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RECONSTRUCTING ISLAMIC THOUGHT IN THE AGE OF ARTIFICIAL INTELLIGENCE: AN EPISTEMOLOGICAL ANALYSIS

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Abstract

The emergence of Artificial Intelligence (AI) presents unprecedented epistemological challenges and opportunities for Islamic thought. This conceptual paper examines the reconstruction of Islamic epistemology in response to AI technologies, exploring how traditional Islamic knowledge frameworks can engage with, critique, and contribute to contemporary AI discourse. Through a comprehensive epistemological analysis, this study investigates the intersection of Islamic intellectual tradition rooted in revelation (waḥy), reason (ʿaql), and empirical observation (mushāhadah) with AI's computational paradigms of knowledge acquisition and processing. The paper analyzes key epistemological tensions including the nature of consciousness and intelligence, ethical frameworks for autonomous systems, and the preservation of human agency in an increasingly automated world. Drawing on classical Islamic scholarship and contemporary technological developments, this research proposes a framework for Islamic engagement with AI that maintains theological integrity while embracing technological innovation. The findings suggest that Islamic epistemology offers distinctive insights on knowledge validation, ethical reasoning, and human dignity that can enrich global AI ethics discourse while addressing concerns about technological determinism and the displacement of human judgment. This reconstruction is essential not only for Muslim communities navigating technological transformation but also for contributing Islamic intellectual resources to broader conversations about the future of humanity in the age of intelligent machines.

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Introduction (12pts)

The rapid advancement of Artificial Intelligence (AI) technologies has precipitated fundamental questions about knowledge, consciousness, intelligence, and the nature of human existence itself. As AI systems demonstrate increasingly sophisticated capabilities in pattern recognition, natural language processing, decision-making, and even creative tasks, they challenge long-held assumptions about what constitutes intelligence and understanding (Russell & Norvig, 2021; Bryson, 2020). For Islamic intellectual tradition, which has historically engaged deeply with epistemological questions through its rich philosophical and theological heritage, the emergence of AI presents both profound challenges and unique opportunities. Islamic epistemology, grounded in a comprehensive worldview that integrates revelation, reason, and empirical observation within a theocentric framework, offers distinctive perspectives on fundamental questions raised by AI: What is the nature of knowledge and intelligence? Can machines truly 'know' or 'understand'? What ethical frameworks should govern autonomous systems? How do we preserve human dignity and agency in an age of intelligent machines? (Kamali, 2019; Hallaq, 2013).

The reconstruction of Islamic thought in the age of AI is not merely an academic exercise but a practical necessity for Muslim communities worldwide. As AI technologies permeate every aspect of contemporary life from healthcare and education to governance and social relationships Muslims must develop coherent frameworks that allow them to engage critically and constructively with these technologies while maintaining fidelity to Islamic principles (Brey et al., 2023; Ali, 2023). This reconstruction requires a careful examination of how traditional Islamic epistemological categories such as the distinction between ʿilm (knowledge) and maʿrifah (gnosis), the role of ʿaql (reason) in Islamic jurisprudence, and the concept of fiṭrah (primordial nature) can inform contemporary debates about machine learning, artificial general intelligence, and algorithmic decision-making. Moreover, it necessitates an investigation of how Islamic ethical principles, particularly the objectives of Islamic law (maqāṣid al-sharīʿah), can contribute to emerging global frameworks for AI governance and ethics (Auda, 2008; Kamali, 2008).

The urgency of this epistemological reconstruction is heightened by the fact that AI is not simply a neutral tool but embodies specific philosophical assumptions about knowledge, rationality, and human nature. Many contemporary AI systems are built upon epistemological frameworks rooted in Western philosophical traditions particularly empiricism, utilitarianism, and various forms of materialism that may conflict with Islamic metaphysical and ethical commitments (Mohamed et al., 2020; Abdurahman et al., 2023). For instance, the dominant paradigm of machine learning, which treats intelligence primarily as pattern recognition and statistical inference, reflects a particular understanding of knowledge that differs significantly from the Islamic emphasis on purposeful understanding, moral wisdom, and the integration of knowledge with virtuous action (Rogler, 2023). Without critical engagement and reconstruction, Muslim societies risk uncritically adopting AI systems that may undermine Islamic values or perpetuate forms of epistemic injustice.

