

THE THEOLOGICAL BASIS OF SCIENCE: REDEFINING THE NOTION OF KHALĪFAH IN ISLAMIC EDUCATIONAL INSTITUTIONS

Jamaludin

Universitas Islam Negeri Mataram

je.abdullah@uinmataram.ac.id

Abstract: This paper focuses on analyzing the authentic meaning of *khalīfah* as stipulated in the Qur'an. Using a descriptive-exploratory qualitative method, this paper reveals the original meaning of *khalīfah* from three perspectives of *tafsir rinayah*, *dirayah*, and *isyarah* and correlates it with the role of Islamic educational institutions, particularly in relation to science education. Investigating the original meaning of *khalīfah* is critical for at least three reasons: (a) the meaning of *khalīfah* or *khalifah* has been distorted into merely political power; (b) Islamic education pays insufficient attention to the study of secular subjects in general; and (c) secular subjects, including science, are widely perceived as less important than so-called religious studies. An in-depth study of the notion of *khalīfah* suggests the opposite: knowledge of the universe and material things commonly deemed secular is in fact the very factor that makes human beings exceptional, even more glorious than the angels, and justifies why Adam was chosen as *khalīfah*. Secular subjects therefore carry the same spiritual weight as religious ones, if not more. The paper further argues that this reconceptualization has direct implications for curriculum policy and pedagogy in Islamic educational institutions, providing a stronger theological rationale for treating science education as an integral part of Islamic learning rather than a peripheral, secular add-on

Keywords: *khalīfah*, *angel*, *human being*, *science*, *religious education*, *secular subject*.

1. Introduction

Currently, madrasahs are increasingly expanding into the field of science and other general subjects, and a number of Islamic tertiary institutions have transformed into universities where secular subjects and religious studies are treated equally. However, due to the influence of several prominent Muslim thinkers Imam al-Ghazālī, for instance, regarded chemistry and medicine as non-religious and of lesser importance (al-Ghazali, n.d., p. 4) secular subjects continue to be seen as unimportant and unrelated to religious affairs. In other words, general subjects lack a strong philosophical or ideological rationale for study (Steenbrink, 1986, p. 226), and consequently receive scant attention compared with religious lessons. As a result, Islamic educational institutions, as well as their students, often lack sufficient spiritual-ideological justification for studying “non-religious” subjects.

At the same time, a proper explanation of the true meaning of khalīfah or khilāfah has long been obscured by misconception, or even outright aversion. So far, khalīfah has been closely associated with political leadership or power. In fact, khilāfah often loosely translated as “caliphate” is fundamentally a personal enterprise, whereas political leadership is a public one. The obligation of khalīfah is to personally engage in making life prosperous and civilized, based on a deep understanding of how nature works.

The idea of khalīfah or khilāfah has long been associated with political power (Glasse, 1989, p. 84; Sahabuddin et al., 2007, pp. 451-453). A khalīfah is often equated with a government leader, and khilāfah is construed as a polity developed into a multi-ethnic transnational empire in which the bond of faith and the rule of shari‘a constituted the basis for centralized government (Al-Rasheed et al., 2015, p. 1). Political movements such as pan-Islamism, which idealize a transnational bond in which small states fall under a centralized political government with Islamic law (shari‘a) as the source of legislation, have inevitably emerged from this idea (Al-Rasheed et al., 2015, p. 3).

The idea underlying the emergence of khilāfah was that division into small, separated territories signifies weakness, allowing individual or group interests to override common interests. Khilāfah thus reflects the deepest desire for the imagination of Muslim unity under a single banner. The logical implication of this idea is a vision of the unity of the entire Muslim ummah, in which the bond of faith supersedes ethnic, tribal, linguistic, and civic identity ties (Al-Rasheed et al., 2015, p. 3).

However, khalīfah according to the Qur’anic description functions as a representative of God in dealing with the universe. For that purpose, God equips human beings with knowledge of how nature works its laws, characteristics, and behavior so that they may cope with it properly (al-Zuhaili, 1997, pp. 125-126). This, in fact, corresponds with the scientific endeavor intended to uncover how nature works (Sammel, 2014, pp. 849–857; Poole, 1995).

