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Algorithmic Ethics and Qur'anic Tabayyun: Knowledge Authority and AI Bias in the Digital Age

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Abstract

*The development of artificial intelligence (AI) and digital algorithms has significantly changed the way knowledge is produced, distributed, and legitimized in the digital era. This situation raises ethical and epistemological challenges, particularly in religious contexts, where the truth and authority of information have a strong moral dimension. This study **aims** to formulate an integration between the principle of Qur'anic tabayyun with the concept of algorithmic ethics to build a more critical, transparent, and responsible approach to the use of AI. This study uses a literature study **approach** by analyzing scientific articles obtained through the Publish or Perish and Elsevier databases, with a publication range of 2015–2026. The analysis process was carried out through the stages of identification, selection, and synthesis of research relevant to the focus of the study. The **results** show that the integration of the concept of Qur'anic tabayyun into the algorithmic ethics framework is relevant to ensure the process of verification, caution, and responsibility in the management of information generated by AI. This research is expected to provide a conceptual contribution to the development of a technology ethics framework based on Qur'anic values while enriching the discourse on the transformation of the authority of religious knowledge in the era of artificial intelligence.*

Keywords: *Artificial Intelligence; Qur'anic Tabayyun; Algorithmic Ethics.*

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Introduction

The development of artificial intelligence (AI) and digital algorithms has brought about fundamental changes in the way knowledge is produced, selected, and legitimized in the digital era [1], [2]. Algorithms no longer function merely as supporting technical tools, but have transformed into active systems that filter, recommend, and frame information consumed by the public. In many contexts, algorithms are even perceived as new knowledge authorities that are considered objective, efficient, and free from subjective human interests [3], [4]. This perception encourages a tendency to passively accept information without a critical verification process by users. However, a number of critical studies show that AI systems are vulnerable to reproducing structural biases, representational inequalities, and power relations hidden in data and algorithmic design [5], [6]. This is due to the way AI works, which relies on statistical patterns and data optimization, rather than on ethical considerations, moral reflection, or normative values that guarantee the fairness of knowledge.

The phenomenon of artificial intelligence bias becomes increasingly problematic when confronted with educational content and religious narratives that have normative and authoritative dimensions [7], [8]. Recent studies have shown that generative AI not only reflects the biases inherent in its training data but also has the potential to reinforce and reproduce these biases through digital knowledge production mechanisms [9]. In this context, AI-based search algorithms, recommendation systems, and chatbots are capable of presenting religious information persuasively and seemingly convincingly to users [2]. However, this presentation is not always based on epistemic accuracy, sound scientific methodology, or a fair representation of the diversity of religious views. As a result, users tend to passively accept religious narratives without critical awareness of the sources, processes, and interests behind them [8], [10]. This condition confirms that AI bias is not merely a technical issue, but an epistemological issue that directly impacts the construction of truth, the legitimacy of interpretation, and the authority of knowledge in the digital space [6].

In the socio-religious context, several studies have shown that digital platform algorithms contribute significantly to strengthening the polarization of religious narratives in the public sphere [11]. Religious content that has high emotional appeal and is capable of triggering massive user engagement tends to be prioritized by algorithms, regardless of its scientific validity, methodological accuracy, and depth of substance [12]. This pattern encourages the dominance of simplistic, sensational, and confrontational religious narratives in the digital ecosystem. As a result, the authority of religious knowledge has the potential to

shift from scientific and moral authorities such as ulama, mufassir, and scientific institutions, to algorithmic systems that operate without ethical awareness and normative considerations [10]. In this situation, algorithms implicitly act as mediators and determinants of the legitimacy of religious discourse. This shift reinforces what is known as the crisis of knowledge authority in the digital era, where truth is increasingly determined by visibility and popularity, rather than by scientific authority and moral responsibility [13], [14].

Concerns about the dominance of algorithms in knowledge formation are also clearly reflected in global public perception. Various international surveys indicate increasing public anxiety about the potential for inaccurate, biased, and difficult-to-verify information generated by artificial intelligence systems [10]. These concerns relate not only to factual errors, but also to the long-term impact of AI on public trust and the quality of social decision-making [15], [16]. The low level of transparency in the working mechanisms of algorithms and limited user control over the information selection and recommendation process exacerbate this situation. In this situation, users are often in a passive position as consumers of information without adequate understanding of how the systems that influence their knowledge work [17]. Therefore, this condition emphasizes the urgency of the presence of ethical principles that can guide the process of receiving, verifying, and disseminating information responsibly in the digital era [18].