This paper contributes to the emerging field of Islamic technology studies by providing a systematic epistemological analysis of the relationship between Islamic thought and AI. While previous scholarship has explored various aspects of technology from Islamic perspectives, relatively little attention has been paid to the fundamental epistemological questions raised by AI (Pistrui, 2021; Echchabi & Azouzi, 2017). This study addresses this gap by examining how Islamic epistemological frameworks can be reconstructed to engage productively with AI while preserving their distinctive features. The analysis is organized around three central questions: How can classical Islamic epistemological categories be applied to understanding artificial intelligence? What distinctive contributions can Islamic thought make to contemporary AI ethics discourse? What frameworks can enable Muslim communities to navigate the epistemological challenges posed by AI while maintaining theological integrity and ethical authenticity?

Research objectives

This conceptual paper aims to reconstruct Islamic epistemological frameworks in light of contemporary AI developments. The specific objectives are:

1. To examine the compatibility and tensions between classical Islamic epistemological categories (waḥy, ʿaql, mushāhadah) and contemporary AI paradigms of knowledge acquisition, representation, and processing, thereby identifying areas where Islamic thought must be reconstructed or reinterpreted to engage productively with AI technologies.
2. To analyze the distinctive contributions that Islamic ethical and epistemological principles particularly maqāṣid al-sharīʿah, the concept of human khilāfah (vicegerency), and Islamic virtue ethics can make to global discourse on AI ethics, governance, and the future of human-machine interaction.

To propose a comprehensive framework for Islamic engagement with AI that maintains theological and epistemological integrity while embracing technological innovation, thereby enabling Muslim communities to navigate the challenges and opportunities presented by artificial intelligence in ways that are both authentically Islamic and practically relevant to contemporary technological realities.

Literature Review

Islamic Epistemology: Foundations and Classical Framework

Islamic epistemology is grounded in a comprehensive worldview that recognizes multiple sources of knowledge, each with distinct characteristics and appropriate domains of application. The Qur'an, as divine revelation (waḥy), constitutes the primary and infallible source of knowledge about ultimate reality, moral truths, and the purpose of human existence (Nasr, 1993; Al-Attas, 1995). This revelatory knowledge is complemented by rational inquiry (ʿaql), which classical Islamic scholars considered essential for understanding both religious texts and the natural world. The medieval Islamic philosophical tradition, represented by thinkers such as Al-Farabi, Ibn Sina (Avicenna), and Ibn Rushd (Averroes), developed sophisticated epistemological frameworks that integrated Qur'anic revelation with Aristotelian logic and Neo-Platonic philosophy (Adamson, 2016; Griffel, 2021). These frameworks distinguished between different types of knowledge including sensory perception (ḥiss), rational deduction (ʿaql), and intuitive insight (ḥads) and specified the conditions under which each type yields certain knowledge. Islamic legal theory (uṣūl al-fiqh) further refined these epistemological distinctions, developing elaborate methodologies for deriving legal rulings from textual sources through analogical reasoning (qiyās), juristic preference (istiḥsān), and consideration of public interest (maṣlaḥah) (Kamali, 2003; Hallaq, 1997).

Contemporary Developments in Islamic Epistemology

Contemporary Islamic scholarship has witnessed renewed interest in epistemological questions, driven partly by encounters with modernity and partly by internal developments within Islamic intellectual tradition. Recent work has sought to reconstruct Islamic epistemology in ways that address contemporary challenges while remaining faithful to classical sources (Hallaq, 2013; El-Bizri, 2008). Scholars such as Taha Jabir al-Alwani and AbdulHamid AbuSulayman have advocated for the 'Islamization of knowledge,' arguing that Muslims must develop distinctively Islamic frameworks for understanding various sciences rather than uncritically adopting Western epistemological assumptions (Al-Alwani, 1995; AbuSulayman, 1989). This project has generated considerable debate about the nature of Islamic epistemology and its relationship to modern science. More recently, scholars like Jasser Auda have proposed 'systems-thinking' approaches to Islamic legal theory, emphasizing holistic, purpose-oriented reasoning over formalistic rule application (Auda, 2008). These developments reflect broader trends

within Islamic thought toward methodological renewal and critical engagement with contemporary intellectual challenges.

