

From Sanad to Syntax: The Disruption of Islamic Hermeneutics by Qur'anGPT

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Abstract

Artificial Intelligence (AI) is increasingly encroaching upon domains once considered the exclusive purview of human cognition, including the interpretation of religious texts. While existing scholarship has explored the ethical and legal permissibility of AI within Islamic contexts, relatively little attention has been paid to how AI technologies—such as Qur'anGPT—are reshaping interpretive authority and hermeneutical methodologies. This article addresses that gap by critically examining Qur'anGPT as a case study of digital interpretive agency within contemporary Islam. This study employs a qualitative, literature-based methodology that integrates theoretical frameworks from digital hermeneutics with the sociology of Islamic knowledge. It is further complemented by a textual analysis of user interactions with Qur'anGPT. The findings suggest that Qur'anGPT functions not merely as a technological tool but as an epistemic actor, mediating Qur'anic meaning, shaping user perceptions, and reconfiguring traditional dynamics between scripture, scholars, and the community. Its algorithmic architecture and linguistic output indicate an emerging shift toward decentralized and democratized models of religious authority. However, this shift also raises critical concerns regarding interpretive reductionism, algorithmic bias, and the diminishing authority of classical epistemological frameworks, particularly those grounded in *sanad* and *ijtihad*. The study argues that while Qur'anGPT significantly improves access to Qur'anic texts, it may oversimplify complex theological discourses. Therefore, AI should be utilized as a supplementary tool—not as a replacement—for human interpretive judgment. The article concludes by proposing an ethical-theoretical framework for evaluating AI's role in Islamic exegesis and presents implications for scholars, technologists, and religious institutions engaged at the intersection of Islam and digital innovation.

[Kecerdasan Buatan (AI) semakin merambah ke dalam domain yang dulunya dianggap sebagai ranah eksklusif kognisi manusia, termasuk dalam



interpretasi teks-teks agama. Meskipun penelitian yang ada telah mengeksplorasi kelayakan etis dan hukum AI dalam konteks Islam, perhatian yang relatif sedikit telah diberikan pada bagaimana teknologi AI—seperti Qur'anGPT—mengubah otoritas interpretatif dan metodologi hermeneutika. Artikel ini membahas kesenjangan tersebut dengan secara kritis mengkaji Qur'anGPT sebagai studi kasus agensi interpretatif digital dalam Islam kontemporer. Studi ini menggunakan metodologi kualitatif berbasis literatur yang mengintegrasikan kerangka teoretis dari hermeneutika digital dengan sosiologi pengetahuan Islam. Selain itu, studi ini dilengkapi dengan analisis tekstual terhadap interaksi pengguna dengan Qur'anGPT. Temuan tersebut menunjukkan bahwa Qur'anGPT berfungsi tidak hanya sebagai alat teknologi, tetapi juga sebagai aktor epistemik, yang memediasi makna Qur'an, membentuk persepsi pengguna, dan mengubah dinamika tradisional antara kitab suci, ulama, dan komunitas. Arsitektur algoritmik dan keluaran linguistiknya menunjukkan adanya pergeseran yang muncul menuju model otoritas religius yang terdesentralisasi dan terdemokratisasi. Namun, pergeseran ini juga menimbulkan kekhawatiran kritis mengenai reduksionisme interpretatif, bias algoritmik, dan berkurangnya otoritas kerangka epistemologis klasik, terutama yang didasarkan pada sanad dan ijtihād. Studi ini berpendapat bahwa meskipun Qur'anGPT secara signifikan meningkatkan akses ke teks-teks Qur'ān, ia mungkin menyederhanakan diskursus teologis yang kompleks. Oleh karena itu, AI harus digunakan sebagai alat tambahan—bukan sebagai pengganti—untuk penilaian interpretatif manusia. Artikel ini diakhiri dengan mengusulkan kerangka etika-teoretis untuk mengevaluasi peran AI dalam eksgegesis Islam dan menyajikan implikasi bagi para cendekiawan, teknolog, dan institusi keagamaan yang terlibat di persimpangan Islam dan inovasi digital.