As research conducted by Muhammad Syafiq Abdul Aziz & Muhammad Izzul Syahmi Zulkepli shows that algorithmic bias in the application of artificial intelligence (AI) in credit scoring systems has the potential to give rise to practices that are not in line with sharia principles, such as unfairness in decision-making, discrimination against certain groups, and a lack of filtering of prohibited elements [19]. Then research by Jing Zhang, Wenlong Song, & Yang Liu highlighted that Generative artificial intelligence (AI) has a significant influence in shaping users' religious cognition through the content it generates. AI not only represents religious information, but also has the potential to reinforce users' existing cognitive biases, thus influencing how they understand religious doctrine and cultural diversity [20]. Furthermore, research conducted by Mainuddin et al. examines how AI can facilitate or hinder learning processes that have spiritual depth, thus providing direction for ethical technology integration without ignoring key pedagogical principles [21].

Based on the three studies presented, a research gap and an opportunity for novelty can be identified, which form the basis for the study entitled "Algorithmic Ethics and Qur'anic Tabayyun: Knowledge Authority and AI Bias in the Digital Age". The study by Muhammad Syafiq Abdul Aziz and Muhammad Izzul Syahmi Zulkepli highlights algorithmic bias in credit scoring

systems that has the potential to violate sharia principles, particularly regarding aspects of fairness and transparency in the Islamic finance industry. Meanwhile, the study by Jing Zhang, Wenlong Song, and Yang Liu emphasizes the influence of generative artificial intelligence on users' religious cognition and the potential for strengthening bias in understanding religious doctrine and cultural diversity. The study by Mainuddin et al. also places AI in the context of Islamic educational pedagogy by examining its benefits and limitations in supporting a learning process that has spiritual depth.

Although all three studies discuss the relationship between artificial intelligence, algorithmic bias, and religious values, existing studies are still sectoral and fragmented in the context of finance, religious cognition, and education. Therefore, there remains a significant research gap in comprehensively examining how algorithmic bias in AI affects the authority of religious knowledge in the digital space and how the principles of information verification in the Quran, particularly the concept of tabayyun, can be used as an ethical framework to assess and correct such bias. In this context, the novelty of this research lies in the effort to integrate the study of algorithm ethics with Quranic epistemology through the concept of tabayyun as a normative mechanism for assessing the validity of AI-generated information, while also offering a new perspective on the transformation of the authority of religious knowledge in the era of artificial intelligence.

In Islamic tradition, the principle of epistemic prudence has long been recognized and institutionalized through the concept of tabayyun. The Qur'an explicitly emphasizes the importance of tabayyun in QS. al-Hujurat: 6 as a mechanism for preventing misjudgments and social injustice stemming from unverified information [22]. This verse shows that epistemic errors are not viewed as merely an individual issue, but as a moral issue that impacts the social order. M. Quraish Shihab, in Tafsir al-Mishbah, emphasizes that tabayyun does not merely mean factual clarification, but also includes ethical dimensions, moral reflection, and social responsibility in the process of receiving and conveying information [23]. This interpretation positions tabayyun as an active epistemological attitude that demands the balanced involvement of reason and conscience. With this depth of meaning, tabayyun has strong conceptual relevance to be contextualized in responding to the complexity of information flows and knowledge authority in the digital era [24].

Based on this background, this study aims to identify how AI algorithms can shape the presentation of religious information that has the potential to influence how users understand religious teachings, while also assessing the extent to which such bias can shift the authority of religious knowledge in the digital era. Furthermore, this study also aims to examine the concept of tabayyun

in the Qur'an as an epistemological principle that emphasizes the importance of verifying and clarifying information before it is accepted as truth. M. Quraish Shihab's interpretation in Tafsir al-Mishbah is used as the main reference to explore the depth of the normative meaning of tabayyun. Through this study, this study seeks to reinterpret the concept of tabayyun as a relevant ethical framework to address the challenges of algorithm-based information production. Furthermore, this study aims to formulate an integration between the Qur'anic principle of tabayyun and the concept of algorithm ethics to build a more critical, transparent, and responsible approach to the use of AI. Thus, this study is expected to provide a conceptual contribution to the development of a technological ethics framework based on Qur'anic values while enriching the discourse on the transformation of the authority of religious knowledge in the era of artificial intelligence.