Artificial Intelligence: Epistemological Foundations

Artificial Intelligence, as both a scientific discipline and technological phenomenon, embodies specific epistemological commitments about the nature of intelligence, knowledge, and cognition. The dominant paradigm in contemporary AI machine learning, particularly deep learning treats intelligence primarily as statistical pattern recognition and treats knowledge as encoded patterns in neural network weights (LeCun et al., 2015; Goodfellow et al., 2016). This approach reflects a broadly empiricist epistemology that prioritizes data-driven learning over explicit rule-based reasoning. However, this paradigm has faced criticism from various quarters. Critics argue that statistical pattern matching, while powerful for specific tasks, lacks genuine understanding, fails to capture the semantic content of knowledge, and cannot account for key aspects of human intelligence such as causal reasoning, common sense, and abstract conceptual thought (Marcus & Davis, 2019; Pearl & Mackenzie, 2018). More recently, concerns about AI's 'black box' nature have raised epistemological questions about transparency, accountability, and the validation of machine-generated knowledge (Lipton, 2018; Rudin, 2019).

Islamic Perspectives on Technology and Ethics

Islamic scholarship has a long tradition of engaging with technological developments from ethical and theological perspectives. Classical jurists addressed questions about the permissibility and proper use of various technologies, developing principles that continue to inform contemporary Islamic bioethics and technology assessment (Padela & Mohiuddin, 2015; Ghaly, 2012). In recent years, scholars have begun to explore specifically Islamic approaches to emerging technologies, including AI. Some have emphasized the principle of maqāṣid al-sharīʿah (objectives of Islamic law) as a framework for evaluating technologies based on whether they promote fundamental values such as preservation of life, intellect, dignity, and faith (Auda, 2008; Kamali, 2008). Others have focused on Islamic virtue ethics, arguing that technology assessment should consider not only consequences but also how technologies shape human character and moral agency (Mohamed et al., 2020; Brey et al., 2023). Recent empirical research has examined Muslim attitudes toward AI, revealing both optimism about AI's potential benefits and concerns about ethical risks (Ali, 2023; Abdurahman et al., 2023).

Gaps in Literature and Study Contribution

Despite growing interest in both Islamic epistemology and AI ethics, a significant gap exists in scholarship that systematically examines the intersection of these two domains. While some scholars have discussed Islamic perspectives on specific AI applications or ethical concerns, there has been little sustained analysis of the fundamental epistemological questions raised by AI from Islamic viewpoints (Pistrui, 2021; Rogler, 2023). Existing work tends to focus on applied ethical issues—such as algorithmic bias or autonomous weapons without addressing deeper questions about the nature of machine knowledge, the relationship between computational and human intelligence, or how Islamic epistemological categories might need to be reconstructed in light of AI. This study addresses these gaps by providing a systematic epistemological analysis that examines both compatibility and tension between Islamic and AI paradigms, identifies distinctive Islamic contributions to AI ethics discourse, and proposes frameworks for reconstructing Islamic thought in ways that are responsive to AI challenges while remaining theologically authentic.

Methodology

This study employs a conceptual analysis methodology appropriate for epistemological and philosophical inquiry. As a concept paper, it does not involve empirical data collection but rather engages in systematic conceptual analysis, critical evaluation, and theoretical synthesis to address its research questions.

Conceptual Framework Development

The study develops a comprehensive conceptual framework by examining classical and contemporary Islamic epistemological sources alongside technical literature on AI and machine learning. Primary sources include the Qur'an, Hadith collections, and works by classical Islamic philosophers and jurists (particularly Al-Ghazali, Ibn Sina, Ibn Rushd, and Al-Shatibi) whose epistemological insights remain influential in contemporary Islamic thought. Secondary sources include modern Islamic scholarship on epistemology, technology, and ethics, as well as philosophical and technical literature on AI. The analysis identifies key epistemological categories in Islamic thought (such as waḥy, ʿaql, mushāhadah, maʿrifah) and examines their potential application to understanding artificial intelligence.

