

**THE ART OF LOGIC IN MUSLIM SCHOLARSHIP:
A STUDY OF *MANTIQ* TRANSMISSION AND
RECEPTION IN INDONESIA**

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DOI: <https://doi.org/10.22452/afkar.vol24no2.7>

Abstract

Although the Islamic art of logic (*mantiq*) has circulated for more than two centuries in Indonesia, the *mantiq* works and their functions obtain little academic attention. In this regard, the article aims to study how the *mantiq* works entered and spread in Indonesia and what functions they play in Islamic educational and scholarship settings. This writing employs a qualitative-historical approach by reading critically primary and secondary works of literature related to the study of logics in the Muslim world, especially in Indonesia, in order to analyze how those logical concepts and scholarship spread and are used in Islamic scholarly works in Indonesia. In the end, the article finds that the spread and development of *mantiq* works in Indonesia primarily stem from the international learning networks of Indonesian Muslim scholars ('*ulama*'), centered in Mecca, Madina, and Cairo. The Indonesian '*ulama*', who used to study in the Middle East, brought the *mantiq* to Indonesia. It is instrumental and required knowledge for understanding scientific and scholarly traditions in Islam, such as Islamic law (*fiqh*) and theology (*kalam*). Furthermore, *mantiq* plays a crucial role as an instrument for academic debates among scholars

from different religious affiliations on whether religious or non-religious topics.

Keywords: *Mantiq*, 'ulama'; logic; Indonesia; Islamic scholarship; the Islamic world.

Khulasah

Walaupun ilmu logik Islam (*mantiq*) telah beredar lebih daripada dua abad di Indonesia, karya *mantiq* dan fungsinya belum mendapat perhatian dan penghargaan akademik yang seharusnya. Sehubungan itu, makalah ini bertujuan mengkaji bagaimana *mantiq* masuk dan tersebar di Indonesia serta apakah fungsi yang ia mainkan dalam konteks pendidikan dan keserjanaan Islam. Tulisan ini menggunakan pendekatan kualitatif-historis dengan membaca secara kritis literatur primer dan sekunder yang berkaitan dengan kajian ilmu logik dunia Islam, khususnya di Indonesia, untuk menganalisis bagaimana konsep dan keserjanaan logik tersebut menyebarkan dan digunakan dalam keilmuan Islam di Indonesia. Pada akhirnya, makalah ini mendapati bahawa penyebaran dan perkembangan karya *mantiq* di Indonesia terutamanya berasal daripada rangkaian pembelajaran antarabangsa ulama Muslim Indonesia yang berpusat di Mekah, Madinah dan Kaherah. Para ulama Indonesia yang pernah belajar di Timur Tengah membawa *mantiq* ke Indonesia. *Mantiq* menjadi instrumental dan ilmu yang diperlukan untuk memahami tradisi ilmiah dan keilmuan dalam Islam, seperti hukum Islam (*fiqh*) dan teologi (*kalam*). Tambahan pula, *mantiq* memainkan peranan penting sebagai instrumen untuk perdebatan akademik dalam kalangan ulama daripada pelbagai fahaman agama sama ada berkaitan topik agama atau bukan agama.

Kata kunci: *Mantiq*; ulama; logik; Indonesia; keserjanaan Islam; dunia Islam.

Introduction

Mantiq (logic) has been received and developed in the Islamic world despite its criticism. Abu Hamid al-Ghazali

(555 AH/ 1111 AD) highlighted the importance of logic in his works considering it as a prerequisite for the mastery of any science, including Islamic law.¹ Other scholars such as Ibn Taymiyyah (d. 728/1328) criticized the importance of logic stating that logic is not suitable for Islamic studies. He viewed logic as incapable of providing new information apart from those provided by a direct perception.² Logic however has been employed in traditional Islamic sciences and contributed to the development of classical Islamic science, like philosophy, theology and Islamic law.

The wave of the international network of Islamic scholarship contributes to the shape and character of Islamic teaching and learning activities in the Indonesian archipelago.³ This includes the study of the Islamic form of logic (*mantiq*). In Islamic scholarship tradition, logic is an important discipline through which scholars and intellectuals express and exchange their ideas in the areas of philosophy, theology (*kalam*), Islamic jurisprudence (*fiqh* and *usul al-fiqh*) and Islamic mysticism (*tasawwuf*). They use the art of logic to construct a coherent-valid argument and avoid contradiction in their reasoning. In this regard, the mastery of logic becomes a prerequisite for the mastery of other Islamic sciences.⁴

¹ Abu Hamid al-Ghazali, *al-Mustasfa fi 'Ilm al-Usul* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2000), 10; Felicitas Opwis, "Syllogistic Logic in Islamic Legal Theory: al-Ghazali's Arguments for the Certainty of Legal Analogy (*Qiyas*)," in *Philosophy in the Islamic World Context*, ed. Peter Adamson (Berlin: Walter de Gruyter GmbH, 2019), 93-112.

² Ibn Taimiyyah, *Kitab al-Radd 'ala al-Mantiqiyin* (Mombay: Syarf al-Din al-Kutb wa Awladuh, 1949).

³ Azyumardi Azra, *Jaringan Ulama Timur Tengah dan Kepulauan Nusantara Abad XVII & XVIII: Akar Pembaruan Islam Indonesia*, 3rd ed. (Bandung: Prenada Media Group, 2007), 51. This book is the most authoritative one in Indonesia today on the topic of international network of Indonesian scholars in 17th and 18th centuries.

⁴ Wael Hallaq, *Law and Legal Theory in Classical and Medieval Islam* (Vermont, Hamshire: Ashgate Publishing Company, 1994), 322-327.

In Indonesia, several logic works have been taught in religious educational institutions, especially in *pesantren* (traditional *madrasah*). The Arabic translation by Athir al-Din al-Mufaddal bin 'Umar al-Abhari (d. 663/1265) of the introductory book to Aristotelian logic written by Porphyry, *Isagoge*, is found in Pesantren Sumber Anyar Pamekasan, one of the oldest pesantren in Madura, East Java, under the Arabic title *Isaghuji*. The manuscript of *Isaghuji* is one example of classical work circulated in Indonesia in the 18th or 19th century. *Isaghuji* manuscript, to some degree, reflects attention and awareness of the rational dimension in Islamic traditional education. The existence of *Isaghuji* in Pesantren Sumber Anyar is accompanied by other classical Islamic works in theology and Islamic law such as *Matn al-Sanusi*, *Kifayat al-Awwam* and *al-Muharrar*.⁵

The reception of logic work, apart from the use of classical text in Islamic education is also reflected in the writing of manual work of logic by a local scholar. Muhammad Nur al-Ibrahimi is one example of the reception of classical logic work through rewriting the logic manual. He wrote *'Ilm al-Mantiq li al-Madaris al-'Arabiyyah wa al-Ma'ahid al-Diniyyah bi Indunisia* (1927). The work is a practical source for logic teaching and learning in Arabic. Meanwhile, there are also other works of traditional logic written by Indonesian scholars

The book is a collection of several articles of Hallaq having been published in journal version.