Method

This study uses a qualitative approach with a library research design that focuses on conceptual and interpretive analysis of the relationship between algorithmic bias in artificial intelligence and the concept of tabayyun from a Qur'anic perspective. This approach was chosen because the study aims to explore in-depth the ethical framework of algorithms through an Islamic epistemological perspective. This study not only analyzes the phenomenon of the development of artificial intelligence technology in the production and distribution of religious knowledge in the digital space, but also examines the concept of tabayyun as a principle of information verification in the Qur'an. Thus, this research design integrates studies of technology ethics, Qur'anic studies, and digital epistemological analysis to produce a comprehensive conceptual understanding of the authority of religious knowledge in the era of artificial intelligence.

The data sources in this study consist of primary and secondary data. Primary data comes from verses of the Qur'an related to the concept of tabayyun, specifically QS. al-Hujurat: 6, as a normative basis in the study of information ethics. The interpretation of the verse is carried out by referring to the work of M. Quraish Shihab, especially Tafsir al-Mishbah, to obtain a contextual and comprehensive understanding of the epistemological and ethical dimensions of tabayyun. Meanwhile, secondary data was obtained from various relevant academic literature, such as international journal articles, scientific books, and research reports discussing the ethics of artificial intelligence, algorithmic bias, digital epistemology, and the relationship between technology and religious knowledge. The literature was obtained from reputable academic databases such as Elsevier (ScienceDirect) and through searches using the Publish or Perish

application by entering keywords related to the main theme of the study, such as algorithmic bias, AI ethics, AI and religion, digital epistemology, and Qur'anic tabayyun. To maintain the relevance and novelty of the study, the literature used was limited to scientific publications within the 2015–2026 period, thus reflecting the latest developments in the study of artificial intelligence and technology ethics.

The data collection technique in this study was carried out through a documentation study of various literature sources relevant to the research topic. The data collection process began with a search for scientific articles using the Publish or Perish application connected to various academic databases, as well as a direct search on the Elsevier platform (ScienceDirect) to obtain journal articles of high academic quality. The literature search was conducted using keywords related to the research topic, such as algorithmic bias, AI and religion, AI ethics, and tabayyun in the Qur'an. The obtained literature was then selected based on several criteria, namely suitability to the research topic, journal quality, and the year of publication within the range of 2015–2026. Next, the selected data was classified based on the main themes of the research, namely algorithmic bias, the authority of religious knowledge in the digital space, and the concept of tabayyun in Qur'anic epistemology.

The data analysis in this study was conducted using a thematic and interpretive analysis approach. In the first stage, the researcher identified key themes related to algorithmic bias, the production of religious knowledge in the digital space, and the principles of information verification in the Qur'an. In the second stage, the researcher conducted an interpretive analysis of the concept of tabayyun through a study of tafsir (interpretation) to understand its epistemological meaning in the information verification process. The next stage was a conceptual synthesis by connecting findings from the literature on artificial intelligence and algorithm ethics with the epistemological values of the Qur'an. Through this analytical process, the study seeks to formulate an algorithmic ethics framework based on the concept of tabayyun as a normative approach to assessing the validity of information generated by artificial intelligence systems in the digital era.

Result and Discussion

Algorithmic Bias and Religious Knowledge Production

The development of artificial intelligence (AI) has fundamentally changed the way knowledge is produced, selected, and circulated in the digital public sphere [5], [25]. Algorithms no longer function merely as technical tools, but rather act as epistemic gatekeepers that determine what information is deemed relevant, credible, and worthy of public consumption [26], [27]. Through automated filtering mechanisms, AI shapes the knowledge landscape that users receive on a daily basis. In this context, algorithms possess epistemic power that was previously monopolized by scientific institutions and mainstream media. However, this power is often not accompanied by adequate transparency and accountability [28]. Therefore, AI cannot be understood as a completely neutral system, but rather as a technology that carries certain assumptions, values, and interests.