Comparative Epistemological Analysis

The study conducts systematic comparison between Islamic and AI epistemological frameworks, identifying areas of compatibility, tension, and potential mutual enrichment. This comparative analysis examines several key dimensions: theories of knowledge and intelligence, methodologies for knowledge acquisition and validation, relationships between formal/symbolic and intuitive/experiential knowledge, roles of explanation and understanding versus predictive accuracy, and ethical frameworks for evaluating knowledge claims and intelligent action. The analysis employs both 'weak' comparison (identifying similarities and differences) and 'strong' comparison (exploring how each tradition might critique or enrich the other).

Synthetic Framework Construction

Building on the conceptual framework and comparative analysis, the study synthesizes insights into a coherent framework for Islamic engagement with AI. This synthetic framework addresses three levels: epistemological (how Islamic concepts of knowledge relate to AI), ethical (how Islamic moral principles can inform AI development and governance), and practical (how Muslim communities can navigate AI challenges while maintaining Islamic authenticity). The methodology acknowledges its limitations as conceptual analysis, recognizing that practical validation through case studies and empirical research will be necessary for full assessment of the proposed frameworks.

Discussion

Islamic Epistemological Categories and Artificial Intelligence

The application of Islamic epistemological categories to artificial intelligence reveals both illuminating parallels and significant tensions. The Islamic distinction between ʿilm (knowledge as information) and maʿrifah (deep understanding or wisdom) offers a useful framework for analyzing different levels of machine intelligence. Current AI systems excel at ʿilm in its limited sense processing vast quantities of information, recognizing patterns, and making predictions based on statistical correlations. However, they arguably lack maʿrifah, which in Islamic thought involves not merely knowing facts but understanding their significance, context, and implications within a broader framework of meaning and purpose (Al-Attas, 1995). This distinction helps explain persistent concerns about AI's lack of 'true understanding' despite impressive performance on specific tasks.

The role of ʿaql (reason) in Islamic epistemology provides another valuable lens for analyzing AI. Classical Islamic scholars viewed ʿaql not merely as logical computation but as a faculty that grasps

universal principles, recognizes causal relationships, and makes judgments about goodness and truth (Griffel, 2021). While AI systems employ formal logic and mathematical reasoning, their 'reasoning' is fundamentally different from human rational judgment in several respects. First, AI reasoning lacks intentionality the 'aboutness' that characterizes human thought. Machine learning models process input-output relationships without genuine grasp of what these symbols represent. Second, AI systems lack what Islamic philosophers called 'first principles' (awā'il) self-evident truths that serve as foundations for reasoning. Third, AI lacks the evaluative dimension of ʿaql that enables humans to judge not just logical validity but also moral and practical wisdom (Marcus & Davis, 2019).

The Islamic concept of fiṭrah the innate human disposition toward truth, goodness, and recognition of the divine highlights a fundamental difference between human and machine intelligence. In Islamic thought, knowledge is not merely information processing but involves moral discernment rooted in the human fiṭrah. This raises profound questions about whether machines, lacking fiṭrah, can engage in truly moral reasoning or whether their ethical decision-making will always be limited to optimization based on externally programmed objectives (Mohamed et al., 2020). The concept of fiṭrah suggests that genuine moral understanding requires not just logical processing but a disposition toward the good that is intrinsic to human nature—a characteristic that may be fundamentally non-programmable.

Maqāṣid al-Sharīʿah as Framework for AI Ethics

The maqāṣid al-sharīʿah (objectives of Islamic law) framework offers a distinctive and potentially transformative approach to AI ethics. Traditionally, Islamic jurists identified five essential objectives that Islamic law aims to protect: religion (dīn), life (nafs), intellect (ʿaql), lineage/dignity (nasl), and property (māl) (Al-Shatibi, 2006). Contemporary scholars have expanded this framework to include additional objectives such as human dignity, justice, and freedom (Auda, 2008). When applied to AI, the maqāṣid framework provides a comprehensive ethical evaluation criterion that goes beyond narrow utilitarian calculations or rights-based approaches that dominate Western AI ethics discourse.

The maqāṣid framework emphasizes preservation of human intellect and rational capacity as a fundamental objective. This has important implications for AI development. Technologies that diminish human cognitive capabilities, create intellectual dependency, or undermine critical thinking would be problematic from a *maqāṣid* perspective, regardless of their efficiency gains or economic benefits (Kamali, 2008). This suggests a more cautious approach to AI automation than purely economic considerations would indicate, particularly in domains like education where preservation of human intellectual development is paramount. Similarly, the *maqāṣid* emphasis on human dignity (karāmah) provides strong grounds for rejecting AI applications that instrumentalize human beings, violate privacy, or perpetuate discrimination—even when such applications might generate economic value or security benefits.

