habitus). Based on this, this study attempts to explore three dimensions between knowledge (Islamic educational philosophy), person (Noeng Muhadjir), and institution (implications for the development of UAD science). This study uses the theoretical framework of George R. Knight (Knight, 2007) on the philosophy of education as a derivative of philosophy and Pierre Bourdieu's (Bourdieu, 1977) theory on social practice that the development of thought (habitus) in educational institutions (arenas) is influenced by capital (social, economic, political, and intellectual) attached to agents, in this case Noeng Muhadjir.

This study aims to examine the construction of Islamic educational philosophy, as outlined by Noeng Muhadjir, and its implications for the development of scientific

paradigms at Ahmad Dahlan University (UAD). This research is important for several reasons:

First, Noeng Muhadjir was the last rector of IKIP Muhammadiyah Yogyakarta from 1990 to 1994, who transformed it into Ahmad Dahlan University (UAD) and became its first rector from 1995 to 1999. His intellectual works are inseparable from the themes of philosophy of science, research methodology, and the integration of general science and religion, making them important to study further. As a scientific institution, UAD has strong scientific cultural capital. In 2023, UAD ranked first among Muhammadiyah Higher Education Institutions (PTM) in Indonesia, based on the SIR (SCImago Institutions Rankings), with the following indicators: research (50%), innovation (30%), and social impact (20%) (Dahlan, 2024). In 2024, UAD even became the PTM with the most professors (UAD, 2023). The problem is that UAD does not yet have a scientific paradigm that guides the direction of future research and innovation, so it needs to be studied further.

Second, the low level of science and technology in the Islamic world is due to the dichotomy between general knowledge and religious knowledge. Meanwhile, in the West and other countries, science continues to develop rapidly, even advancing at a pace comparable to that of the Industrial Revolution (Azra, 2013). Conversely, countries with less religious populations tend to have more educated and prosperous citizens (Salazar et al., 2020). This condition aligns with the research by Gijsbert Stoet and David C. Geary, which suggests that students in countries with high religiosity tend to have lower achievements in science and mathematics. This is noteworthy, considering that mathematics is often perceived as a neutral field, and it highlights a consistency between high religiosity and low educational quality (Geary & Stoet, 2017).

The results of this study are expected to contribute academically to the development of Islamic educational philosophy that is empirical-rational in nature but spiritual in purpose. With the development of education based on Islamic peripatetic philosophy, Islamic education encompasses not only Islamic religious sciences but also general sciences, including empirical and experimental testing, as part of its curriculum. The further implication is the end of the dichotomy between wajib ain (religious knowledge) and wajib kifayah (general knowledge) into two equal types of knowledge. This concept has become a new scientific treasure in the discourse of Islamic educational philosophy, particularly in educational institutions. It is especially relevant to the development of science at Ahmad Dahlan University.

Previous studies have primarily discussed Islamic educational philosophy through analytical discussions, such as the article by Khoirudin, Salminawati, and Usiono, entitled "Muslim Educational Personality in the Perspective of Islamic Educational Philosophy." This article discusses the Muslim Educational Personality within the framework of the Islamic Educational Philosophy analysis. The article by Suha Hadi Alloush et al., entitled "Renaissance Philosophy and Its Impact on Cultural Evidence from the Perspective of Islamic Thought," discusses Renaissance philosophy and its impact on culture from the perspective of Islamic thought. This article explores Islamic educational philosophy in the context of the Renaissance, which had a significant impact on culture. Next is Farah

Ahmed's article, entitled "An Exploration of Naquib al-Attas' Theory of Islamic Education as Ta'dīb as an Indigenous 'Educational Philosophy," which discusses Islamic Education Philosophy within the framework of Naquib al-Attas' theory. This article discusses Naquib Al Attas' Islamic education philosophy as the indigenous educational philosophy of the Malay community.

Therefore, in contributing to a more detailed discussion of Islamic educational philosophy at the institutional level, this article will focus on the Islamic educational philosophy of Noeng Muhadjir, a local figure whose thoughts on Islamic educational philosophy are extensive. This study is limited to a discussion of Noeng Muhadjir's philosophy of Islamic education and its paradigmatic impact on scientific development at Ahmad Dahlan University in Yogyakarta.

Methods

This research is a qualitative study that combines theoretical and empirical approaches (Creswell & Creswell, 2018). This research will combine library research and field research methods to produce an abductive method. Library research involves collecting various references, both primary and secondary, that are relevant to this study. Furthermore, the data obtained will be analysed, and the results will be used as reinforcement in the research exploration. Field research in this study employs observation and interviews to gather information about Noeng Muhadjir's thoughts and the institutional scientific conditions at Ahmad Dahlan University. The results will be analysed and then compared with the findings of library research to draw conclusions from the overall data analysis. With the abductive method, researchers observe and draw conclusions, while still leaving open the possibility of alternative and diverse analyses (Haryatmoko, 2020; Rinehart, 2020).

In the documentation study, researchers examined primary data in the form of Noeng Muhadjir's works related to Islamic educational philosophy, including: (1) Book Chapter, "A New Direction for PTM Development" in M. Rusli Karim, Entering a New Phase of PTS (Muhadjir, 1990a); (2) Book Chapter, "Epistemology of Islamic Education: A Theoretical-Philosophical Approach," in Chabib Thoha and F. Syukur Nc., Priyono. Reformulation of Islamic Education Philosophy (Muhadjir, 1996); (3) Magazine, "Postmodern Islamic Studies: Muhammadiyah's Agenda After a Century," Suara Muhammadiyah, 13/95 Special Edition of the Centennial Congress (Muhadjir, 2010); (4) Book, Biographical Reflections of 80 Years of an Academic (Muhadjir, 2011).and (5) Book, Epistemological Philosophy of Naqliyah Reasoning and Aqliyah Reasoning: Prophetic Foundations of Bayani, Irfani, and Burhani Reasoning: Development of Islam and Science and Technology (Muhadjir, 2014).