Various studies show that bias in artificial intelligence stems from the imbalance of training data, algorithmic optimization logic, and the economic and political interests of digital platforms [9], [29]. Unrepresentative data will produce unequal and discriminatory algorithmic outputs. Furthermore, algorithms' orientation towards efficiency and user engagement often comes at the expense of accuracy and depth of meaning [30]. This bias not only results in distorted social representations but also forms new hierarchies of knowledge that are not always visible to users. These hierarchies operate implicitly and are difficult to justify morally [31]. From an epistemological perspective, this condition triggers what is known as a crisis of epistemic authority, namely the weakening of humans' ability to independently assess the validity of knowledge [6].

It appears that research conducted by Gabino-Campos et al. states that AI's reliance on training data makes it vulnerable to reproducing biases contained in that data, which not only maintains but also has the potential to strengthen social inequalities in algorithm-based decision-making practices [32]. Similarly, research conducted by Akpinar & Fazelpour states that although digital technology continues to develop (AI), but understanding of how technology mediates and enables communication within epistemic communities is still relatively limited and needs to be criticized [33]. Then research by Adrienn Hadady-Lukács highlights that the use of artificial intelligence (AI) poses new challenges for employment law. Therefore, employment regulations need to be reviewed to ensure they continue to protect workers' rights and maintain a fair working environment [34].

Based on these various studies, it is clear that the development of artificial intelligence (AI) raises a number of important social, epistemic, and regulatory issues. AI's reliance on training data has the potential to reproduce and even reinforce biases that can deepen inequalities in algorithmic decision-making. Furthermore, understanding of how technology mediates communication within epistemic communities remains limited and requires more in-depth critical examination. Furthermore, the use of AI also raises new challenges within the legal framework, particularly in protecting workers' rights. Therefore, existing regulations need to be reviewed to ensure fairness and accountability in the application of this technology.

The crisis of epistemic authority becomes even more complex when it enters the religious realm [35]. Islamic knowledge, including interpretations, fatwas, and moral discourse, is now widely consumed through digital platforms that operate based on popularity and engagement algorithms. Religious authority is no longer solely determined by scientific chain of command, methodological competence, and institutional legitimacy. This shows that digital visibility, number of followers, and content performativity also determine religious authority in online spaces [36]–[38]. As a result, religious knowledge tends to be simplified to fit algorithmic logic. This condition increases the risk of discourse fragmentation and distortion of the meaning of Islamic teachings.

Research conducted by Zhang et al. shows that generative AI in the context of religious education has paradoxical potential, because in addition to being able to support personalized learning and expand cross-cultural understanding, this technology also risks reinforcing existing biases and prejudices [20]. Furthermore, research by Brumec et al. states that although AI can be utilized as an instrument to support spiritual engagement, ethical integration requires wisdom so as not to diminish the depth of meaning, relationality, and transformative capacity inherent in spirituality [39]. Then, research by Song et al. emphasizes that the development of ethical artificial intelligence is becoming increasingly important along with the rapid advancement of technology. In this case, religious and cultural values can provide an important perspective to identify limitations in approaches currently used in the development of robotics and AI [40].

The various studies above demonstrate that the use of artificial intelligence (AI) in the context of religious and spiritual education is paradoxical. On the one hand, AI can support more personalized learning and expand cross-cultural understanding and spiritual engagement. However, on the other hand, this technology also has the potential to reinforce bias and diminish the depth of meaning and relationality in spiritual experiences. Therefore, the ethical development of AI requires considering religious and cultural values as a crucial

framework to ensure that technological advancement remains aligned with moral, spiritual, and humanitarian dimensions.

In such situations, AI bias can no longer be understood as a purely technical issue, but rather as an epistemological and ethical one [41]. Algorithms have the ability to reinforce certain views while systematically excluding others. This process creates filter bubbles and deepens the polarization of religious discourse in digital spaces [18], [29]. When algorithms function as unquestioned knowledge authorities, users tend to accept information passively [16], [42]. The process of critical verification is often neglected because information is presented in a persuasive and convincing manner.