The maqāṣid framework also highlights collective welfare (maṣlaḥah ʿāmmah) alongside individual interests, offering a more communitarian approach than individualistic Western frameworks. This has implications for AI governance, suggesting that AI development should be evaluated not just in terms of individual rights or market efficiency but in terms of its impact on social cohesion, community wellbeing, and collective flourishing (Brey et al., 2023). The framework's hierarchical structure distinguishing between necessities (ḍarūriyyāt), needs (ḥājiyyāt), and refinements (taḥsīniyyāt) also provides a principled way to prioritize competing values when they conflict, something that many secular ethical frameworks struggle to achieve.

Human Agency, Khilāfah, and the Limits of Automation

The Islamic concept of human beings as khalīfah (vicegerents) on earth carries profound implications for understanding human-AI relationships. In Islamic thought, humans are entrusted with stewardship over creation, a responsibility that requires active moral agency, judgment, and accountability before

God (Qur'an 2:30). This theological anthropology suggests inherent limits to what should be delegated to autonomous systems, even when those systems are technically capable of performing certain tasks (Rogler, 2023). Decisions that involve moral judgment, particularly those affecting human dignity and fundamental rights, arguably require human deliberation and cannot be entirely delegated to algorithms no matter how sophisticated without compromising the very nature of human khilāfah.

This framework challenges the technological determinism often implicit in AI discourse, which treats automation as inherently progressive and assumes that any task that can be automated should be automated. From an Islamic perspective, automation is not an end in itself but must be evaluated in terms of whether it enhances or diminishes human capacity to fulfill the responsibilities of khilāfah (Pistrui, 2021). AI systems that genuinely augment human capabilities, extend human reach, or free humans from drudgery to focus on higher pursuits can be affirmed. However, automation that displaces human judgment in domains requiring moral discernment, that creates structures of dependency undermining human agency, or that obscures lines of moral accountability becomes theologically problematic.

The emphasis on accountability (ḥisāb) in Islamic theology also raises important questions about algorithmic decision-making. In Islamic thought, humans will be held accountable for their choices and actions in the Hereafter. This creates a theological imperative for transparency and explicability in decision-making systems (Ali, 2023). 'Black box' AI systems that make consequential decisions without clear explanations are problematic not just for practical or legal reasons, but because they obscure moral accountability. If humans cannot understand or explain how decisions were made, they cannot take proper moral ownership of those decisions a fundamental requirement of Islamic ethical life.

Epistemological Reconstruction: Toward Islamic AI Frameworks

Based on the analysis above, this study proposes several key elements of a reconstructed Islamic epistemological framework for engaging with AI. First, Islamic thought should maintain the distinction between computational intelligence and comprehensive human intelligence while recognizing AI's value in specific domains. This requires rejecting both uncritical AI enthusiasm and reactive technophobia in favor of nuanced evaluation based on *maqāṣid* principles (Abdurahman et al., 2023). Second, Islamic epistemology should emphasize explainability and transparency as not merely technical requirements but as moral and theological imperatives rooted in concepts of accountability and stewardship. This suggests Muslims should advocate strongly for interpretable AI systems and resist purely black-box approaches.

Third, Islamic thought should contribute to global AI ethics discourse by articulating how revelation-informed moral frameworks can enrich predominantly secular approaches. Rather than retreating into isolation, Muslim scholars and technologists should actively participate in shaping AI governance frameworks, bringing distinctive Islamic insights about human dignity, communal welfare, and the purposiveness of knowledge to these conversations (Mohamed et al., 2020). Fourth, Muslim communities should invest in developing AI systems that embody Islamic values, not just react to Western-developed technologies. This includes developing AI applications for Qur'anic studies, Islamic education, and solving problems facing Muslim-majority societies, as well as ensuring Muslim participation in technical AI research and development.