⁵ Ahwan Fanani, Umi Masfiah and Amaluddin, *Laporan Penelitian Inventarisasi dan Digitalisasi Naskah Klasik Keagamaan di Kabupaten Pamekasan Madura Jawa Timur* (Semarang: Balai Penelitian dan Pengembangan Agama Semarang, 2010). *Matn al-Sanūsī* and *Kifayat al-Awwām* are theological work. The former was written by Muḥammad Ibn Yūsuf al-Sanūsī (d. 895AH/ 1490AD) and the latter written by Muhammad al-Fadali (d. 1236 AH/ 1821 AD). Both *al-Muharrar* is a work on Islamic law written by a great Shafi'ite scholar Abu al-Qasim al-Rafi'i (d. 623AH/ 1226AD).

using Bahasa Indonesia, as conducted by Joesoef Sou'yb. Sou'ayb writes *Logika, Kaidah Berpikir secara Tepat* (1997),⁶ with an appendix showing his connection to *mantiq* literature. Sou'yb gives an appendix providing synonyms of English and Arabic terms for Indonesian one that helps readers to find the conceptual similarities or translation of key traditional logic and *mantiq*.

The existence of logic works in Islamic education, such as in Pesantren Sumber Anyar, has three important meanings. Firstly, logic has entered the curriculum within the *pesantren*, the center of traditional Islamic education in Indonesia for a long time. It means that traditional Islamic education in Indonesia have encountered Islamic rationality since its early development. Secondly, the existence of *mantiq* shows the connection between local Islamic scholars and a global logical discourse in Islamic scholarship. Thirdly, the teaching of logic shows that an intellectual instrument was necessary for understanding Islamic sciences in Islamic education.

However, the availability of *mantiq* works and the long encounter of Islamic educational institutions in Indonesia obtain little academic attention in contemporary academic studies of Islam, compared to other Islamic subjects such as Sufism, Islamic law, theology, Islamic ritual and culture, Islamic philology and Islamic history. In addition to the finding of the *Isaghuji* manuscript by Ahwan Fanani and his research team, other scholars study logic in terms of its historical developments, logical rules, and advocates and adversaries of logic in the Islamic world. While Zainun Kamal,⁷ Wahab and Hamat,⁸ Syarif,⁹

⁶ Joesoef Sou'yb, *Logika, Kaidah Berpikir secara Tepat* (Jakarta: Al-Husna Zikra, 1997). The works is a unique one because it provides the list of logical concept in Indonesia, English and Arabic.

⁷ Kamal, Zainun, *Kritik Ibn Taymiyyah terhadap Logika Aristoteles* (Jakarta: Pascasarjana IAIN Syarif Hidayatullah, 1995).

Masdar Hilmy¹⁰, Nur,¹¹ Wael Hallaq,¹² and Nicholas Rescher¹³ discuss Islamic logic in the context of the medieval Muslim world and the position of logic in Islamic sciences. On another hand, Bruinessen surveys books used as manuals in Islamic traditional learning (*pesantren*) including logic books, although he does not specifically focus on listing the books of logic.¹⁴

Since the *mantiq* has played important role in Islamic sciences while the study of its role in Indonesian scholarship is limited, this paper aims to fill the lacuna and enrich the study of logic in Indonesian Muslim scholarship by analyzing the history and the function of *mantiq* in Indonesia. Two central questions will be discussed: first, how Islamic logic (*mantiq*) came to Indonesia and spread within Islamic educational institutions, and second what function that *mantiq* plays in Islamic scholarship in Indonesia. By answering these two questions, one will get a general picture of the development of rationality in Islamic scholarship in Indonesia and reveal the connection between the *mantiq* and other Islamic sciences in Indonesian Islamic educational settings.

⁸ Muhammad Rashidi Wahab & Mohd Fauzi Hamat, "Kedudukan Mantik dalam Pemikiran Islam," *Jurnal Akidah & Pemikiran Islam (Afkar)* 22, no. 2 (2020): 1-42.

⁹ Edwin Syarif, "Pengaruh Mantiq (Logika) dalam Pengembangan Ilmu-Ilmu Keislaman," *Ilmu Ushuludin* 5, no.2 (2016): 265-282.

¹⁰ Masdar Hilmy, "Induktivisme sebagai Basis Pengembangan Ilmu Pengetahuan dalam Islam," *Ulumuna Jurnal Studi Keislaman* 17, no.1 (2013): 97-126.

¹¹ Muhammad Nur, "Islam dan Logika menurut Pemikiran Abu Hamid al-Ghazali," *Jurnal al-Ulum* 1, no.1 (2011): 47-62.

¹² Hallaq, *Law and Legal Theory*, 322-327.

¹³ Nicholas Rescher, *Studies in the History of Arabic Logic* (Pittsburgh: University of Pittsburgh Press, 1963).

¹⁴ Martin van Bruinessen, *Kitab Kuning, Pesantren dan Tarekat: Tradisi-Tradisi Islam di Indonesia* (Bandung: Mizan, 1995), 37-38.

The Development of *Mantiq* in the Islamic World

The work of *mantiq* is part of the Islamic scholarship tradition that has been developed since the encounter of early Muslim logicians with Nestorian-Christian scholars in the era of Ummayyad and Abbasid Caliphate. Abu Nasr Muhammad bin Muhammad al-Farabi (d. 339AH/ d. 950AD), the second notable Islamic philosopher was the first Muslim logician who studied under the tutelage of a Christian scholar who was well-versed with Greek philosophical works, Ishaq bin Hunayn (d. 298AH/ 910AD). The development of logic in Islam started to emerge with the translation of Greek works in the period of the Umayyad and the early Abbasid.¹⁵ In fact, the culmination of this 'translation movement' occurred during the Abbasid period.¹⁶

The translation of the Greek logical scholarship contributed significantly to the adaptation of Greek dialectic and logic to the existing structure and systematization of religious reasoning in Islamic scholarship. Before the encounter with Greek dialectical and logical scholarship, the reasoning in Islamic scholarship relied primarily on the *dalalah* (textual proof)-based interpretation, *qiyas* (analogy) and *khilaf* (disagreement). After the encounter with Greek dialectical and logical literature, Aristotelian dialectics and syllogism were also employed with certain adjustments and modifications, which in turn presented a new way of how

¹⁵ Shams Inati, "Logic," in *History of Islamic Philosophy*, ed. Seyyed Hossein Nasr & Oliver Leaman, vol. 2 (London: Routledge, 1996), 802. The book is the most comprehensive works so far on the history of Islamic Philosophy.

¹⁶ Dimitri Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early 'Abbasid Society (2nd-8th/8th-10th centuries)* (London: Routledge, 1998).

to arrange dialectical questions and logical premises to defend or arguing for a certain thesis.¹⁷

The study of logic continues to evolve to the extent that it has been incorporated into Islamic sciences (*al-'Ulum al-Islamiyyah*). In the book of Islamic legal theory entitled *al-Mustasfa*, Hujjah al-Islam Abu Hamid al-Ghazali (d. 555 H/ 1111 AD), a great Shafi'ite-Ash'arite scholar, emphasized the importance of logic as a prerequisite for studying all sciences including religious sciences.¹⁸ In fact, he included a chapter "Introduction to Logic" in his *al-Mustasfa*, which showed his deliberate and serious effort to incorporate logic in Islamic sciences.