Secondary data consists of works by other authors that discuss Noeng Muhadjir's ideas relevant to this study. Field data were collected through in-depth interviews with UAD Rector Muchlas MT, Head of the UAD Institute for Research and Community Service (LPPM), and UAD Vice Rector for Academic Affairs. The interviews were conducted indepth (in-depth interviews) or unstructured (unstructured interviews) to explore detailed

and in-depth information about the direction of UAD's scientific development and the traces of Noeng Muhadjir's thoughts and work (Chauhan, 2019; Bihu, 2020). After that, the literature data and informants obtained from the interviews were organised in a circular manner, rather than in a structured format. After the data on Noeng Muhadjir's educational philosophy construction was described, data analysis was carried out. The analysis was mainly to see the influence of Noeng Muhadjir's thoughts in the science unification guideline book (tauhidul 'ulūm): Development of Science Based on Al-Islam and Kemuhammadiyahan (AIK) Ahmad Dahlan University (UAD), 2025. Data analysis was conducted through inventory, categorisation, interpretation, critical evaluation, and synthesis to produce a new understanding (Bakker & Zubair, 1994). Additionally, triangulation was employed by combining various data sources to maintain the consistency of findings across different theoretical perspectives. After analysis, the data were constructed according to the theoretical framework of Islamic educational philosophy and then analysed for their implications for the development of the UAD science paradigm.

Result and Discussion

The study of Islamic educational philosophy, as presented by Noeng Muhadjir, and its implications for scientific development at UAD will begin with a discussion of Noeng Muhadjir's intellectual biography, his ideas on Islamic educational philosophy, and the implications for the development of scientific paradigms at UAD. The results and discussion will be outlined as follows:

1. Intellectual Biography of Noeng Muhadjir

Noeng Muhadjir was born on the shores of Lake Maninjau, Padang Panjang, West Sumatra, on November 13, 1930. He was the first of nine children born to H. Salim Reksodimejo and Hj. Hasyimah Hendrodihardjo. The name Noeng Muhadjir was given by Dr. Karim Amrullah (Buya Hamka's father) (Muhadjir, 2014). Both of his parents were Muhammadiyah teachers in Yogyakarta, whom the Dutch East Indies government paid. His mother graduated from Kweekschool Muhammadiyah Yogyakarta, while his father graduated from Normaalschool Jombang. Noeng Muhadjir was greatly influenced by his mother's character rather than his father's, especially in terms of leadership skills such as decisiveness, courage, and responsibility. His mother was active in the Aisyiyah organisation (a modern Islamic women's organisation) in Ponorogo (when she was a newlywed) and in Maninjau (when she had one child). In 1945, Noeng Muhadjir's father passed away, and his mother then became a batik trader at the market to support her nine children. In 1950, when civil servant salaries improved, his mother negotiated with the Yogyakarta Education Office and was appointed as a teacher at a public elementary school (Muhadjir, 2011).

Noeng Muhadjir was known as a diligent and disciplined child. He always woke up early to pray and study. For him, school was his main daily activity. After Isha, he studied until 10 p.m., then from 1 a.m. to 2 a.m., he studied again. His home has many shelves and books in the living room. Noeng Muhadjir began his education in the preparatory class at

HIS Muhammadiyah Prengan Kotagede, then moved to HIS Muhammadiyah Ngupasan. HIS is a 7-year elementary school with Dutch as the language of instruction, including textbooks in Dutch. Ahead of World War II, in 1945, Noeng Muhadjir continued his education at Madrasah Muallimin Muhammadiyah Yogyakarta (graduated in 1947). In the mornings, he studied at Muallimin in the 3rd grade, and in the afternoons, he studied at SMP Negeri so that he could continue to SMA. While at Muallimin, Noeng Muhadjir joined the Indonesian People's Scouting Movement as Deputy Pioneer Leader. He also took three Gillwell regional courses. After passing the SMPN exam in the exact sciences in 1949, Noeng Muhadjir continued his studies at SMA Muhammadiyah 1, Section A, majoring in languages (English, Arabic, German, French, Indonesian, and Old Javanese) in the morning. In the afternoons and evenings, Noeng Muhadjir studied at Bopkri II High School, majoring in exact sciences (Muhadjir, 2011). After passing the exams at SMAN (A) and SMAN (B) in 1952, Noeng Muhadjir entered the Faculty of Literature, Pedagogy, and Philosophy at Gadjah Mada University (UGM), majoring in Pedagogy and Psychology, and graduated with a Baccalaureate in 1957 (Muhadjir, 2014).

Noeng Muhadjir was once interrupted from being a teacher and principal at four schools at once: SGAN, KGAN, SGA Muhammadiyah, and SMA Muhammadiyah in Kotaradja (now Banda Aceh) until 1961. While teaching at SMKK Meutia, Noeng Muhadjir became interested in a woman who was the school's principal. She was a woman of Minang descent, born in Sabang and raised in Jakarta, where she studied at SGKPN Jakarta. The two of them got married, with the marriage ceremony held in July and the wedding reception in October 1960. When they moved to Yogyakarta, his wife worked as a teacher at SKKP Immaculata, then at the Vocational Office, then at SKKP Negeri (Muhadjir, 2011).