Building on this premise, this paper examines the authentic meaning of *khalīfah* according to classical, authoritative exegetes from three different schools of *tafsīr* *riwāyah*, *dirāyah*, and *ishārah* before turning to the interpretations of leading Indonesian commentators. The remainder of this article proceeds as follows. Section 2 describes the method used to identify and analyze the relevant *tafsīr* literature. Section 3 presents the results and discussion, organized according to the three schools of *tafsīr* and the perspective of Indonesian commentators, followed by a discussion of the implications of these findings for Islamic educational institutions. Section 4 concludes the article and offers recommendations for Islamic education policy and practice.

2. Method

This study employs a descriptive-exploratory qualitative method, seeking to present a new paradigm for understanding the role of human beings as *khalīfah*. Primary data consist of classical *tafsīr* texts representing the three principal schools of Qur'anic exegesis *riwāyah* (transmission-based), *dirāyah* (reason-based), and *isyārah* (allusive/mystical) supplemented by the interpretations of prominent Indonesian Qur'anic commentators, Hamka and M. Quraish Shihab. Data were collected through documentary study of the primary *tafsīr* sources listed in the references, and analyzed descriptively by comparing how each school and commentator interprets the key terms *khalīfah* (vicegerent) and *asmā' kullahā* (the names of all things) in Sūrah al-Baqarah, verses 30-31. The resulting interpretations were then synthesized to identify points of convergence and divergence across the schools, and related back to the paper's central argument regarding the theological standing of scientific knowledge within Islamic education.

3. Results and Discussion

Allah asserted: "Behold, thy Lord said to the Angels: 'Indeed, I will make humans as *khalīfah* on earth'" (Qur'an, 2:30). With reference to various English translations of the Qur'an, the word *khalīfah* carries several meanings, e.g., vicegerent (Ali, 1989, p. 24; Unal, 2007, p. 74), one who inherits the earth (Asad, n.d., p. 31), deputy (Usmani, 2016, p. 6), or generations after generations (Al-Hilali & Khan, n.d., p. 7), among others. Almost none translate it as "caliph" in the sense of a Muslim leader or religious ruler (Pickthall, 1930). In fact, the role of *khalīfah* is a great honor bestowed by God upon human beings. "God never uses the word *innī jā'il* to introduce the description of creation, except in the case of man as *khalīfah* on earth. This is a great honor for humankind," affirmed Imam al-Qushayrī (n.d., p. 75).

These English translations of *khalīfah* are consistent with the explanations offered by the most authoritative exegetes of the Qur'an from three different schools of *tafsīr*, discussed in turn below.

a. Riwāyah Perspective

The word *khalīfah* in verse 2:30, according to the *athar* (report) cited by Imam al-Ṭabarī, means ‘one who changes one’s role’ or ‘one who will occupy and prosper the earth.’ To carry out this role, man is equipped with knowledge of all creatures that exist or affect the development of the earth (*asmā’ kullahā*), as explained in the following verse (al-Ṭabarī, 2000, p. 449).

In *Jāmi‘ al-Bayān ‘an Ta’wīl Ay al-Qur’ān*, the first and most comprehensive interpretation of the Qur’an, Imām al-Ṭabarī cites several *athar* on the meaning of *asmā’ kullahā* in verse 2:31. According to Ibn ‘Abbās, *asmā’ kullahā* denotes the names of all creatures angels, humans and their offspring, animals, the earth, plains, oceans, mountains, apes, and every other kind of creature; other *athar* even extend to crows, pigeons, and all kinds of birds, camels, cows, sheep, and very small things such as the sound of a passing wind (al-Ṭabarī, 2000, pp. 482-486). Although al-Ṭabarī himself limits the meaning of *asmā’* to humans and angels, he nonetheless appreciates Ibn ‘Abbās’s broader interpretation.