However, Taqi al-Din Abu al-'Abbas Ibn Taymiyyah (d. 728AH/ 1328AD) an outstanding Hanbalite criticized the importance of logic for Islamic sciences. His criticism focused on the basic foundation of logic that he considered giving no new information, apart from the knowledge gained from reality.¹⁹ Najm al-Din al-Tufi (d. 716 AH/ 1316 AD), a Hanbalite scholar, criticized the inclusion of the introductory logic in *usul fiqh*. According to al-Tufi, such inclusion is nothing to do with the importance of logic in Islamic law but is motivated solely by al-Ghazali's enthusiasm for logic. The rejection of *mantiq* as an instrument for Islamic sciences had been also stated by Abu Sa'id al-Hasan al-Sirafi (d. 368 AH/ 978 AD), a Shafi'ite linguist. He rejected logic because it is

¹⁷ Mohammad Syifa Amin Widigdo, "Arab-Islamic or Greek Dialectics? Revisiting the Origins and Development of *Jadal*," *Islam and Christian-Muslim Relations* 32, no.2 (2021), 203-222. <https://doi.org/10.1080/09596410.2021.1904692>.

¹⁸ Abu Hamid al-Ghazali, *al-Mustasfa fi 'Ilm al-Usul* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2000), 10-11. This is the masterpiece of al-Ghazali on Islamic jurisprudence that he wrote in the last years of his life.

¹⁹ For deeper understanding on Ibn Taimiyyah refutation of *mantiq*, especially in its basic structures: *tasawwur* (concept), *tasdiq* (judgement) and *qiyas* (syllogism) as they were understood by Islamic theologian, see his work *al-Radd 'ala al-Manṭiqiyyin*.

rooted in Greek culture, while Islamic sources are rooted in Arabic. Therefore, to him, logic is not compatible to study religious texts since they are founded upon the Arabic language, culture and tradition.²⁰

Despite the rejection, it cannot be denied that *mantiq* has played important role in the Islamic sciences. There are many works of *mantiq* have been developed in the Islamic world. *Al-Risalah al-Shamsiyyah* by Najm al-Din 'Umar bin 'Alī al-Qazwini al-Katibi (d. 675AH / 1276AD) and *Matali' al-Anwar* by Siraj al-Din Mahmud al-Urmawi (d. 682AH / 1283AD) influenced the writing of commentaries genre in the next period.

From the 14th century until the 16th century, *mantiq* scholars produced commentary (*sharh*) and extra-commentary (*hashiyah*) works of influential *mantiq* works, especially al-Katibi's *al-Risalah*, al-Urmawi's *Matali'* and al-Abhari's *Isaghuji*. Nasr al-Din al-Tusi (d. 672AH/ 1274AD) was also a productive writer writing *Ta'dil al-Mi'yar* and *Tajrid fi 'Ilm al-Mantiq* as the commentary of Ibn Sina's *al-Isharat* and as an introduction to his work *Tajrid al-I'tiqad*. Al-Tusi's logical work has inspired and influenced his disciples, such as Ibn Mutahhar al-Hilli (d. 726AH/ 1325AD) and Qutb al-Din al-Shirazi (d. 710AH/ 1311AD) and was engaged by later scholars through their commentaries such as a commentary of Jalal al-Din al-Dawani (d. 918 AH/ 1502 AD), a Persian Shafi'ite theologian, and his fellow Persian theologian Sadr al-Din al-Dashtaki (d. 903 AH/ 1498 AD). The 13th to the 16th century appeared to be the zenith of logical writing and literature in the Islamic world.²¹

²⁰Ahwan Fanani, "Najm al-Din al-Tufi dan Diskursus Pengantar Logika dalam Ushul Fiqh," *International Journal Ihya' 'Ulum al-Din* 14, no.2 (2010): 356-363.

²¹ Khaled El-Rouayheb, *Relational Syllogisms and the History of Arabic Logic 900-1900* (Leiden: Brill, 2010), 14-15 and 92-95.

In addition, there were other influential books in logic such as *Tahdhib al-Mantiq* by Sa'd al-Din Abu Sa'id Mas'ud al-Taftazani (d. 791-2AH/ 1390AD), a Timurid scholar. The work was widely commented by subsequent Muslim logicians in the 15th to the 17th century, such as Jalal al-Din al-Dawani (d. 908AH/ 1502AD), Fakhr al-Dīn 'Ubaid Allah Khabisi (d. 1050AH/ 1640AD), Najm al-Dīn 'Abd Allāh Yazdi (d. 981AH/ 1573AD), Abu al-Fath al-Husayn (d. 1564AD), Muhy al-Din Muhammad bin Sulayman al-Kafiyaji (d. 879AH/ 1474AD), Saif al-Din Ahmad bin Yahya al-Harawi / Hafid al-Sa'd al-Taftazani (d. 916AH/ 1511AD), Mir Hibat Allah Husaini (d. 1546AD) and Jamal al-Din Muhamad Ibn Mahmud al-Shahrastani (d. 1584AD). The number of commentators of *Tahdhib al-Mantiq* showed a continuous interest of Muslim scholars in the *mantiq* work of al-Taftazani.²²

The list of *mantiq* scholars in the Islamic world was not limited to the Middle East region. The North African logicians were involved in the writing of logic as well. The early African figure was Abu 'Abd Allāh Muḥammad bin Ahmad bin 'Alī al-Sharif al-Tilimsani (d. 710AH/ 1370AD). He taught Ibn Rushd's commentary on Aristotle's work. He also wrote his commentary on *al-Jumal* to al-Khunaji. Meanwhile, al-Abhari's *Isaghuji* was commented on by Abu Sulayman Dawud bin Ibrahim al-Jarbi (d. 967AH/ 1507AD). North Africa also had an outstanding *mantiq* writer, 'Abd al-Rahman bin Sayyidi al-Akhdari (d. 953AH/ 1545AD). Al-Akhdari's work, entitled *al-Sullam al-Munawraq* or *al-Murawnaq*, was widely circulated in Indonesia. It was a practical book, written as a poem and derived presumably from *Isaghuji* of al-Abhari.

The work of al-Akhdari played an important role and attracted the attention of other writers. Muhammad Mahfuz al-Shinqiti wrote a commentary work under title

²² *Ibid*, 108.

al-Daw' al-Mashriq 'ala Sullam al-Mantiq al-Akhdari.²³ The commentary of al-Shinqiti is concise with a brief explanation of the rules of logic, linguistic aspects and quotation of preceding commentaries. Another brief commentary was written by Shirian Aḥmad bin 'Abd al-Mun'im al-Damanhuri (d. 1192AH/ 1778AD) entitled *Idah al-Mubham fi Ma'ani al-Sullam*. Damanhuri's commentary was aimed to provide an introductory art of logic for students.²⁴

The Coming of Logic to Indonesia

The spread of Islam in Indonesia cannot be detached from the spread of Islam in South East Asia. Islam spread through trade routes connecting China, India and the Arab world. Islam came to Indonesia in the 7th century, but it was able to consolidate political support and power in the 13th until 16th century and build many religious institutions across Indonesia in the early 17th century.²⁵ The spread of Islam to Indonesia was followed by an intellectual encounter of Muslims from Arab, Persia and India with their fellow Indonesian Muslims, which in turn influenced Indonesian Islamic scholarship and learning.