After that, he was assigned to study at FIP UGM and graduated with a doctorate in 1966. Noeng Muhadjir was then elected as Dean of UGM, a position he held for three consecutive terms. His chosen field of expertise was Social Psychology. His dissertation (theory and methodology) was 15% prepared at Harvard University in 1978, with design development in 1979, consultation in 1980, data collection and analysis conducted in Central Java, and the dissertation written in 1981. He defended her thesis in 1982 and graduated with honours. The pinnacle of his career came in 1984 when Noeng Muhadjir became a Professor and taught in graduate programs (Master's and Doctoral) at various universities (Muhadjir, 2014).

In 1990, Noeng Muhadjir was appointed Rector of IKIP Muhammadiyah Yogyakarta for the 1990-1994 term. After that, Noeng Muhadjir transformed IKIP Muhammadiyah into Ahmad Dahlan University (UAD) and became the first rector of UAD for the 1995-1999 term. During his tenure as rector of UAD, the Chair of the UAD Daily Advisory Board (BPH) was Dr H. Muhammad Muqoddas, Lc., M.Ag. (one of the Chairmen of the Muhammadiyah Central Leadership). Noeng Muhadjir's success in developing UAD cannot be separated from his experience in holding several key positions, including Chairman of Quality Control for the Policy Research and Action Research (World Bank National Project) from 1993 to 1999, as well as Chairman of the Education Philosophy Steering Team at Bappenas. In addition, he also had experience as a dean for three terms, Director of the Research Centre,

and Secretary of the Research and Scientific Development Centre of Central Java-Special Region of Yogyakarta, leading national projects. He also travelled abroad to the United States seven times and to several European countries and Canada for various educational projects. This knowledge and experience enabled him to expand Muhammadiyah Teacher Training College from 9 study programs to 26 study programs within 4 years, then to 28 study programs in the following period. Not stopping there, the number of students also increased from 350 students to more than 2,600 new UAD students (Muhadjir, 2011). Even in his twilight years, Noeng Muhadjir continued to serve as a lecturer at the UAD Postgraduate Program, and he passed away on October 28, 2018, at the age of 88.

As an academic, Noeng Muhadjir was highly productive in producing works with a focus on two areas of study: philosophy and methodology. This can be seen from his works: Qualitative Research Methodology Edition I in 1989 (Muhadjir, 1989) was developed into Edition II in 1990 (Muhadjir, 1990), and Edition III in 1993 (Muhadjir, 1993); Philosophy of Science Edition I in 1998 (Muhadjir, 1998), which was then developed into Edition II in 2001 (Muhadjir, 2001). Since 2000, he has entered the quantitative paradigm, writing the sixth edition of Research Methodology and the fourth edition of Philosophy of Science, which cover four qualitative paradigms (positivistic, phenomenological, linguistic logic, and Islamic studies) and three mathematical quantitative paradigms (recursion theory, set theory, and structural equation modelling). These books became the foundation of his intellectual career. From 1984 to the end of March 1914, Noeng Muhadjir successfully supervised more than 100 dissertations. As a supervisor, Noeng Muhadjir's role was to assist in deconstructing ideas, refining philosophical thinking, constructing theories, developing analytical methodologies, and fostering the development of meaning and interpretation.

In 2011, Noeng Muhadjir wrote a book to celebrate his 80th birthday. The book is titled Refleksi Biographis 80 Tahun Seorang Akademisi (Muhadjir, 2011). The book is dedicated to his mother to inspire the younger generation. In the book, Noeng Muhadjir recounts his childhood memories, his parents, his education, his work, his philosophical thoughts on education, and his imagination and hopes for the development of Ahmad Dahlan University. Throughout the book, Noeng Muhadjir recounts that his mother was the person who greatly influenced and shaped his character.

His last significant work, after promoting more than 100 dissertations, was writing the book Filsafat Epistemologi: Nalar Naqliyah dan Nalar Aqliyah, Landasan Profetik Nalar Bayani, Irfani, dan Burhani Perkembangan Islam dan IPTEK (Muhadjir, 2014). This book is a kind of intellectual sediment, reflection, imagination, and idealism about the paradigm of science that Muslim scientists should have, developing a theohumanistic science and technology by linking rational reasoning and traditional reasoning. This book is a culmination of Noeng Muhadjir's thoughts, who, since childhood, had experienced two systems of religious and secular education. As a professor, he pursued his career at a public university, but also supervised numerous dissertations at Islamic universities, eventually becoming the rector of an Islamic higher education institution. Thus, it is intriguing to

examine Noeng Muhadjir's thoughts on the philosophy of Islamic education and its implications for the development of a unifying paradigm of science at UAD.

2. Islamic Peripatetic Philosophy as the Foundation for the Development of Theohumanistic Science

Structural-functional philosophy is (the body of knowledge) the source of science (Knight, 2007), so that Islamic education science means that it originates from Islamic philosophy. Mulkhan's thesis (Mulkhan, 2013) states that Islamic educational philosophy (tarbiyah) is the application of Islamic philosophy in the field of education, just as educational philosophy (in the West) is compiled from Western philosophers. Syeed Hossein Nasr, in his book Islam Tradisi (Nasr, 1987), divides Islamic philosophy into four schools of thought, namely (1) Masya'i (Peripatetic) with Ibn Sina as its figurehead, (2) Hermetic-Pythagorean (Ismaili) by Ikhwan al-Shafa, (3) Isyraqi (illumination) with Suhrawardi as its figurehead, and (4) al-Hikmah al-Mutaaliyah (transcendental theosophy) with Mulla Sadra as its figurehead. However, in general, Mulkhan, referring to the Thematic Encyclopedia of Islamic Philosophy by Seyyed Hossein Nasr and Oliver Leaman, concludes that Islamic philosophy can be broadly divided into two schools of thought: (1) Peripatetic, which tends towards Greek rationalism, and (2) Illumination or Transcendental Theosophy, which emphasises spiritualism. These two schools of thought, however, generally speaking, the first two schools tend to be rationalist, while the latter two are more spiritualist.