Thus, artificial intelligence bias and the crisis of digital knowledge authority cannot be addressed solely through technological approaches. Technical solutions without ethical foundations risk reinforcing existing epistemic problems. An epistemological and ethical framework is needed that can place technology within clear moral boundaries. In the Islamic context, tabayyun serves as a relevant and contextual Quranic principle to address these challenges. This principle enables the integration of critiques of modern technology with normative Islamic values. Thus, the search for truth in the digital age remains bound by ethical responsibility and social awareness.

Qur'anic Epistemology of Tabayyun

The concept of tabayyun in the Qur'an is one of the important principles in Islamic epistemology related to the verification of information [43]. This principle is explicitly stated in QS. al-Hujurat: 6 which emphasizes that every news that comes from a certain source must be checked for its truth before being accepted or used as a basis for decision making. This verse was revealed in a social context that emphasizes the importance of being careful in receiving information so as not to cause errors in judgment that could harm other parties [8], [23], [44]. Therefore, this verse not only functions as a guideline for communication ethics, but also as a methodological basis in the process of obtaining valid knowledge.

QS. al-Hujurat: 6 is a key verse in the Qur'an that emphasizes the importance of epistemic caution in receiving and disseminating information. This verse commands believers to conduct tabayyun when receiving news from parties whose credibility cannot be ascertained. This command aims to prevent errors in judgment that can lead to social injustice [1], [37]. Thus, the Qur'an positions the issue of information as a moral and social issue, not just a cognitive issue [23]. This principle emphasizes that epistemic errors do not only impact individuals, but can also affect the social order and relationships between

individuals. Therefore, QS. al-Hujurat: 6 can be understood as the normative foundation of the ethics of knowledge in Islam.

This normative affirmation is deepened by M. Quraish Shihab in Tafsir al-Mishbah through a contextual reading of the fatabayyanu command. According to him, this command cannot be reduced to merely technical and procedural factual clarification [23]. Tabayyun is understood as a comprehensive and multi-layered verification process [45]. This process includes assessing the credibility of the information source, understanding the social context of news delivery, and analyzing the potential impacts it may cause [46]. Within this framework, tabayyun is not only oriented towards factual truth, but also towards preventing social harm. Therefore, tabayyun contains both epistemological and ethical dimensions that link truth, justice, and moral responsibility [24].

Furthermore, Quraish Shihab highlights that one of the main causes of epistemic failure is the hasty attitude in receiving information (al-'ajalah) [23]. This attitude opens up space for the emergence of prejudice, misunderstanding, and injustice in social relations. In Shihab's view, the speed of receiving information without verification is a form of moral negligence that has wide impacts [23], [47]. This view has strong relevance to contemporary studies that show that the rapid and unverified flow of information in the digital era contributes to the formation of biased and problematic public opinion [5]. In this context, individuals are often trapped in the logic of instant information consumption. Therefore, tabayyun functions as a corrective mechanism against the tendency to receive information passively and unreflectively.

Another important dimension of QS. al-Hujurat: 6 is an affirmation that the subject of tabayyun is not only the bearer of news, but also the recipient of information [23]. This shows that Islam places active epistemic responsibility on the individual as the recipient of knowledge. Thus, truth is not entirely left to external authorities, but rather demands the involvement of critical awareness from each individual [48]. This perspective emphasizes the position of humans as morally responsible epistemic subjects. This understanding is in line with studies on the shift in religious authority in the digital era, where individuals increasingly play a role as the main actors in the process of selection, interpretation, and legitimization of religious knowledge [36], [37]. In this context, tabayyun becomes a principle that strengthens the critical literacy of the community regarding religious information.

Thus, QS. al-Hujurat: 6 in the interpretation of al-Mishbah emphasizes that tabayyun is a preventive and reflective principle of Qur'anic epistemology. This principle not only aims to ensure the accuracy of information, but also prevents detrimental social impacts resulting from epistemic errors [49]. Tabayyun

demands a balance between rationality, ethics, and social responsibility in the process of acquiring knowledge. This framework shows that Islam has an internal mechanism for managing the complexity of information. Therefore, tabayyun provides a strong normative foundation for rereading the dynamics of knowledge production and distribution in the modern era. This foundation becomes increasingly relevant when knowledge is mediated by digital technology that is laden with bias and hidden interests.