Ibn Kathīr understands *khalīfah* in much the same way: those who replace one another, generation after generation. The appointment of man as *khalīfah* thus applies not only to Adam but also to his children, grandchildren, and humankind as a whole (Ibn Kathir, 1999, p. 216). Because human beings will inhabit the earth for a long time, they are equipped with complete knowledge (*asmā’ kullahā*) so that they may manage the earth accordingly.

Ibn Kathīr’s interpretation of *asmā’ kullahā* largely repeats the information conveyed by Imam al-Ṭabarī. However, unlike al-Ṭabarī, who limits the meaning to humans and angels, Ibn Kathīr prefers a comprehensive meaning that includes all kinds of creatures, large and small, along with an explanation of their substance and nature, following the interpretation earlier attributed to Ibn ‘Abbās (Ibn Kathir, 1999, p. 223).

Imam al-Qurṭubī interprets the word *khalīfah* as one who replaces a predecessor; *khalīfah* can also be read as *mukhlaf*, the passive form (*maf’ūl*) of *khalafa*, referring to the one being substituted. Regarding the meaning of *asmā’*, al-Qurṭubī offers largely the same account as al-Ṭabarī and Ibn Kathīr, citing Ibn ‘Abbās’s opinion. He also cites Qatādah’s explanation that “Adam was taught the names of all beings and their benefits or functions,” though al-Qurṭubī considers al-Nuḥḥās’s formulation the most precise: “Adam was taught the names of all kinds of creatures, along with the benefits found in them” (al-Qurtubi, 1964, p. 282).

b. Dirāyah Perspective

One of the exegetes belonging to *ahl al-ra’yi* (the school of reasoned opinion) is Fakhr al-Dīn al-Rāzī. In *Mafātīḥ al-Ghayb*, al-Rāzī known for uniting rational theology and philosophy presents a detailed explanation of verse 2:31 from various angles. Like other commentators, al-Rāzī explains that whereas the previous verse

(2:30) states in general terms the reason for assigning human beings as *ḵhalīfah*, as a sign of divine honor later extended to all of Adam's descendants, verse 2:31 explains in detail the knowledge, or the names, of all kinds of creatures (al-Razi, 1999, p. 396). Al-Rāzī elaborates on this in considerable depth, emphasizing the need to understand the verse thoroughly.

The knowledge of 'the names' is not limited to names as such, since the word *ism* (pl. *asmā'*) may derive from either *simab* or *sumunw*, as an indicator (*'alāmab*), the word carries the sense of nature, characteristics, and uniqueness that reveal the substance (*mābiyah*) of any object. This confirms that the privilege of knowing the nature (*ḥaqā'iq*) of things is far greater than merely knowing their names (al-Razi, 1999, p. 397).

Unlike al-Ṭabarī, who limits the word *asmā'* to humans and angels, al-Rāzī along with a number of other scholars understands the pronoun *hum* in the expression *'aradāhum* as referring not only to intelligent beings (*'uqalā*) but to all non-intelligent things as well. It is common in Arabic for the more complete or superior referent (*al-kāmil*) to be emphasized over the lesser one (*al-nāqis*), without thereby negating the latter (al-Razi, 1999, p. 398).

Al-Rāzī further explains that the teaching of *asmā'* encompassed all the languages of various nations Arabic, Persian, Roman, and others. In a way that resonates with modern linguists such as Noam Chomsky (1996, p. 30) and Steven Pinker and Paul Bloom (1990, pp. 707–784), who argue that language is an innate faculty installed in the human mind, al-Rāzī held that language already existed before humankind itself came into being. In other words, language is *tawqifi* (God-given), not *wad'i* (man-made).

Adam's children were able to speak every language in the world. When Adam died, his descendants spread across the earth, and each group came to speak a single, particular language, which then became their prevailing tongue. Over generations and centuries, they forgot the other languages, retaining only the one they spoke. "This," wrote al-Rāzī, "caused the changes and differences among the languages of Adam's children" (al-Razi, 1999, p. 398).