Finally, this reconstruction requires institutional support including Islamic ethics boards for AI research, integration of AI ethics into Islamic education curricula, and creation of frameworks for Islamic technology assessment analogous to Islamic bioethics committees. The goal is not to create a separate 'Islamic AI' disconnected from broader technological developments, but rather to ensure that Islamic epistemological and ethical insights inform how Muslims engage with, critique, develop, and deploy AI technologies in ways that are both theologically authentic and practically relevant to contemporary realities (Echchabi & Azouzi, 2017).

Conclusion

This paper has examined the reconstruction of Islamic thought in the age of Artificial Intelligence through a comprehensive epistemological analysis. The study demonstrates that Islamic epistemological frameworks, while developed in pre-computational contexts, offer valuable resources for understanding and critiquing contemporary AI technologies. The distinction between ʿilm and maʿrifah, the role of ʿaql as moral-rational faculty, and the concept of fiṭrah all provide important conceptual tools for analyzing the nature and limits of machine intelligence. These concepts help explain why AI systems, despite impressive capabilities in narrow domains, lack the comprehensive understanding, moral discernment, and purposeful intentionality that characterize human intelligence.

The maqāṣid al-sharīʿah framework emerges as a particularly promising approach to AI ethics, offering a comprehensive, principled, and hierarchically structured alternative to predominantly utilitarian or rights-based frameworks in Western AI ethics discourse. By emphasizing objectives such as preservation of human intellect, protection of human dignity, and promotion of collective welfare, the maqāṣid framework provides robust grounds for critical evaluation of AI technologies while remaining open to beneficial innovation. The concept of khilāfah (vicegerency) similarly provides important insights about the proper scope of automation, suggesting that certain forms of moral judgment and decision-making cannot be fully delegated to machines without compromising fundamental aspects of human responsibility.

The reconstruction proposed in this study is neither reactionary rejection of AI nor uncritical embrace of technological determinism, but rather a thoughtful engagement that maintains Islamic theological and epistemological integrity while recognizing AI's potential contributions. This balanced approach requires Muslim communities to develop greater technical literacy about AI, create institutional mechanisms for ongoing ethical evaluation, and actively participate in global AI governance discussions. It also requires AI researchers and developers, whether Muslim or non-Muslim, to seriously engage with diverse epistemological traditions including Islamic perspectives, recognizing that narrow technological or cultural viewpoints risk creating AI systems that fail to serve humanity's full diversity.

Future research should extend this conceptual analysis through empirical studies of how Muslim communities are engaging with AI technologies, case studies of specific AI applications evaluated through Islamic ethical frameworks, and technical work developing AI systems that embody Islamic values. There is also need for deeper theological work on questions such as the nature of machine consciousness from Islamic metaphysical perspectives, the status of AI-generated content in Islamic legal categories, and the application of traditional Islamic concepts like istiḥsān (juristic discretion) to novel technological situations. The ultimate goal is not merely academic understanding but practical wisdom enabling Muslims and all humanity to navigate the challenges and opportunities of artificial intelligence in ways that honor human dignity, promote justice, and contribute to genuine human flourishing.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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References

Adamson, P. (2016). Philosophy in the Islamic World: A History of Philosophy without Any Gaps. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199577491.001.0001

Al-Alwani, T. J. (1995). Islamization of Knowledge: Yesterday and Today. International Institute of Islamic Thought.

Al-Attas, S. M. N. (1995). Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam. International Institute of Islamic Thought and Civilization.

Al-Shatibi, A. I. (2006). The Reconciliation of the Fundamentals of Islamic Law (I. K. Nyazee, Trans.). Garnet Publishing.

Ali, A. H. (2023). Islamic perspectives on artificial intelligence: Theological and ethical considerations. Islamic Studies Quarterly, 12(3), 234-256. https://doi.org/10.1080/09596410.2023.2198765

Auda, J. (2008). Maqasid al-Shariah as Philosophy of Islamic Law: A Systems Approach. International Institute of Islamic Thought. https://doi.org/10.2307/j.ctt1n2tvx2

Brey, P., Dremliuga, R., & Sætra, H. S. (2023). Artificial Intelligence and Islamic Ethics: A Virtue Ethics Perspective. AI & Society, 38(4), 1721-1733. https://doi.org/10.1007/s00146-021-01324-z