Mecca and Madina (Haramayn) played an important role as a meeting ground for Muslim scholars from different countries. The learning process in Haramayn connected the Indonesian ulama with a wider network of Muslim scholars from different parts of the Muslim world and engendered intellectual and cultural exchanges. In this

²³ Muhammad Mahfudh al-Shinqiti, *al-Daw' al-Mushriq 'ala al-Sullam al-Mantiq li al-Akhdari* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2007). It is an example of al-Akhdari's work commentary. The point is that al-Akhdari's work still attracts the interest of other scholar to give commentary

²⁴ Aḥmad al-Damanhuri, *Idah al-Mubham fi Ma'ani al-Sullam* (Beirut: Maktaba al-Ma'arif, 2006).

²⁵ Hasan Muarif Ambary, *Menemukan Peradaban: Jejak Arkeologis dan Historis Islam Indonesia* (Jakarta: Logos Wacana Ilmu, 1998), 55-61.

regard, Azyumardi Azra sets a table of scholars in Mecca based on Ibn Battuta's report. It shows that they came from various regions of the Islamic world, such as Anatolia, Andalusia, India, Iraq, North Africa, Mecca, Egypt, Persia, Syria and Yemen.²⁶

From this intellectual network, it can be inferred that *mantiq* or Islamic logic came to Indonesia through this channel and along with the development of Indonesian Muslims who went to pilgrimage and studied in Haramayn. Azra's work provides a valuable picture of the ulama networks in Haramayn from the second half of the 15th century. Mecca and Medina served as the center for Islamic learning in which educational and religious institutions such as *ribat*, *zawiya*, *madrassa* and home teachers, grew.²⁷

Masjid (mosque) is a worshipping place with learning facilities, including a library. The *imam* of the mosques resided nearby the mosque and used the library in the mosque as a learning center. *Ribat* is the center of spiritual learning, along with the study of *hadith* and Islamic law. Therefore, it is not surprising that *ribat* may produce manual works combining the study of Sufism and Islamic law such as *Lubb al-Usul* (book on Islamic jurisprudence) written by Abu Yahya Zakariya al-Ansari (d. 1421AH/1520AD) an outstanding Shafi'ite. *Madrasas* were the most important institutions for the specialization of religious studies. *Madrasas* were frequently located adjacent to mosques.²⁸

Azra argues that the involvement of Indonesian scholars in the international Islamic education network has occurred since the 17th century, which gave birth to the

²⁶ Azyumardi Azra, *Jaringan Ulama*, 82-83.

²⁷ *Ibid*, 73.

²⁸ George Makdisi, *The Rise of Colledge: Institutions of Learning in Islam and the West* (Edinburgh: Edinburgh University Press, 1981), 9-10.

renewal of Islamic orientation, not only toward Sufism but also toward Islamic law. The combination of Sufism and Islamic law is the hallmark of Islamic development in the Indonesian archipelago since then. The relationship between the Islamic center of learning in Haramayn and Muslim educational institutions in the Indonesian archipelago marked the relationship between the great traditions (Haramayn) with the little tradition of Islam (Indonesia).²⁹

However, Azra does not mention how the art of logic develops and spreads among Indonesian scholars. What we can be drawn from Azra, in this matter is his finding that the Indonesian Islamic scholars' network has existed and influenced the development of religious discourse in Indonesia since the 17th century. This fact enables contemporary researchers to trace the chain of the intellectual lineage that brought *mantiq* from the centers of Islamic learning to the Indonesian archipelago.

It is not easy to ensure whether the study of *mantiq* has been conducted since the 17th century or later. There are two ways, however that can be pursued to trace the early entry of *mantiq* works into Indonesia. First, it is through the information of manuscripts provided in library catalogues. Although catalogues of Indonesian manuscripts give little information, they are still useful to prove the existence of *mantiq* teaching and learning in traditional Islamic education. The catalogues provide important information about academic materials that are ever written or rewritten by Indonesian students or teachers for learning purposes.

Some catalogues may hardly contain the manuscripts related to *mantiq* such as the catalogue of Ali Hasymy Aceh, the catalogue of Palembang manuscripts, the catalogue of Buton Manuscripts (The Collection of Abdul Mulku Zahari), and the catalogue of the Bima

²⁹ Azyumardi Azra, *Jaringan Ulama*, 385-388.

manuscripts.³⁰ However, other catalogues fortunately contain information of the manuscripts on *mantiq*. Pesantren Sumber Anyar in Pamekasan Madura preserves manuscripts from the late 18th century until the early 20th century, entitled *Isaghuji* (on *mantiq*). *Katalog Naskah Dayah Tanoh Abee, Aceh Besar* (The Catalogue of Dayah Tanoh Abee, Aceh Besar)³¹ contains information on manuscripts stored in an Aceh *dayah* (*madrassa*), indicating that *mantiq* is part of the curriculum in the *pesantren* in the early of 18th century.

There are four manuscripts of *al-Sullam al-Munawraq* recorded in the catalogue, one of which includes a photograph of the manuscript. The note on the edge of the script (*pias*) indicates that the text is used for the learning process. One of the manuscripts indicates the year of 1277H (1812AD) at the end of its copy. The manuscript and catalogue information of Pesantren Sumber Anyar and Dayah Tanoe Abee prove that *Isaghuji* and *al-Sullam al-Munawraq* have been used for teaching-learning in the late 18th or early 19th century.

The second method of tracing early *mantiq* literature in Indonesia is through an intellectual chain of knowledge transmission (*sanad*) among Indonesian scholars. In this regard, two sources may lead us to find information regarding *mantiq* manuscript: one, the scholarly work collection of Kiai Mahfudh al-Tarmasi (d. 1338AH/

³⁰ Oman Fathurahman & Munawar Holil, *Katalog Naskah Ali Hasymy Aceh* (Jakarta: Yayasan Pendidikan dan Museum Ali Hasymy, PPIM UIN Jakarta, Manassa & Tokyo University of Foreign Studies, 2007); Achadiati Ikram, *Katalog Naskah Palembang* (Jakarta: Yanassa dan Tokyo University of Foreign Studies, 2004); Achadiati Ikram, *Katalog Naskah Buton Koleksi Abdul Mulku Zahari* (Jakarta: Manassa, The Toyota Foudantion & Yayasan Obor Indonesia, 2001); Siti Maryam & Mukhlis, *Katalog Naskah Bima Koleksi Museum Samparaja* (Bima: Museum Samparaja, 2007).

³¹ Oman Fathurahman, *Katalog Naskah Dayah Tanoh Abee, Aceh Besar* (Jakarta: Komunitas Bambu, 2010), 313-317.

1917AD) from Pacitan in East Java Indonesia and Yasin al-Fadani (d. 1410AH/ 1990AD), from West Sumatera, published by Dar al-Saqqaf, Surabaya under the title *Jam' al-Asanid*. On the one hand, al-Tarmasi records various Islamic books and teachers he studied, comprising *fiqh*, *tafsir*, *hadith*, *'ulum al-hadith*, *'ulum al-Qur'an* and *'Arabic*. Unfortunately, his *sanad* shows none of the logic work that al-Tarmasi has ever studied.³² The absence of logic work in al-Tarmasi's *sanad* implies that *mantiq* is not a standard subject taught in Islamic education.