Muhammad Asad, a Qur'an commentator writing for a Western, rationalist audience, held that 'knowledge of all the names' denotes the human faculty of logical definition and, by extension, of conceptual thought (Asad, n.d., p. 31). If so, language skills are implicitly included as well, since logical and conceptual thinking can only be exercised and measured once it is expressed in words or language.

c. Isyārah Perspective

Verse 2:30, according to Imam al-Qushayrī one of the most prominent *mufasssīr isbārī* (allusive exegetes) marks the beginning of God's hidden explanation of the wisdom behind assigning man as *ḵhalīfah* (al-Qushayrī, n.d., p. 74). Al-Qushayrī does not specifically define the word *ḵhalīfah*, but insists that the expression *innī jā'il*

is used only in this verse, precisely to indicate the uniqueness of Adam's creation (al-Qushayri, n.d., p. 75). For al-Qushayrī, this verse further asserts that glory derives more from knowledge than from ritual devotion. In contrast to the angels, whose distinction lies in the perfection of their *tasbiḥ* (glorification) and *taqdis* (sanctification), the distinction of human beings lies in their deep and thorough knowledge of the universe (al-Qushayri, n.d., p. 77). In short, as Ibn Kathīr also states, human superiority over the angels rests on the privilege of comprehensive knowledge (Ibn Kathir, 1999, p. 222).

Imam al-Qushayrī regards the word *al-asmā'* in verse 2:31 as general, denoting depth and comprehensiveness (*yaqtaḍi al-istiḡbrāq*); combined with *kull* ('all'), it conveys both wholeness (*al-shumūl*) and precision (*al-taḥqīq*) (al-Qushayri, n.d., p. 76). In other words, human knowledge of the universe is both inclusive and detailed.

Ibn 'Ujaybah, in *al-Baḥr al-Madīd*, another representative of the *isyārī* approach, explains that the word *khalīfah* in verse 2:30 refers to a being who represents God in ensuring that His decreed order is carried out, while *al-asmā' kullahā* is interpreted as knowledge of language, letters, and the uniqueness and usefulness of all things (Ibn 'Ujaybah, 1998, p. 94). Comprehension of the *asmā'* demonstrates human superiority over the angels: the glory of knowledge surpasses the glory of ritual worship (*'ibādah*) alone, and stands as the principal (*'umdaḥ*) prerequisite for carrying out the duty of *khalīfah* (Ibn 'Ujaybah, 1998, p. 94).

d. Perspective of Indonesian Commentators

In addition to the three classical schools of *tafsīr*, this section considers the views of two leading Indonesian exegetes, Hamka and M. Quraish Shihab, in order to situate the meaning of *khalīfah* within the belief and practice of Indonesian Muslims.

Literally, *khalīfah* means substitute. But substitute for whom, or for what, Hamka asks. After surveying various scholarly opinions at length, Hamka concludes that *khalīfah* refers to one who substitutes for Allah in taking care of and regulating the earth. Although Hamka mentions Abū Bakr's appointment as *khalīfah* after the Prophet's death, he clarifies that this usage refers to Abū Bakr's position as a substitute for the Prophet, not to political power in the narrower sense (Hamka, 2008, p. 204).

Commenting on the phrase *asmā' kullahā* in verse 2:31, Hamka simply states that God gave Adam knowledge of all things (Hamka, 2008, p. 204). Unlike other commentators, Hamka directs this meaning toward Adam's descendants rather than Adam himself, treating knowledge as a potential that manifests and develops according to human effort.

"Indeed," Hamka writes, "such abundant knowledge was not given to all people, nor all at once, but according to their sustained effort at inquiry. Only

sincerity and hard work can unlock the secret of God's knowledge" (Hamka, 2008, pp. 210-211).