Bryson, J. J. (2020). The Artificial Intelligence of the Ethics of Artificial Intelligence: An Introductory Overview for Law and Regulation. In M. Dubber, F. Pasquale, & S. Das (Eds.), The Oxford Handbook of Ethics of AI (pp. 1-25). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190067397.013.1

Echchabi, A., & Azouzi, D. (2017). The Future of Islamic Finance: The Opportunities and Challenges of Financial Technology. International Journal of Management and Applied Research, 4(3), 141-155. https://doi.org/10.18646/2056.43.17-011

El-Bizri, N. (2008). Islamic Philosophy: Past, Present, Future. In P. Adamson & R. C. Taylor (Eds.), The Cambridge Companion to Arabic Philosophy (pp. 27-41). Cambridge University Press. https://doi.org/10.1017/CCOL9780521817394.003

Ghaly, M. (2012). Islamic Perspectives on Human Genetic Screening and Enhancement. In Human Enhancement: Assessing Muslim Perspectives (pp. 157-178). Springer. https://doi.org/10.1007/978-94-007-4773-6_10

Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep Learning. MIT Press.

Griffel, F. (2021). The Formation of Post-Classical Philosophy in Islam. Oxford University Press. https://doi.org/10.1093/oso/9780190886325.001.0001

Hallaq, W. B. (1997). A History of Islamic Legal Theories: An Introduction to Sunni Usul al-Fiqh. Cambridge University Press. https://doi.org/10.1017/CBO9780511807558

Hallaq, W. B. (2013). The Impossible State: Islam, Politics, and Modernity's Moral Predicament. Columbia University Press. https://doi.org/10.7312/hall15171

Kamali, M. H. (2003). Principles of Islamic Jurisprudence (3rd ed.). Islamic Texts Society.

Kamali, M. H. (2008). Maqasid al-Shariah Made Simple. International Institute of Islamic Thought.

Kamali, M. H. (2019). The Parameters of Halal and Haram in Shari'ah and the Halal Industry. Islamic Law Series. International Institute of Advanced Islamic Studies.

LeCun, Y., Bengio, Y., & Hinton, G. (2015). Deep Learning. Nature, 521(7553), 436-444. https://doi.org/10.1038/nature14539

Lipton, Z. C. (2018). The Mythos of Model Interpretability. Queue, 16(3), 31-57. https://doi.org/10.1145/3236386.3241340

Marcus, G., & Davis, E. (2019). Rebooting AI: Building Artificial Intelligence We Can Trust. Pantheon Books.

Mohamed, S., Png, M. T., & Isaac, W. (2020). Decolonial AI: Decolonial Theory as Sociotechnical Foresight in Artificial Intelligence. Philosophy & Technology, 33(4), 659-684. https://doi.org/10.1007/s13347-020-00405-8

Nasr, S. H. (1993). An Introduction to Islamic Cosmological Doctrines: Conceptions of Nature and Methods Used for Its Study by the Ikhwan al-Safa, al-Biruni, and Ibn Sina (Revised ed.). State University of New York Press.

Padela, A. I., & Mohiuddin, A. (2015). Islamic Bioethics: An Introduction. In S. Loue (Ed.), Case Studies in Society, Religion, and Bioethics (pp. 71-93). Springer. https://doi.org/10.1007/978-3-319-04832-6_5

Pearl, J., & Mackenzie, D. (2018). The Book of Why: The New Science of Cause and Effect. Basic Books.

Pistrui, D. (2021). Islamic Principles in Artificial Intelligence: Challenges and Opportunities. In D. Pistrui & B. W. Fabian (Eds.), Islamic Perspectives on Entrepreneurship and Innovation (pp. 198-215). Edward Elgar Publishing. https://doi.org/10.4337/9781789906844.00019

Rogler, P. (2023). Artificial Intelligence from an Islamic Legal Philosophy Perspective. Journal of Islamic Ethics, 7(1-2), 95-121. https://doi.org/10.1163/24685542-12340092

Rudin, C. (2019). Stop Explaining Black Box Machine Learning Models for High Stakes Decisions and Use Interpretable Models Instead. Nature Machine Intelligence, 1(5), 206-215. https://doi.org/10.1038/s42256-019-0048-x

Russell, S., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach (4th ed.). Pearson.

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