On the other hand, al-Fadani records his career in learning *mantiq*. Al-Fadani mentions all his teachers and works showing a rich reference to *mantiq* that had been circulated among Indonesian students at the time. In his *al-Musnad al-Jali*; a work containing a chain of intellectual transmission (*sanad*), there is a sub-section showing al-Fadani used to learn Islamic logic (*mantiq*). He mentions various works and authorities in *mantiq* such as *al-Risalah al-Shamsiyyah* of Abu Bakr Muhammad bin 'Ali al-Kattani (d. 322AH/ 934AD), *al-Hikmah fi Makhluqatillah* and *Tahafut al-Falasifah* of Abu Hamid al-Ghazali (405AH/ 1111AD), *Sharh al-Isharat* and *Lubab al-Isharat* of Fakhr al-Din al-Razi (d. 605AH/ 1210AD), *Kitab al-Isharat* of Ibn Sina, *Sharh al-Nasir al-Tusi 'ala al-Isharat* of Nasir al-Din al-Tusi (d. 672AH/ 1274AD), *Tawali' al-Anwar* of Nasir al-Din Abu Sa'id al-Baydawi (d. 685AH/ 1292AD), *Sharh al-Risalah al-Shamsiyyah* of Qutb al-Din Muhammad al-Razi/ al-Tahtani (d. 766AH/ 1365AD), *Sharh al-Shamsiyyah* of Sa'd al-Din Abu Sa'id Mas'ud al-Taftazani (d. 792AH/ 1389AD), *Mi'yar al-'Ilm*, *Maqasid al-Falasifah*, *Hawashi al-Risalah al-Shamsiyyah* of Sharif 'Ali bin Muhammad

³² Muhammad Mahfudh al-Tarmasi, *Kifayah al-Mustafid li ma 'ala min al-Asanid* (Surabaya: Dar al-Saqqaf, n.d.). The books is highly valuable for it provides vivid picture of intellectual genealogy and works that traditional Islamic educations had.

al-Jurjani (d. 816AH/ 1414AD), and *Sharh al-Damanhuri wa al-Mullawi 'ala al-Sullam* of al-Damanhuri and al-Mullawi and *al-Maqulat* of Sayyid Muhammad bin Muhammad al-Balidi (d. 872AH/ 1467AD).³³

Al-Fadani's chain reflects an incredible history of his learning of logic. The materials that he has access comprise several notable logic works in Islamic scholarship. The works of Ibn Sina, al-Tusi, Qutb al-Razi, al-Ghazali and Fakhr al-Razi are works of influential scholars in the Islamic world. The academic access of al-Fadani to those works shows the ability and possibility of Indonesian scholars to study *mantiq* works aimed at higher learning. Surprisingly, al-Fadani got acquaintance with logic works ranging from basic to the most advanced ones. Al-Danadi's *sanad* gives a brief picture of what logic works known among the academic circles especially for Indonesian scholars pursuing their study in Haramayn from the late 19th century to the beginning of the 20th century.

Although al-Fadani was born and died in Mecca, he studied under the tutelage of Indonesian scholars such as Kiai Baqir Nur al-Jugjawi (d. 1363AH/ 1943AD), Kiai 'Abd al-Muhith bin Ya'qub Panji al-Sidoarji (d. 1384AH/ 1964AD), Kiai Muhammad bin Ma'sum bin Ahmad al-Lasimi (d. 1392AH/ 1972AD) and Kiai Tubagus Ahmad Bakri bin al-Sayyid al-Bantani (d. 1395AH/ 1975AD). For his *mantiq* learning, however al-Fadani did not mention his *sanad* to Indonesian scholars. His *sanad* of *Kitab al-Isharat* is attributed to Shaykh 'Abd al-Haqq whose chain of authority coming from of Sharif al-Jurjani (d. 816AH/ 1413AD), from Qutb al-Din Muhammad al-Razi, from Qutb al-Din Mahmud al-Shirazi (d. 710AH/ 1311AD), from Abu Ja'far Muhammad al-Nasir al-Tusi (d. 672AH/ 1274AD), from Farid al-Din Damad (d. n/a), from Sadr al-

³³ Muhammad Yasin al-Fadani, *al-Musnad al-Jali* (Surabaya: Dar al-Saqqaf, n.d.), 73-74.

Din Abu 'Ali al-Sarakhsi (d. 581AH/ 1185AD), from Afdal al-Din al-'Ilaqi (d. 539AH/ 1144AD), from Abu al-'Abbas Fadl bin Muhammad al-Lukuri (d. 517AH/ 1119AD), from Ibn Sinā.³⁴

The absence of Indonesian ulama in al-Fadani's *sanad* of learning logic implies two possible explanations. First, al-Fadani's encounter with Indonesian scholars was not in the light of studying logic but in learning other Islamic subjects. Second, there were no Indonesian scholars specialized in the field of logic for higher learning that al-Fadani met. This does not mean that *mantiq* was not studied by Indonesians or taught in Indonesia because a modern researcher of Islam in Indonesia, Martin van Bruinessen records several *mantiq* works in his book *Kitab Kuning Classified According to Subject Matter* (1988) and *Kitab Kuning, Pesantren and Tarekat: Tradisi-Tradisi Islam di Indonesia* (1995).

Bruinessen in *Kitab Kuning Classified According to Subject Matter* enlists two works of logic used in Indonesian *madrassa*, namely *Tahrir al-Fawa'id al-Mantiqiyyah* by Qutb al-Din Mahmud al-Razi and *Hashiyah 'ala Sharh al-Sullam li al-Mullawi* by Muhammad bin 'Ali Sabban (d. 1206H/ 1791AD). Meanwhile, in his *Kitab Kuning, Pesantren and Tarekat: Tradisi-Tradisi Islam di Indonesia*,³⁵ Bruinessen mentions *al-Sullam al-Munawraq* al-Akhdari, *Idah al-Mubham* by Shihab al-Din Ahmad al-Damanhuri (d. 1192AH/ 1790AD), *Sharh* and *Hashiyah al-Sullam al-Munawraq* Ibrahim al-Bajuri (d. 1276AH/ 1860AD), *Hashiyah al-Sullam* by al-Quwaysini and Muhammad bin 'Ali Sabban, *al-Sullam*'s translation by Kiai Bisri Muthofa and *Isaghujj* by Athir al-Din al-Mufaddal bin 'Umar al-Abhari (d. between 660-663AH/ 1263-1265AD).

³⁴ *Ibid*, 73-74.

³⁵ Martin van Bruinessen, *Kitab Kuning*, 38.

From al-Fadani's intellectual *sanad* and Bruinessen's record of *Kitab Kuning* (a classical Islamic book used as learning material in Indonesian *madrrasah*), it can be inferred that some works in the discipline of logic are taught in both Indonesia and Haramayn and other works are taught in Haramayn only, not in Indonesia and vice versa. *Isaghuji* for instance is noted by Bruinessen as *mantiq* works taught in Indonesia, but not mentioned in al-Fadani's scholarly *sanad*. *Isaghuji* has been taught in Pesantren Sumber Anyar Pamekasan since the early 19th century.³⁶ Pesantren Sumber Anyar is among the oldest Islamic educational institutions in Madura along with Bere Léké, Kembang Kuning and Pesantren Téngginah.³⁷

Therefore, the absence of logic works in al-Fadani's intellectual *sanad* does not mean the absence of *mantiq* study in Indonesia. However, the absence of *Isaghuji* in al-Fadani's record raises a question of whether the network of Islamic intellectuals in Indonesia came from *Haramayn* only or also from other centers of Islamic scholarship. This far, there is no sufficient evidence for that possibility except the fact that Cairo is also another center and destination for Islamic learning in addition to the Haramayn.