Noeng Muhadjir proposed Islamic Peripatetic philosophy as the basis for the development of Islamic educational philosophy, which could give rise to Theo-Humanistic Science and Technology (theistic science). The word Peripatetic originates from the term Peripatos (meaning "place to walk"), which refers to the room where Aristotle and his successors held classes for teaching and learning activities. In Arabic, Peripateticism is referred to as masy'iy or masya'iyin. The Peripatetic school of thought is prominent in the field of natural philosophy, with early Peripatetic figures such as Theophrastus, Dikaiarchos, and Strato. Then came Aristotelianism, which was a reaction to Peripateticism, which was suspected of being mixed with Neoplatonism. The characteristics of Aristotelianism are consistent with Aristotelianism in terms of thinking tools and philosophical objects of study. Peripateticism remained true to the spirit of Aristotelianism, but in determining its philosophical objects of study, it was greatly influenced by Neoplatonism. Aristotelianism emphasises philosophical objects with a greater focus on physical and empirical aspects, whereas Peripateticism tends to incorporate many metaphysical elements into its examination of philosophical objects (Washil, 2000).

Peripatetic Islamic philosophy developed between the 3rd century AH/9th century AD and the 6th century AH/12th century AD in the eastern part of the Islamic world, with Baghdad as its centre, and specifically in the western region (Spain) in the 6th century AH/12th century AD. Conceptually, Peripatetic Islamic Philosophy is a synthesis of the thoughts of Plato, Aristotle, Pythagoras, and the Stoics (called Neoplatonism) in the discourse of the Islamic worldview. Plato's influence is evident in ethics and politics,

Aristotle's in logic and physics, Pythagoras' in metaphysics, and the Stoics' in cosmology. Islamic Peripatetic Philosophy was pioneered by al-Kindi (d. 873) and developed by ar-Razi (d. 925), al-Farabi (d. 950), Ibn Miskawaih (d. 1030), Ibn Sina (d. 1036), Ibn Bajjah (d. 1138), Ibn Thufail (d. 1185), and Ibn Rusyd (d. 1198). The last three philosophers developed Islamic philosophy in the West (Spain) (Khoirudin & Santoso, 2018).

Specifically, Noeng Muhadjir refers to Andalusian Islamic Peripatetic Philosophy, namely Islamic philosophy with its main figure, Ibn Rushd (born 1126 AD), who, in his efforts to discover the truth of the regularity of the universe, employed empirical-experimental methods or "empirical rationality." There is a sequence (interconnection) between reason and empiricism in Noeng Muhadjir's terms. Islamic Peripatetic experimentalism has a "theistic" purpose (interconnection) to perfect worship (Muhadjir, 2014). The question is, why did Noeng Muhadjir propose Islamic Peripatetic philosophy as the basis for the development of Islamic educational philosophy?

To answer this question, Noeng Muhadjir (Muhadjir, 2014) divides Greek philosophy into three eras: the era of sophism, the era of rationalism, and the era of empiricism. First, the era of sophism was characterised by dualism, such as good-bad, big-small, and exist-non-exist, but it collapsed when "reasoning" emerged. Second, the rational era was pioneered by Socrates (5-4 BC), Plato (4 BC), and Aristotle (as a reference for classical rational thinking, which remains dialogical and argumentative today). Third, the era of Andalusian Islam, which was no longer rational-dialogical, but rather "empirical-experimental and rational." According to Noeng Muhadjir, Islamic Andalusia (775-1492 AD) became a pioneer in science and technology, making significant contributions to modern science and technology. While Europe was still in the Dark Ages (8th-14th centuries AD), Islamic Andalusia led the way in empirical thinking, which inspired the Italian Renaissance in the 14th century and spread to Europe in the 15th century.

Next, Noeng Muhadjir (Muhadjir, 2014) explains the journey of science and technology in several historical stages. First, the European Renaissance (Enlightenment) stage, namely the shift from dogmatic thinking to rational thinking based on historical evidence, did not begin in 15th century Europe, but rather in 8th- to 15th-century Islamic Andalusia. During the Crusades, European scientists were amazed by the greatness of Islam in both the East and Andalusia. They wanted to bring the science and technology possessed by Muslims, but because their religion (Catholicism) was dogmatic, European scientists separated themselves from dogmatic Catholicism. They then developed anthropocentric empirical rational science, so that science and technology were no longer oriented towards seeking the truth about the universe's order, but rather towards human interests. As a result, anthropocentric empirical rational testing no longer used Islamic peripatetic testing, but rather probabilistic truth testing. This gave rise to the second phase, "modern science and technology" (16th-19th centuries). After going through an era of separation between science and religion, two orientations of science emerged: (1) science is neutral, and (2) science is profit-making, oriented towards materialistic interests. At the beginning of the 20th century, scientists realised the limitations of natural resources, so the orientation of science and technology was developed towards improving the quality of human life and

enhancing human dignity, giving rise to the third phase of "postmodern science and technology". When human dignity was marginalised, ethics emerged to ensure that science and technology upheld human dignity, giving rise to the discourse of "theohumanistic science and technology" as the fourth phase. In this regard, Noeng Muhadjir proposes that the development of "theo-humanistic science and technology" must be based on Andalusian Islamic Peripatetic philosophy.