When linked to the development of artificial intelligence technology, the principle of tabayyun can be understood as an epistemological framework that encourages users not to passively accept information from digital systems. Instead, users are required to critically evaluate the source, context, and validity of the information generated by algorithms. Thus, the concept of tabayyun is not only relevant in the social context of classical societies but also holds strong significance in addressing epistemological challenges in the era of artificial intelligence and digital transformation.

Towards an Ethical Framework of AI Based on Tabayyun

Based on research findings on algorithmic bias and the principle of information verification in Qur'anic epistemology, this study proposes a conceptual framework for Tabayyun-Based AI Ethics Framework. This framework positions the concept of Tabayyun as a normative verification mechanism that can be used to evaluate the validity of information generated by algorithmic systems.

In the digital ecosystem, artificial intelligence systems operate through data processing, generating various forms of information for users. However, because algorithms rely on specific training data and statistical patterns, the resulting information is potentially biased. Therefore, an evaluation mechanism is needed that allows users to critically assess the veracity of such information. In this context, the concept of tabayyun can serve as an epistemological principle that emphasizes the importance of clarification, source verification, and caution in accepting information.

Conceptually, this ethical framework can be explained through the following stages:

1. Algorithmic Information Production

The first stage is the information production process by an artificial intelligence system. Algorithms process various digital data to generate content or answers that are then presented to users. At this stage, the AI system serves as the primary mediator in the distribution of information in the digital space.

2. Potential Algorithmic Bias

The second stage demonstrates that the information generated by algorithmic systems is not always neutral. Bias can arise from various factors, such as imbalanced training data, user preferences, or information distribution patterns on the internet. This bias can influence how religious information is perceived by the public.

3. Tabayyun Verification Process

The third stage is the core of the proposed ethical framework. In this stage, the principle of tabayyun is applied as a mechanism for verifying information. Users are encouraged to clarify information sources, compare them with credible references, and evaluate the context of information before accepting it as truth.

4. Ethical Use of AI in Religious Knowledge

The final stage is the ethical use of artificial intelligence in the process of seeking and disseminating religious knowledge. By applying the principle of tabayyun, users are no longer merely passive consumers of digital information but play an active role in ensuring that the information they receive has validity and epistemological integrity.

Overall, this conceptual framework suggests that the integration of Qur'anic values into technological ethics can provide a new approach to addressing the challenges of algorithmic bias in the era of artificial intelligence [50]. The principle of tabayyun is not only relevant in the context of social communication in Islamic societies, but can also function as an epistemological mechanism that encourages a critical attitude in dealing with increasingly complex digital information flows.

Based on the interpretation of QS. al-Hujurat: 6 in Tafsir al-Mishbah, tabayyun can be positioned as an Islamic epistemological principle that regulates how knowledge is acquired, verified, and morally accounted for [23]. This principle shows that the epistemic process in Islam is not value-neutral, but is always related to ethical and social responsibility. Tabayyun demands the subject's active involvement in the process of acquiring knowledge, not merely passive acceptance of available information. Within this framework, truth is not understood separately from the principles of justice and social welfare [23], [47]. True knowledge is not only factually accurate, but also that which does not cause harm to individuals and society. Therefore, tabayyun can be understood as an epistemic mechanism that integrates rationality, ethics, and social concern.

In classical Islamic tradition, tabayyun is generally understood in the context of interpersonal social relations, particularly in communication situations involving news carriers whose credibility is questionable [51]. This

understanding positions tabayyun as a communication ethic that functions to maintain social harmony. However, epistemologically, the principle of tabayyun does not depend solely on the personal identity of the information carrier. Its primary focus lies on the character of the knowledge source itself, such as its level of verifiability, transparency, and potential negative impacts [52]. Thus, tabayyun is principled and can be applied across contexts. This approach aligns with contemporary epistemological critiques of the claimed neutrality of modern knowledge sources, which often ignore the power relations and interests behind knowledge production [6], [53].