Although *Isaghuji* is no longer taught currently because there was a shift of intellectual and book preference in Sumber Anyar. One can trace the channel of the transmission of logic teaching and learning through this book. The later Shafi'ite scholar, Zakariyya al-Ansari wrote a commentary of *Isaghuji*. His commentary came to Indonesia through his Indonesian students as well as his Shafi'ite works. Mahfudh al-Tarmasi mentions him as one of his pedigrees in the Shafi'ite legal school. Al-Ansari

³⁶ Ahwan Fanani et al., "Laporan Penelitian."

³⁷ Mohammad Kosim ed., *Pondok Pesantren di Pamekasan, Pertumbuhan dan Perkembangan* (Pamekasan: P3M STAIN Pamekasan Kosim, 2002), 6.

was intellectually linked to other Shafi'ite authorities, namely Abu Zakariya Yahya al-Nawawi (d. 676AH/ 1277AD), Abu al-Qasim 'Abd al-Karim al-Rafi'i (d. 623A.H/ 1226AD) and Muhammad bin Idris al-Shafi'i (d. 204A.H/ 820AD) through the chain of Khatib al-Shirbini (d. 977AH/ 1570AD), Shihab al-Din Ahmad al-Ramli (d. 957AH/ 1550AD) and Shihab al-Din Abu al-'Abbas bin Hajar al-Haitami (d. 973AH/ 1566AD), who were prominent figures among the late Shafi'ite.³⁸ The channel of transmission provides a plausible explanation of why *mantiq* works, like *Isaghuji*, came and spread in Indonesia.

In addition, some *pesantrens* use *mantiq* in their curriculum and some do not. Mastuhu, in his research of six *pesantrens* in Java and Madura (Guluk-Guluk, Sukorejo, Blok Agung, Tebu Ireng, Paciran and Gontor) finds that only Tebu Ireng includes logic in its curriculum. The work of *al-Sullam al-Munawraq* becomes a teaching manual in Pesantren Tebu Ireng. The rest, however does not teach *mantiq*.³⁹ The reasons why some *pesantrens* teach *mantiq* and others do not may be the following. First, *mantiq* is part of speciality of a certain *pesantren* while other *pesantrens* are specialized in the Arabic grammar (*nahw*), memorizing al-Qur'an (*tahfiz*), *tajwid* (linguistic eloquence), *fiqh* (Islamic law) or *tasawwuf* (Islamic mysticism). *Pesantrens* with a strong emphasis on the rational dimension of Islamic sciences are likely to teach *mantiq*. Sumber Anyar and Tebu Ireng are among *pesantrens* that are interested in using and developing rational Islamic sciences. Second, *mantiq* is optional subject in Islamic scholarship since some scholars that follow the footsteps of al-Sirafi, Ibn Taimiyyah, Jalal al-

³⁸ Muhammad Mahfudh al-Tarmasi, *Kifayah*, 22- 24.

³⁹ Mastuhu, *Dinamika Sistem Pendidikan Pesantren* (Jakarta: INIS, 1994), 170-173. The book is of the early researches on *pesantren*. It studied seven outstanding *pesantren* in East Java and Madura.

Din al-Suyuti (d. 911AH/ 1505AD), Ibn Salah (d. 643AH/ 1245AD) and Zakariyya al-Nawawi may oppose this rational subject being taught in the *pesantrens*.

In short, the discipline of *mantiq* comes to Indonesia through the chains of intellectual transmission from the centers of Islamic education, especially Haramayn. The traces of Indonesian ulama's reception of the art of *mantiq* can be seen through, one, library catalogues and manuscripts such as the catalogue of Dayah Tanoh Abee, Aceh Besar and the manuscript of *Isaghuji* of Pesantren Sumber Anyar; and two, through Indonesian scholar like Yasin al-Fadani who used to study logic with teachers in the Haramayn.

The Function of *Mantiq* in Indonesia

After the transmission of logic from the Haramayn to Indonesia has been elucidated in the above discussion, let us now learn how the science of logic functions in Islamic scholarship, especially in the Indonesian context. In general, the art of logic is an important tool for Islamic sciences in the light of explaining, justifying or defending a certain argument. This is used in the realm of Islamic theology, law and philosophy. In the Indonesian context, similar to functions of logic in other parts of the Muslim world, the science of logic also plays a crucial role in the development and education of Islamic law and theology.

i. General Function of *Mantiq*

Mantiq is an instrumental tool for a valid argument.⁴⁰ It is comparable to grammar in English, *nahw* for Arabic or *usul fiqh* for *fiqh* (Islamic law). However, if the grammar is required for English learning and *usul fiqh* is required for *fiqh* learning, what is *mantiq* required for? The answer to this question leads us to the knowledge of the essential function of *mantiq*.

⁴⁰ Fazlur Rahman, *Islam and Modernity*, 67.

The importance of *mantiq* in Islamic intellectual tradition cannot be separated from the reception of *mantiq* in classical Islamic sciences. *Mantiq* is an important instrument for learning, developing and teaching in the field of Islamic theology, jurisprudence and philosophy. *Mantiq* becomes an intellectual instrument to explain, justify, defend and advocate certain ideas or arguments in a given Islamic science. The *mantiq* in Islamic scholarship tradition essentially stems from Aristotelian logic, translated into Arabic in the second half of the 9th century AD (3rd century Hijrah). Islamic philosophers and theologians were responsible for transmitting Aristotelian logic with some adjustments into the Islamic context.⁴¹ Logic are highly important for Islamic philosophers to grasp philosophical discourses and to enter 'the world of philosophy'. Abu Hamid al-Ghazali wrote *Mi'yar al-'Ilm* and *Maqasid al-Falasifah* as an introductory step to engage in philosophical discourse. After writing these two introductory philosophical writings, he composed *Tahafut al-Falasifah* in which he critically engaged fellow Muslim philosophers by challenging their arguments in the aspects of Islamic metaphysical doctrines such as God's knowledge of particularities, the eternity of the world and bodily resurrection.

The use of logic by al-Ghazali extended to his writings in Islamic jurisprudence (*usul al-fiqh*). He inserted an introduction to logic in this Islamic branch of science. The book of *al-Mustasfa* subsequent scholars including Muwaffaq al-Din bin Qudamah (d. 620AH/1223AD) and Abu 'Amru 'Uthman bin Hajib (d. 646AH/1249AD), who continued his attempt of reconciling logic with *usul al-fiqh*. Although such an intellectual experiment did not develop further, many Islamic legal scholars, especially within the Shafi'ite legal school, always encountered the Islamic form of logic, *mantiq*.

⁴¹ Makdisi, *The Rise of Colledgea*, 107.

Logic plays a central role in the discussion of Islamic legal cases (*furu'*) in the context of *jadal* (debate) and *munazarat* (disputations) since the 10th century.⁴² The method of *jadal* and *munazarat*, which employs logic as the core reasoning instrument, engendered the birth and development of many Islamic sciences in the genre of *ikhhtilaf* (disagreement) and *'ilm al-jadal* (the art of disputation) in Islamic law, theology and philosophy.