For Noeng Muhadjir (2014: 35), Islamic Peripatetic philosophy, which emerged in the 8th-13th centuries AD, Islam has made a significant methodological contribution to the world of science and technology, as well as a substantive contribution to European essentialist philosophy, known as the seven liberal arts. These seven liberal arts were built from the Andalusian Islamic quadrivium of the 8th-13th centuries (mathematics, physics, astronomy, and music) and the European trivium (language, logic, and rhetoric). Based on the composition of the seven liberal arts, the intellectual works of Islamic Andalusia have been recognised as part of European classical culture. Therefore, Noeng Muhadjir (Muhadjir, 2014) hopes that Islam, which began the Enlightenment in Andalusia, Spain, by changing the way of thinking from "dogmatic-apologetic" to "logical-empirical," but with a "theistic" goal. The task of Muslim scientists today is to enlighten and empower Muslims to re-enter the world of "empirical experimental science" that was once developed by Andalusian Muslims. Muslim scientists need to develop technology for the sake of goodness, not to compete with the rest of the world. Noeng Muhadjir (Muhadjir, 2014) said, "Theistic science (in Andalusian Islam) developed into anthropocentric science (in Renaissance Europe), then materialistic (since the 18th-19th centuries), and since the early 20th century has begun to be reformed into humanistic, needs to be elevated one more level to become theistic-humanistic".

3. The Construction of Islamic Educational Philosophy by Noeng Muhadjir

Based on Noeng Muhadjir's review, which uses Islamic peripatetic philosophy as the basis for developing Islamic educational philosophy oriented towards scientific progress, the basic framework of Islamic educational philosophy in terms of ontology, epistemology, and axiology can be described as follows:

3.1 Multifaceted Monism: The Ontology of Science

Ontology is a branch of philosophy that explores the nature of existence (Albadri et al., 2023), whereas monism is a school of thought within ontology that examines the nature of existence (Putra & Arlisman, 2021). Monism comes from the Greek word monos (single or alone) (Putra & Arlisman, 2021). According to the KBBI, monism is (1) the view that the universe is a single entity; (2) the view that matter and the mind are one (Kamus besar Bahasa Indonesia, 2016). Multifaceted is (1) having many sides; (2) having various sides (Kamus Besar Bahasa Indonesia, 2016). Thus, monism-multifaceted becomes the philosophical basis for the existence, transcendence, and immanence of God as the Lord of the universe.

This view aligns with the Islamic tradition of "wahdah al-wujud" (unity of being), developed by Mulla Sadra from Ibn Arabi. Unlike theologians who interpret Laa Ilaaha Illallah as "There is no God worthy of worship except Allah," in philosophy it is interpreted as "There is no true Reality except Allah." The universe is nothing but a manifestation (tajalliyat) of the names and attributes of Allah. All existing beings (spiritual and material) are, in essence, "one" and "the same," but their gradations differ (tasykil al-wujud) due to differences in their essence. This concept of the unity of existence can serve as the basis for the unification of science and is useful for affirming the ontological status, which posits that existing reality encompasses not only the physical world but also the metaphysical (God) (Kartanegara, 2005). In monism, multifaceted reality is understood as "reality that is godly." This means that the existence of all reality is bound and sourced from a single substance (God Almighty: Tauhid), not reality as understood in the perspective of secularism and materialism, which only recognises empirical and sensory logical truths (Dewi, 2021).

In this regard, Noeng Muhadjir's view of multifaceted monism (sequential singular ontology) can be used as a basis for understanding reality. Islam recognises monism, that the universe has three (3) manifestations (sequences) that converge on one truth. (1) The manifestation of the regularity of the universe as destiny determined by Allah. (2) The manifestation of humans, the manifestation of the truth of human creativity based on the laws of sunnatullāh in utilising the destiny of the universe, and understanding the wisdom of God (divine values). (3) The manifestation of God, not God as something, but as the names and attributes of Allah (the wisdom of Allah) (Muhadjir, 2014). Thus, the essence of reality consists of three manifestations, but the source of truth is only one (God).

In Q.S. Fāṭir (35) verse 53, "So you will never find any change in the sunnah of Allah, nor will you find any deviation in the sunnah of Allah." The orderliness of the universe (ayat kauniah) has been proven over centuries to remain unchanged by Allah, allowing it to be studied by humans and creatively utilised. This is in line with the essence of education in the formulation of Muhammadiyah's philosophy of education: "Science and technology are the result of holistic and comprehensive rational thinking about the reality of the universe (ayat kauniah) and about revelation and sunnah (ayat qauliyah), which are an integral unity through research and development activities that are continuously renewed for the glory of humanity in a sustainable natural environment" (Muhammadiyah, 2010).

This view of science and technology is based on the fundamental assumption of parallelism between two systems of knowledge. (a) The system of knowledge developed based on the holy book is called ayat qauliyyah. (b) The system of knowledge that grows from the authentic experiences of humanity (sunnatullāh) is called ayat kauniyyah. The parallelism between knowledge derived from the interpretation of the Quran and Sunnah (qauliyyah) and knowledge from the universe (kauniyyah) demonstrates that knowledge not directly based on verses from the Quran and Sunnah is not inherently un-Islamic. The entire universe with all its details is the creation of Allah and constitutes kauniyyah verses to which the laws of nature (sunnatullāh) apply (Mulkhan, 2019).

Thus, the essence of education is actually an effort to foster awareness of the unity of reality (multifaceted monism) which is derived from āyah qauliyyah (written scriptures) as a manifestation of God's truth and āyah kauniyyah (the unfolding scriptures) as a manifestation of the universe which is God's destiny, through the efforts of human creativity which is constantly renewed (a manifestation of human truth). In "multifaceted monism," the truth of nature (destiny) is united with the truth of humanity (creativity) and united with the truth of God (revelation) (Muhadjir, 2014). If the West only recognises a single truth in the form of "the universe," then Islam recognises the truth of multifaceted monism.