The subsequent development of digital technology has significantly shifted the structure of epistemic relations in society [2]. Knowledge is no longer solely conveyed by humans as conscious subjects, but is also produced, selected, and popularized by algorithmic systems that operate automatically and in a closed manner [54]. Algorithms determine what information is considered relevant, important, and worthy of public consumption. Various studies show that in this condition, algorithms function as new knowledge authorities that significantly influence how the public understands social and religious realities [9], [55]. In the context of digital Islam, this phenomenon is clearly visible in the shift in authority of religious interpretation and discourse to digital platforms based on popularity, visibility, and user engagement [37], [56]. As a result, the legitimacy of religious knowledge is increasingly determined by algorithmic logic, rather than by scientific authority.

In the face of these changes, tabayyun can be reinterpreted as a critical epistemic attitude towards algorithmic systems. The principle of caution emphasized in the Qur'an demands that information generated or mediated by artificial intelligence not be taken for granted [57]. Instead, such information must be examined rationally, contextually, and ethically. In this regard, tabayyun functions as a normative filter against the dominance of the logic of automation in knowledge production [24]. This approach aligns with contemporary discourses on algorithm ethics that emphasize the importance of transparency, accountability, and fairness in AI systems [5], [12]. Thus, tabayyun can serve as a conceptual bridge between Islamic ethics and critiques of algorithmic epistemology.

Furthermore, the ethical dimension of tabayyun, as emphasized by Quraish Shihab, demands that the knowledge verification process also consider its social impacts [23]. Truth is not judged solely on the basis of data suitability, but also on its moral and social implications [58]. In an algorithmic context, this means that the use of AI in the production and distribution of religious knowledge must be criticized if it has the potential to reinforce bias, polarize discourse, and create a crisis of scientific authority [59]. When technology

magnifies the inequality of representation and simplifies the complexity of religious meaning, tabayyun functions as a corrective principle [57]. Therefore, tabayyun serves not only as a cognitive principle but also as an ethical evaluative framework. This framework closely links the validity of knowledge and moral responsibility.

Through this broadening of meaning, tabayyun can be understood as an adaptive and contextual principle of Islamic epistemology. This principle does not lose its normative Quranic roots, but instead gains new relevance in the face of the dominance of algorithms and the crisis of knowledge authority in the digital era. Tabayyun demonstrates the ability of Islamic values to engage in dialogue with contemporary epistemological challenges. By positioning humans as responsible epistemic subjects, tabayyun rejects the total surrender of knowledge authority to non-human systems. Within this framework, technology is positioned as an epistemic tool, not as the final arbiter of truth. Therefore, tabayyun offers an important contribution to the development of a just and just ethics of knowledge and religious digital literacy.

Implications for Religious Authority in the Digital Age

This discussion demonstrates that developments in artificial intelligence technology have the potential to change the structure of religious knowledge authority in society. In the digital era, people increasingly obtain religious information through technology platforms that utilize algorithmic systems. This situation could shift the role of traditional sources of authority toward digital systems based on data and algorithms.

In this situation, the principle of tabayyun (verification) becomes increasingly important as an epistemological mechanism that encourages people to be critical in receiving information. By applying the principle of information verification taught in the Quran, technology users can be more discerning in assessing the accuracy of religious information generated by artificial intelligence. Therefore, the integration of Quranic values such as tabayyun plays a crucial role in maintaining the integrity of religious knowledge amidst the development of digital technology.

In an algorithmic context, tabayyun is no longer limited to verifying news between individuals, but has expanded to include critical evaluation of technology-based knowledge production systems [60]. This expanded meaning requires an awareness that information sources are not always personal, but rather encapsulated within complex computational systems. Tabayyun demands that AI users and developers question data sources, the logic of algorithm selection, and the interests behind system design [61]. This process requires epistemic reflection on how knowledge is constructed and disseminated by

machines [62]. This approach aligns with contemporary AI ethics principles that emphasize transparency, accountability, and fairness in machine-based decision-making [5], [12]. Thus, tabayyun serves as a principle of ethical oversight of algorithmic systems.

Furthermore, the reinterpretation of tabayyun reaffirms the position of humans as the primary epistemic subject [63]. In Islam, the search for truth cannot be left entirely to non-human systems that operate without moral awareness and ethical considerations [64]. Tabayyun presupposes the active involvement of reason and conscience in assessing the information received. This principle rejects the notion that technology can completely replace the role of humans in determining the validity of knowledge [65]. In addition, tabayyun links truth with social responsibility, so that every epistemic decision must consider its impact on society [66]. In this case, tabayyun functions as a normative correction to the tendency of epistemic delegation, namely the uncritical surrender of knowledge authority to algorithms [6].