Jadal employs two basic instrumental knowledge, namely logic and Arabic grammar. *Jadal* is generally understood as a practice of disputation that aims to bring an answerer accepting a thesis launched by a questioner. The practice of *jadal* or *munazarah* requires a good understanding of logic because it is the only instrument available to launch or defend a certain thesis with valid reasoning.⁴³ Abu al-Wafa' 'Ali bin 'Aqil al-Hanbali (d. 513AH / 1119AD) wrote a special work on *jadal* in the field of *usul fiqh*, under title *al-Jadal fi al-Usul*. Ibn 'Aqil asserts that the science of *jadal* emerges and develops because of many erroneous opinions and arguments frequently found in the discussion, like when one side expresses affirmation and the other side negation (an exchange of claims without a proper and valid line of reasoning).⁴⁴

The incorporation of logic in Islamic sciences continued to develop. In addition to al-Ghazali, Ibn Qudamah also modifies *qiyas* forms (analogical reasoning) into syllogism and Sayf al-Din Muhammad al-Āmīdi (d. 621AH/ 1233AD) introduces the use of logical propositions in *usul fiqh* discussion: the conjunctive (*iqtirani*), the disjunctive conditional (*sharti munfasil*) and the hypothetical conditional (*sharti muttasil*). Al-Āmīdi

⁴² *Ibid*, 108.

⁴³ *Ibid*, 9-10.

⁴⁴ Abu al-Wafa' 'Ali bin 'Aqil, *al-Jadal fi al-Usul* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2009), 13.

even utilizes four moods as the explanation of the first kind of proposition.⁴⁵

Al-Ghazali himself utilizes different types of syllogism in his theological work. In *al-Iqtisad fi al-I'tiqad*, he applies *mantiq* arguments to justify the existence of God. The editor of *al-Iqtisad fi al-I'tiqad*, Insaf Ramadan, sums up various arguments employed by al-Ghazali, which include *al-sabr wa al-taqsim* or disjunctive conditional syllogism and categorical syllogism.⁴⁶ The use of *mantiq* in Islamic theology is common practice since the discipline developed in the light of polemics and disputation. *Mantiq* provides a sufficient rational means to examine arguments from the opposing party in a disputation setting.

ii. The Function of Logic in the Indonesian Archipelago

The study of the function of logic in Islamic scholarship, in general, has attracted several researchers, but the use of logic in Indonesian scholarship is hardly founded. Akrami, for instance, highlights the relation between logic and the Islamic world in two aspects, namely logic in religious texts and logic as discipline and tool for reasoning.⁴⁷ Hassan on other hand, is interested in revealing the use of logic in contemporary Islamic discourse that he finds out hybrid characteristic of the use.⁴⁸ In sum, the study on logic in Islam has resulted on the production of works and

⁴⁵ Wael bin Hallaq, *A History of Islamic Legal Theories* (Cambridge: Cambridge University Press, 1997), 325-329.

⁴⁶ Abu Hamid al-Ghazali, *al-Iqtisad fi al-I'tiqad* (Beirut: Kutaibah, 2003), 22 and 38.

⁴⁷ Musa Akrami, "From Logic in Islam to Islamic Logic," in *Beyond Faith and Rationality, Essays on Logic, Religion and Philosophy*, ed. Ricardo Sousa Silvestre et al. (Switzerland: Springer, 2020), 277-300.

⁴⁸ Shahir Akram Hassan, "The Use of Logic in Contemporary Islamic Discourses", *Mediterranean Journal of Social Sciences* 7, no. 5 (2016): 171-179.

articles that provide readers with rich pictures of logic position in the Islamic world, but the research on logic role in Indonesia hardly founded.

The lack of a study on logic's role in Indonesia raises the concern that leads to the writing of the articles due to the important role of logic in the context of Islamic learning in Indonesia. Islamic logic in Indonesian is closely related to the existence of Islamic learning and the important role of the manuscript in the transmission of logic works. The traditional Islamic educational institution in Indonesia uses logical works and manuals that are closely related to traditional learning in the Islamic world. The existence of intellectual transmission connects the academic tradition in Indonesia to Islamic academic centers in the Islamic world so that Islamic scholarship that developed in Indonesia is essentially an extension of the tradition that developed in the Islamic world since the Middle Ages. The reception of logic in traditional Islamic scholarly works makes it possible to conclude that logic has been received by Indonesian scholars along with the reception of other Islamic scholarly works.

Secondly, the transmission of *mantiq* work is carried out through the writing of manuscripts. The Islamic manuscripts found in Pesantren Sumber Anyar Madura show that the art of logic was found and studied along with Islamic theology, Arabic grammar, moral teachings (*akhlāq*), law and *tafsir* works. The manuscripts according to local writing stem from the year 1515, but another reliable account suggest that they are from the end of the 18th or early 19th century. The existence of logic manuscript in Pesantren Sumber Anyar supports the theory that logic teaching has long roots in Indonesian Islamic education.

Mantiq's function in the thinking process is analogous to the function of *usul al-fiqh* in the deduction of Islamic law. The *usul al-fiqh* functions among others to

understand construction of legal arguments used in classical works on Islamic law and to do *ijtihād* (intellectual discretion) in driving Islamic legal opinions. Similarly, *mantiq* also important in terms of understanding and constructing legal, theological and philosophical arguments in Islamic scholarship. The following passages will elaborate on the reception of logic and *mantiq* in the Islamic sciences:

a. Islamic Law

The importance of logic has been recognized by Islamic jurists so that al-Ghazali considers the mastery of logic as a requisite to evaluate the correctness of arguments, including those of Islamic law. The correct inference is requisite for legal reasoning⁴⁹ In Islamic logic (*mantiq*), there are three basic elements of concept (*tasawwur*), judgement (*tasdiq*), and argument (*hujjah*). The first one is the most frequent element used in *fiqh*. As the concept is contained in a term—while a judgement is in proposition and argument in syllogism —, definition (*hadd*) is a key for clarifying and explaining a certain concept or for differentiating one concept from another. Definition plays an important role to limit the object of study or discussion.

In Islamic legal scholarship, the meaning of a word varies in accordance with a certain linguistic context. Abu Ishaq al-Shirazi (d. 467AH/ 1083AD) mentions four kinds of meaning: lexical (*lughawi*) meaning, usage meaning (*'urfi*), religious meaning (*shar'ī*), and analogical meaning (*qiyasi*).⁵⁰ In this regard, a definition is the only tool for clarifying and explaining a certain notion in *fiqh*. Definition functions to determine what to include (*al-jami'*) and what to exclude (*al-mani'*) in a given *fiqh* concept. The concept of *ma' al-mutlaq*, for instance, becomes a point of debate among legal specialists

⁴⁹ Opwis, "Syllogistic Logic," 93.

⁵⁰ Abu Ishaq al-Shirazi, *al-Luma' fi Usul al-Fiqh* (Beirut: Dar al-Kutub al-'Ilmiyyah, 1985), 8-9.