3.2 Metaphysical Realism: The Epistemology of Science

Epistemology is a branch of philosophy that seeks to understand the nature of knowledge, specifically in relation to the distinction between truth and falsehood. Based on multifaceted monism, epistemology is a branch of philosophy of science that seeks truth in the sense of distinguishing between truth and falsehood, or right and wrong (Atabik, 2014). Based on multifaceted monism in the ontological aspect, metaphysical realism serves as the foundation of epistemology in determining the source of science, the instruments of knowledge, and the criteria for truth.

The term metaphysical realism is a synthesis or combination of realism and metaphysics. The term metaphysical realism is not something new in epistemological studies. Fathul Mufid (Mufid, 2008) states that metaphysical realism is an approach that was initially developed by Karl R. Popper and later introduced by Noeng Muhadjir. This term has similarities with transcendental realism developed by Roy Bhaskar, A realist theory of science (Bhaskar, 1975) and Nancy Cartwright, The Dappled World (Cartwright, 1999).

Realism is a scientific epistemology that recognises the existence of sources of knowledge outside of reason, namely the existence of objects (matter) that exist independently. However, "realism" in metaphysical realism is not merely an acknowledgment of the existence of sources of knowledge outside of reason in the sense of the sensory realm alone, but also that sources of knowledge outside of human reason can originate from metaphysical elements (Bagus, 1991; Delfagaaun, 1992). Thus, the terminology of metaphysical realism reflects a form of recognition of the existence of metaphysics as part of scientific experience that is beyond physical experience (Muhadjir, 2015). It is based on this metaphysical element that the existence of divine revelation can be accepted as a source of ideas and concepts in the scientific structure (Kuntowijoyo, 2004).

The basic assumption of metaphysical realism recognises the orderliness of the universe as the creation of Allah SWT. This assumption is based on Andalusian Islamic Peripatetic philosophy, namely the Islamic philosophy of Ibn Rushd, which seeks to discover the regularity of the universe through empirical-experimental methods or "empirical rationality" (the connection between reason and empiricism), with a "theistic" (divine) goal of perfecting worship (spiritual orientation) (Muhadjir, 2014). Islamic Peripatetic logic observes the regularity of the universe, even at the smallest unit, yet is

capable of grasping a profound truth. For example, 15 centuries after the discovery of the Andalusian Islamic telescope, it was not until 1950 AD that it was discovered that the universe consists not only of the Milky Way Galaxy, but also of thousands of galaxies with tens of thousands of planets (Muhadjir, 2014).

This argument can serve as a basis for the unification of knowledge, not only between religious knowledge and general knowledge, but also between different branches of general knowledge, assuming that the orderliness of the universe means that even the smallest discoveries can be linked to one another. The goal, in addition to discovering the presence of Allah through His verses (qauliyah-kauniyah), is also to worship Allah. This is in line with the following quote from the Muhammadiyah Education Philosophy Formulation: "Mastery of science and technology is the first step in the growth of gnostic awareness, so that rational thinking is the beginning of spiritual awareness of divine gnosis. Worshipful devotion to God includes worship as summarized in the pillars of Islam, research and development of science and technology, the management of a sustainable environment in a civilized, just, and prosperous community, and the liberation of every person from suffering caused by ignorance and poverty." (Muhammadiyah, 2010).

This is in line with the view of Abdul Munir Mulkhan (Mulkhan, 2005), that the function of science and technology is not merely the exploration, description, explanation, and interpretation of empirical facts based on the regularity of nature, but also a methodology for understanding reality to reveal the metaphysics of tawhid regarding the relationship between qauliyyah verses and kauniyyah verses. The work of science and technology is the first step towards the transcendent and the good of all humanity, which is a form of worship. This is also in line with the concept of the unity of knowledge (the unity of knowledge) of Ahmad Syafii Maarif (Maarif, 2015), who states that all branches of knowledge aim to bring humans closer to Allah, as the highest source of everything.

In metaphysical realism, metaphysical beliefs must be maintained within a structure that integrates science with faith; however, the process needs to be transformed from mystical beliefs to rational empirical evidence and a suprarational understanding of Allah (the highest wisdom of Allah) (Muhadjir, 2010). Thus, the purpose of scientific activity is to observe the unity of natural laws, the interrelationship of all parts and aspects as a unity of Divine principles.

3.3 Theo-Humanistic: The Axiology of Science

Axiology is a branch of philosophy that studies ethics, right and wrong (Fithriani, 2017). According to Noeng Muhadjir, there are two sources of axiology, based on values that develop alongside humanity (deontological ethics) and divine values (ontological ethics). (1) Deontological ethics are ethics that develop in the cultural process of humanity from era to era. (2) Ontological ethics (divine) is morality derived from religious teachings (Muhadjir, 2014). An example of deontological ethics is Pancasila, as it was born from the long experience of Indonesian society. In contrast, ontological ethics is exemplified by Al-Islam and Kemuhammadiyahan (AIK), which originates from a religious understanding within Muhammadiyah.

Noeng Muhadjir's view of the axiology of science remains closely tied to the ontological view of "monism-multifaceted" and the epistemology of "realism-metaphysics," characterised by the spirit of Islamic Peripateticism, which emphasises empirical-rational methods. In positivism, rationality is explained by empirical cause-and-effect evidence. Still, according to Noeng Muhadjir, it is a "higher rationality" (superhuman rationality), namely the understanding of empirical events based on values derived from religion (AIK). In other words, science and technology are built on empirical evidence of truth and can be explained by a higher rationality based on "values." For example, Muslim scientists who have strong faith believe in Allah while observing and developing empirical evidence, and using the highest wisdom of Allah (superhuman rationality) in seeking evidence of truth. This approach will encourage the development of empirical rational science, aiming to integrate science and faith (Muhadjir, 2010).