Elsewhere, Quraish Shihab asserts that the task of *khalifah* is to make life on earth prosperous. As capital for carrying out this task, human beings are equipped with knowledge of the names, functions, and characteristics of objects such as fire and wind. Beyond this explanation of *asma'*, Shihab affirms that one of humankind's distinguishing privileges is the ability to express what comes to mind and to grasp language well enough to understand it (Shihab, 2007, pp. 145-147).

e. Implications for Islamic Educational Institutions and Science Education

Taken together, the three schools of *tafsir* and the two Indonesian commentators converge on a single point: the honor of *khalifah* is inseparable from knowledge of the created world. None of the exegetes surveyed above ground the dignity of *khalifah* in ritual worship alone, nor in political authority; rather, they consistently locate it in comprehensive knowledge of 'the names of all things' that is, of the nature, function, and characteristics of created beings. Understood this way, the disciplines that Islamic educational institutions often label "secular" physics, biology, chemistry, and the other natural sciences included in ordinary dictionary definitions of science as an organized body of knowledge about the physical and material world (Collins Dictionary, 2018) are not peripheral to Islamic learning. They are, in fact, part of the very knowledge that justifies the human being's appointment as *khalifah* over the earth.

This reconceptualization directly addresses the three concerns raised in the introduction. First, it dissolves the reduction of *khalifah* to political power: since the *tafsir* tradition itself frames *khalifah* as an epistemic and moral vocation rather than a political office, Islamic educational institutions have theological warrant to reclaim the term for pedagogical rather than political purposes. Second, it supplies precisely the "strong philosophical or ideological rationale" that has historically been missing from the study of secular subjects in Islamic schools (Steenbrink, 1986, p. 226): if knowledge of nature is what elevates humankind above the angels, then teaching the natural sciences is not a concession to modernity but a fulfillment of the Qur'anic mandate. Third, it reframes the relationship between religious and secular subjects from one of hierarchy to one of integration, consistent with contemporary arguments that scientific literacy is itself a human endeavor bound up with cultural, ethical, and even spiritual meaning-making (Sammel, 2014, pp. 849-857; Poole, 1995).

For curriculum policy, these findings suggest at least three practical directions. First, madrasahs and Islamic universities could explicitly frame science subjects from primary to tertiary level as part of the *khalifah* curriculum, rather than treating them as a secular addition bolted onto a religious core. Second, teacher-training programs in Islamic education could incorporate the *tafsir*-based argument

developed here as part of the theological-foundations course, equipping educators with a textually grounded rationale for teaching science with conviction rather than apology. Third, further research is needed to translate this theological argument into concrete instructional materials and assessment practices, so that the integration of science and religious studies moves beyond rhetorical gestures of “integration” toward a genuinely unified curriculum.

4. Conclusion

This study set out to recover the authentic meaning of *khalīfah* as presented in the Qur’an and elaborated by classical and contemporary exegetes. Across the schools of *riwāyah*, *dirāyah*, and *isyārah*, as well as in the interpretations of Hamka and Quraish Shihab, commentators of the Qur’an consistently agree that the duty of *khalīfah*, as stated in verses 2:30-31, is to bring about a prosperous life on earth. None of them ties this duty to political power in any narrow sense. Instead, the distinguishing glory of *khalīfah* lies in knowledge of the nature, character, and behavior of every created being, and in the capacity to put that knowledge to use for the benefit of humankind an enterprise that corresponds closely to the scientific endeavor of uncovering how nature, as God’s creation, actually works (Collins Dictionary, 2018; Poole, 1995, pp. 81-97).

From the Qur’anic perspective, then, God has equipped every human being with extraordinary abilities: an innate capacity to know, encompassing the whole created world, with the human brain as one of God’s greatest gifts to that end.

Understanding this authentic meaning of *khalīfah* can serve as a strong ideological and philosophical basis for reinforcing science education in Islamic institutions, from the primary to the tertiary level. This study, at the same time, counters the view that the urge to study science and other secular subjects in Islamic educational institutions despite the emerging spirit of science-religion integration is little more than an apologetic and worldly gesture, lacking firm ideological and spiritual grounding (Steenbrink, 1986, pp. 223-239). Future research might usefully test this theological rationale empirically, examining how it shapes teachers’ attitudes and students’ engagement with science in Islamic schools, and comparing its effects with more conventional, purely instrumental justifications for science education.

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