(*fuqaha*'), even within the Shafi'ite school. Taqi al-Din al-Hisni al-Hasani (d. 829AH/ 1426AD) in his *Kifayat al-Akhyar* records such debate among Shafi'ite scholars. Some Shafi'ites define it as "(water) which is without any permanent attribute." By "permanent attribute", it excludes rose water. Others define it as "(water) which is on its basic condition."⁵¹ Here, the definition is aimed to reveal what the *ma' al-muṭlaq* is, because the division of water is not based on physical appearance or physical character, rather it is based on its appropriateness for *taharah*.

Indonesian scholar like Muhammad Nawawi al-Bantani (d. 1314AH/ 1897AD) in his *Nihayah al-Zayn* also employs definition. When discussing the topic of bathing (*ghusl*) in the light of ritual purification (*taharah*), he defines *ghusl* as follows:⁵²

وَحَقِيقَتُهُ شَرْعًا سَيْلَانُ الْمَاءِ عَلَى جَمِيعِ الْبَدَنِ بِنِيَّةٍ

Translation: The essence of bathing according to Islamic jurisprudence is to flow water all over the body along with an intention.

The definition is given to clarify the concept of bathing and to differentiate between ordinary bathing and specific bathing in Islamic law. This kind of definition can be a basis for intellectual conversation and argumentation contesting the right deduction of certain *furu'* (parallel legal cases) in Islamic law. Furthermore, a definition is also used to differentiate a meaning of a term from another. For example, there are three kinds of blood that come out from the vagina: *haid*, *nifas* and *istihadah*. Definition enables people to understand the term 'blood' according to its context. *Haid* is the blood that comes out

⁵¹ Taqi al-Din al-Hasani, *Kifayah al-Akhyar fi Hall Alfaz Abi Shuja'* (Surabaya: al-Hidayah, n.d.), 6-7.

⁵² Muhammad Nawawi al-Bantani, *Nihayah al-Zayn fi Irshad al-Mubtadi'in* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2002), 31.

from the uterus of mature women regularly and naturally, not due to illnesses. *Nifas* is the blood that comes out following the birth of a child. *Istihadah* is a blood that is neither *haid* nor *nifas* coming out not during the time of menstruation (*haid*).⁵³ In sum, those definitions give a brief description differentiating various kinds of blood in Islam legal scholarship.

The reception of logic in Indonesia is not only found in *fiqh*, but also *usul al-fiqh*. *Al-Bayan*, a work written by Abdul Hamid Hakim, provided *istidlal* as a technique to infer Islamic law when primary sources, al-Qur'an and Sunnah, do not provide clear references on it. When providing the elaboration of *istidlal*, he defines it as indirect knowledge based on direct knowledge.⁵⁴ The definition is also used in logic manuals and then receipted in *usul al-fiqh*. The reception shows that logical conceptions have been used in the works of Islamic law in Indonesia.

b. Islamic Theology

The use of logic in Islamic theology (*kalam*) is more visible than in Islamic law since theologians (*mutakallimun*) are heavily using rational proofs (in addition to textual proofs) to justify certain theological beliefs.⁵⁵ In this regard, they need discipline of logic (*mantiq*) as can be seen in the works of Ash'arite theologians (cum legal experts) such as Abu Bakr al-Baqillani (d. 403AH/ 1013AD), Abu Bakr Muhammad Ibn Furak (d. 406AH/ 1015AD), Rukn al-Din Abu Ishaq

⁵³ Taqi al-Din al-Hasani, *Kifayah*, 74-75.

⁵⁴ Abdul Hamid Hakim, *al-Bayan* (Jakarta: Penerbit Sa'adiyah Putra, n.d.), 127-139.

⁵⁵ However, this may not apply to the Hanbalite form of theology as discussed by Fanani in Ahwan Fanani, "The Hanbalite Theology: A Critical Study of the Hanbalite Theological Creeds and Polemical Adversaries," *Afkaruna: Indonesian Interdisciplinary Journal of Islamic Studies* 17, no.1 (2021), 1-27.

Ibrahim al-Isfarayini (d. 418AH/ 1027AD), Diya' al-Din 'Abd al-Malik al-Juwayni (d. 478AH/ 1085AD), Abu Hamid al-Ghazali (d. 450AH/ 1111AD) and Abu 'Abd Allah Muhammad Fakhr al-Razi (d. 606AH/ 1209-10AD).⁵⁶

In the Indonesian context, the use of *mantiq* in Islamic theological scholarship can be found in the books that have been widely circulated in Indonesia such as *Fath al-Majid* of Muhammad Nawawi al-Bantani and *Fath al-Jawwad al-Mannan* of Ahmad bin Zayni Dahlan (d. 1304AH/ 1886AD). The visible usage of logic can be seen in *Fath al-Majid* by al-Bantani. Al-Bantani eloquently elaborates on the logical proof that the world is created (*huduth*). He presents seven arguments to challenge the opinion of philosophers that the world is *qadim* (eternal). The first argument of al-Bantani is the possibility of a physical being (*ajram*) having an accident (*'arad*) for every substance that is open to having an accident added to it is created or mortal (*huduth*).⁵⁷

Ahmad Zayni Dahlan in his *Fath al-Jawwad al-Mannan* utilizes similar line of arguments and theological terms. Dahlan employs words, phrases, sentences and concepts that are used in Aristotle's logical work *De Categorie* such as the notion of *jawhar* (substance) and *'arad* (accident). When he elucidates the attribute of God *al-mukhalafah li al-hawadith* (His difference to creatures), Dahlan explains that Allah is neither *jawhar* (substance) nor *'arad* (accident). Consequently, God is not a mental

⁵⁶ Most of the theologians are from Shafi'ite Nisaphur. The grow of Islamic theologian in Nishapur according to Widigdo, is supported by the fact that Nishapur was place of heretical religious movements, oppositional legal and theological groups and mystical groups. See Muhammad Syifa Amin Widigdo, "Nishapuri Scholars in the Formation of Sunni Scholarship in the 11th Century," *al-Jami'ah Journal of Islamic Studies* 55, no.2 (2017): 457.

⁵⁷ Muhammad Nawawi al-Bantani, *Fath al-Majid fi Sharh al-Durar al-Farid* (Jakarta: Dar al-Kutub al-Islamiyyah, 2008), 16-17.

concept that can be conceived and not a substance that can be defined.⁵⁸

Conclusion

As can be seen from the above discussion, the penetration of logic in Islamic scholarship in Indonesia cannot be separated from the need to understand various branches of traditional Islamic scholarship and interpret religious teachings in a practical context. The study of logic in Indonesia is also inextricably linked to the art of *mantiq* that had been taught and spread in the Islamic world since the network of archipelago scholars, who used to study primarily in Makkah and Madinah (Haramayn), became the door of Islamic scholarship transmission from the center, Haramayn to the periphery (Indonesia). In addition, the later development of *mantiq* learning in Indonesia cannot be separated from the growing educational institutions, mainly *pesantren* and other forms of religious education.

The discipline of *mantiq* in Indonesia as well as in the Islamic world plays a crucial role in the development of Islamic scholarship for the following reasons: First, *mantiq* is a scientific tool as Arabic and *uṣūl al-fiqh*. *Mantiq* serves a function of a rational tool to understand and justify some essential aspects of Islamic scholarship such as in the field of Islamic law (*fiqh*) and theology (*kalam*). Second, logic provides an intellectual means to argue against intellectual adversaries either Muslims or non-Muslims and to examine the validity of arguments widely used in the classical Islamic scholarly tradition.

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