Thus, in Noeng Muhadjir's view, the purpose of science is to recognise superhuman truth (values) over objective factual truth. Muslim scientists need to recognise that, through Islamic Peripatetic philosophy in the 8th-13th centuries AD, Islam made a significant methodological contribution to European civilisation. "Islamic science (in Andalusian Islam) then developed into anthropocentric science (in Renaissance Europe), became materialistic (since the 18th-19th centuries AD), and since the early 20th century has begun to be reformed into humanistic science. Therefore, scientists need to strive to realise theistic-humanistic science" (Muhadjir, 2014).

This theohumanistic orientation of science is in line with Muhammadiyah's philosophy of education as follows: "Muhammadiyah education is the preparation of an environment that enables a person to grow as a human being who is aware of the presence of Allah SWT as Rabb and master of science, technology, and art (IPTEKS). With spiritual awareness of gnosis (faith/tauhid) and mastery of IPTEKS, a person is able to fulfill their life needs independently, care for others who suffer from ignorance and poverty, continuously spread prosperity, prevent immorality for the glorification of humanity within the framework of a friendly environment in a nation and a just, civilized, and prosperous world order as worship to Allah" (Muhammadiyah, 2010).

To develop theosophical humanistic science, it is necessary to return to the spirit of Andalusian Islamic Peripatetic philosophy, namely, seeking the truth of the order of the universe with rational reasoning, but with a divine orientation using traditional reasoning. Thus, the development of science is carried out with the intention of worshipping Allah, always to do good (amar ma'rūf) and prevent corruption (nahi munkar) that is beneficial to humans. Furthermore, knowledge can improve the quality of human life: not only by becoming materially and spiritually happy (well-being), but also by being happy because of making others happy (well-being) for the sake of the hereafter (Muhadjir, 2014) in this context, in the development of knowledge, which is not only able to seek the first truth: the order of Allah's creation, but also the second truth: Allah's goodness for humanity.

4. Paradigmatic Implications: from Philosophy to the Unification of Science at UAD

Noeng Muhadjir's ideas on Islamic educational philosophy explicitly form the philosophical basis of the Unification of Knowledge (tauhidul 'ulūm) guideline book: Development Based on Islam and Muhammadiyah at Ahmad Dahlan University, which was produced by the Institute for Islamic Studies (LPSI) in 2025. However, the term "paradigm of knowledge" used by UAD differs from the term proposed by Noeng Muhadjir. For example, in his writing entitled "Epistemology of Islamic Education: A Theoretical-Philosophical Approach," Muhadjir (1996) offers the paradigm of "Islamic science," which is science that is coherent with the nash (the Qur'an and hadith) to "integrate the development of science with revelation." Then, in 2014, in the book Philosophy of Epistemology: Naqliyah Reasoning and Aqliyah Reasoning, Prophetic Foundations of Bayani, Irfani, and Burhani Reasoning in the Development of Islam and Science and Technology, Muhadjir (2014) proposed "theistic science", which links aqliyah reasoning (empirical rationality) with naqliyah reasoning (religious spirituality).

In formulating a science paradigm based on the values of Islam and Muhammadiyah (AIK), a discourse developed on various alternative terms from the guideline drafting team, ranging from "prophetic science," "maslahah science," "science interconnection," "science reciprocity," until finally "science unification" was chosen. In his works, Noeng Muhadjir proposes various scientific paradigm terms, such as theistic science, maslahah science, prophetic science, and Islamic science. Noeng Muhadjir's main argument is the need to end the dichotomy between fardu 'ain knowledge (religious knowledge) and fardu kifayah knowledge (general knowledge). According to Noeng Muhadjir, all knowledge is fardhu ain, while fardhu kifayah is the pursuit of knowledge. All knowledge comes from Allah, both qauliyah verses (textual revelations) and kauniyah verses (natural revelations). What distinguishes secular or Islamic knowledge is its value. All of this knowledge is important to Allah, based on the principle of tawhid and Islamic values. Therefore, the unification of knowledge at UAD implies the integration of knowledge with Islamic values and the convergence of disciplines to address life's problems.

Noeng Muhadjir's enthusiasm is in line with Ahmad Dahlan University (UAD), which has a vision of "becoming a superior and innovative university, serving the interests of the nation and humanity, imbued with Islamic values." In this vision, UAD has a forward-looking imagination to become a superior and innovative campus imbued with Islamic values. As an Islamic university under the auspices of Muhammadiyah, the Islamic values referred to are values in accordance with the intellectual culture and religious understanding of Muhammadiyah, namely the understanding of "Progressive Islam" as outlined in Al-Islam dan Kemuhammadiyahan (AIK). Broadly speaking, AIK can be understood as the entirety of Islamic teachings, including creed, worship, morals, and muamalat (transactions) sourced from the Qur'an and Sunnah as understood by Muhammadiyah (Anwar, 2021). In line with Noeng Muhadjir's spirit of unifying aqliyah and naqliyah reasoning, UAD then developed "unification of knowledge" (tauhidul 'ulūm) as a paradigm of "modern Islamic education" knowledge.

UAD's concept of the unification of knowledge (the unification of general knowledge and religious values) is understood in two ways, namely the unification of knowledge in essence (substance) and the unification of knowledge in sharia (methodology). First, in essence, the unification of knowledge is the integration of scientific activities (teaching, research, and community service) with the values of Islam and Muhammadiyah (AIK). In essence, the unification of knowledge at UAD is based on three pillars: (1) a value base, namely the appreciation of Tawhid raḥāmutiyah, so that the UAD academic community appreciates its scientific activities and the knowledge produced has a positive impact on the universe (Ilyas, 2018). (2) The UAD work ethic, which consists of three spirits of service that every member of the UAD academic community must possess, namely: innovative (imtiyāz), professional (itqān), and dedicated (iḥsān). (3) Progressive Islamic Service, which is a commitment to the usefulness of knowledge for the development of science (the future), the Muslim community (Islam), the nation (the Unitary State of the Republic of Indonesia), humanity (self and others), and the universe (global) (Muhammadiyah, 2023).