In contemporary Islamic studies, the tabayyun framework can also serve as an ethical foundation for the use of AI in the production of religious knowledge [67]. This includes the practice of digital interpretation, platform-based da'wah, and the dissemination of Islamic discourse through social media [64], [68]. Without the principle of tabayyun, technology has the potential to reinforce algorithmic bias and simplify the complexity of the meaning of Islamic teachings [69], [70]. Furthermore, the absence of epistemic caution can weaken the authority of scholarship based on academic methodology and tradition. With tabayyun, technology is positioned as an epistemic tool, not as an authoritative source of truth. This principle ensures that the use of AI remains subject to the values of justice, benefit, and moral responsibility [36], [56].

Thus, this principle demonstrates that the Qur'an provides adaptive and contextual epistemological values in addressing the challenges of digital civilization. Tabayyun enables a constructive dialogue between the normative heritage of Islam and the challenges of cutting-edge technology. Through this approach, AI ethics is understood not merely as a technical issue, but as a moral and humanitarian one. This reinterpretation also affirms the contribution of Islamic studies to the global discourse on technological ethics. Thus, tabayyun emerges as a relevant Qur'anic principle to guide the responsible and equitable use of AI.

Theoretical Contribution

This research contributes theoretically by strengthening the conceptual understanding of algorithm ethics and Quranic interpretation through a systematic synthesis of various empirical findings published between 2015 and 2026. Through a structured literature analysis, this research not only identifies key patterns in previous research but also integrates various theoretical perspectives scattered throughout the literature into a more comprehensive framework. Thus, this research enriches academic discourse by demonstrating conceptual relationships between the main variables discussed and confirming the relevance of the theories used in explaining the phenomena studied. Furthermore, this study also opens up space for the development of conceptual models that can be used as a basis for further empirical research, thereby contributing to expanding theory development and strengthening the academic foundation in the field of study studied.

Research Limitations

This study has several limitations that should be considered when interpreting the results. First, the data sources used in this literature review were limited to journals obtained through the Publish or Perish and Elsevier databases, with publication years ranging from 2015 to 2026. This limitation allows for the possibility of other relevant literature not included in the analysis.

Second, this research uses a literature review approach, so the findings depend on the quality and depth of the discussion in the previous research analyzed. Therefore, this research does not involve direct empirical data collection in the field.

Third, the research focused only on the main themes related to the predetermined research topic. This resulted in several other aspects that might be relevant to the research topic not being discussed in depth.

These limitations are important considerations in understanding the scope and contribution of this research.

Recommendations for Further Research

Based on the limitations outlined, several recommendations can be put forward for further research. First, future research is advised to expand the literature sources by using more academic databases to ensure a more comprehensive study.

Second, further research could combine a literature review approach with empirical research, such as surveys, interviews, or case studies. This approach is

expected to provide a more in-depth understanding of the phenomenon being studied.

Third, subsequent research can also explore other variables or factors related to the research topic so that it can enrich theoretical and practical understanding in the same field of study.

Thus, further research is expected to be able to complement and develop the findings produced in this research.

Conclusion

The phenomenon of bias in artificial intelligence (AI) remains prevalent and has the potential to influence the formation and authority of digital knowledge in society. This situation demonstrates that the use of AI cannot be separated from strong ethical considerations, including the importance of religious principles in responding to and managing the information generated by this technology. In this context, the integration of the Qur'anic concept of tabayyun into an algorithmic ethics framework becomes relevant as an effort to ensure verification processes, prudence, and responsibility in the use of information. This approach also reflects a trend toward integrating various theoretical perspectives and methodological approaches to produce a more comprehensive, systematic, and ethically grounded understanding of the development and use of AI.

Author Contributions

Jumarni Fepriani: Conceptualization, Methodology, Writing – review & editing, Supervision, Project administration. **Dwi Ratnasari**: Methodology, Writing – review & editing, Investigation.

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Conflict of Interest

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