This aligns with what was conveyed by Prof. Ir. Anton Yudhana, S.T., M.T., PhD, Head of the Institute for Research and Community Service (LPPM) at UAD, that the development of research and community service at UAD must have a positive impact on society. This impact can be seen from the sustainability of community service, which lasts at least three years and continues for many years. This means that the development of research and community service at UAD can have a positive impact on society, both in terms of research, education, and teaching, all of which are grounded in real-world community projects. This will have an impact on the pattern of research development, which is not only focused on research results in the form of publications but also on the sustainability of development that has a broad impact on society in the form of appropriate technology.

This reflects that the development of scientific activities at UAD is directed towards having an impact on society, which, in this case, encompasses the universe. This impact is manifested in the sustainability of community service obtained from research results. Furthermore, the benefits of progressive Islam's reflections become the guiding spirit in the implementation of Noeng Muhadjir's ideas, who is always committed to the benefits of scientific development for the future, humanity, national interests, and the global universe. Thus, the paradigmatic implications of Noeng Muhadjir's ideas are becoming increasingly strong in the unification of knowledge at UAD and can serve as the main basis for centralised scientific development.

In the development of the unification of knowledge, the term "Islamic" for various branches of science is no longer necessary, such as Islamic medicine, Islamic psychology, and so on, if all scientific activities are to seek and approach Allah by reading the signs of His greatness and power (Fazlurrahman, 2000; Guessoum, 2011; Maarif, 2015; Mulkhan, 2013). In the context of UAD, all faculties, starting from (1) Teacher Training and Education; (2) Applied Science and Technology; (3) Industrial Technology; (4) Public Health; (5) Medicine; (6) Pharmacy; (7) Law; (8) Economics and Business (9) Psychology; (10) Literature, Culture, and Communication; to (11) Islamic Studies, all have the same position

and opportunity to achieve enlightenment of divine consciousness to know, be close to, and meet Allah. This is what Noeng Muhadjir means by deconstructing fardhu 'ain (religious knowledge) and fardhu kifayah (general knowledge). For Noeng Muhadjir, all knowledge is equal and fardhu 'ain is to study it with religious values, but fardhu kifayah is to spread it (Muhadjir, 2011, 2014).

In practical terms, the unification of UAD knowledge is an effort to link and connect, or interconnect, two or more disciplines of knowledge to address scientific and life problems. With the basic assumptions of multifaceted monism and metaphysical realism, the unification of knowledge extends not only to the intersection between religious knowledge and general knowledge but also to the integration of various disciplines of knowledge. In the unification of UAD science, this is achieved with the spirit of ending the monodisciplinary approach by proposing five levels of methods, ranging from intradisciplinary to transdisciplinary, as the highest level of science unification (Marliat, 2022).

In addition, multidisciplinary scientific development through publications is an important aspect of UAD's efforts to integrate Noeng Muhadjir's ideas on institutional scientific development. This is reflected in what Prof. Ir Sunardi, S.T., M.T., Ph.D., Vice Rector for Academic Affairs at UAD, said in an interview: "UAD must nurture the ideology of excellence. The Study Centre can become a centre of excellence at UAD by expanding its network and access to funding for multidisciplinary research and publications."

Maintaining the ideology of excellence means that UAD must uphold the ideology of its parent foundation, Muhammadiyah. By doing so, UAD will contribute to preserving Muhammadiyah's scientific spirit, which embodies a progressive Islamic perspective that views science holistically, without dichotomies, integrating general science and religious science as mutually supportive. Additionally, the study centres at UAD serve as platforms for broader academic development through multidisciplinary publications. Ultimately, Noeng Muhadjir's vision for academic development is embedded in every activity at UAD.

Conclusion

Based on the background, problem formulation, theory, and data outlined, the following conclusions can be drawn. First, Noeng Muhadjir's Islamic educational philosophy is constructed from the Islamic Peripatetic philosophy tradition developed by Ibn Rushd in Andalusia, Spain. Islamic Peripatetic philosophy is built on the following basic premises: (1) multistrata monism (sequential singular ontology), that the universe has three manifestations, but converges on one truth, namely (a) the truth of God (the wisdom of Allah); (b) the truth of nature: the order of the universe as God's destiny, and (c) the truth of humanity: human creativity based on the laws of sunnatullah and the wisdom of God; (2) metaphysical realism that recognizes the order of the universe (the regularity of the universe) as the creation of Allah SWT, so that in the effort to find the truth, "empirical rationality" is used, but with a "theistic" (ilahiyah: transcendence; discovering divine values) goal; and (3) Theo-humanistic ethics built from deontological ethics and ontological ethics, namely ethics that developed in the process of human culture from era to era

(deontological) with morals lifted from religious teachings (ontological). Second, Noeng Muhadjir's construction of educational philosophy has implications for the paradigm of UAD's unification of knowledge. The unification of knowledge referred to here is the process of integrating various disciplines and AIK values into a single, coherent whole in order to answer life's problems.

With the premise of Islamic peripatetic philosophy, Noeng Muhadjir proposes a paradigm of Theo-Humanistic Science and Technology development that is oriented towards God and universal goodness by linking aqliyah reasoning (empirical rationality) and naqliyah reasoning (theocentricity) as a solution to the dichotomy of science. UAD employs this basic assumption in constructing a scientific paradigm based on Al-Islam and Kemuhammadiyahan (AIK), known as the "unification of knowledge" (tauhidul ulum).

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