Keywords: Qur'anGPT, Digital Hermeneutics, Qur'anic Exegesis, Artificial Intelligence, Religious Authority.

Introduction

In this rapidly advancing digital era, artificial intelligence (AI) is not only revolutionizing the industrial and scientific landscape but also challenging longstanding normative frameworks within society and religion.¹ AI's capacity to mimic, replace, and even surpass human decision-making processes raises profound ethical and epistemological challenges, particularly regarding autonomy, accountability, and moral legitimacy.² No longer merely a technical tool, AI has evolved into a symbolic and normative force that reshapes humanity's relationship with knowledge, authority, and meaning.

¹ Y. N. Harari, "Reboot for the AI Revolution," *Nature* 550, no. 7676 (2017): 324, <https://doi.org/10.1038/550324a>.

² P. Boddington, *Towards a Code of Ethics for Artificial Intelligence* (Springer, 2017), 1, <https://doi.org/10.1007/978-3-319-60648-4>.

The impact of artificial intelligence (AI) has extended to virtually every sector of life. In business, it facilitates automation and enhances market forecasting; in healthcare, it enables data-driven diagnoses;³ and in education, it powers adaptive learning systems. In finance, AI is extensively utilized for fraud detection and risk analysis.⁴ Perhaps most strikingly, AI is infiltrating domains traditionally regarded as uniquely human—particularly the realm of religion.

Religious applications of artificial intelligence (AI) are emerging across various traditions. In Japan, the Kōdai-ji Temple introduced a robotic figure modeled after Kannon, the Buddhist deity of compassion, to deliver sermons and answer theological questions.⁵ In the Christian context, churches have begun to formulate ethical frameworks to address the implications of AI on matters of faith.⁶ In the Islamic context, responses to AI are diverse and, at times, contradictory. In Indonesia, the largest Muslim organization, Nahdlatul Ulama, has explicitly rejected the use of AI in legal reasoning (*istinbāt al-ahkām*), emphasizing the critical role of human scholars in issuing fatwas.⁷ In contrast, Gulf states such as Saudi Arabia and the United Arab Emirates have embraced AI as a religious tool, developing initiatives like the “Virtual Mufti”.⁸ These divergent responses reflect a deeper epistemological tension between the aspirations of technological modernity and the preservation of *fiqh*-based traditions.

This raises a fundamental question: can—and should—AI serve as a hermeneutical agent in Islam? As AI systems increasingly engage with scriptural exegesis, fatwa issuance, and religious consultation, what is at stake is not only technical competence but also the very structure of religious authority. The interaction between AI and sacred texts risks blurring the boundaries between the human interpreter and the machine as a representational agent.

³ N. C. Amedior, “Ethical Implications of Artificial Intelligence in the Healthcare Sector,” *Advances in Multidisciplinary and Scientific Research Journal Publication* 36 (2023): 3, <https://doi.org/10.22624/AIMS/ACCRABESPOKE2023P1>.

⁴ S. Ransbotham et al., “The Cultural Benefits of Artificial Intelligence in the Enterprise,” *MIT Sloan Management Review*, 2021, 3, <https://sloanreview.mit.edu/projects/the-cultural-benefits-of-artificial-intelligence-in-the-enterprise/>.

⁵ J. C. Jackson and K. C. Yam, “The In-Credible Robot Priest and the Limits of Robot Workers,” *Scientific American*, n.d., <https://www.scientificamerican.com/article/the-in-credible-robot-priest-and-the-limits-of-robot-workers/>.

⁶ T. G. Puggeda, *Artificial Intelligence and Ethical Reflections from the Catholic Church* (Theology Department Faculty Publications, 2021), 88, <https://archium.ateneo.edu/theology-faculty-pubs/50>.

⁷ K. C. Media, “NU: Haram Minta Fatwa Ke ‘Artificial Intelligence,’” *KOMPAS.com*, 2023, <https://nasional.kompas.com/read/2023/09/19/15551621/nu-haram-minta-fatwa-ke-artificial-intelligence>.

⁸ M. Masrur, “Uni Emirat Arab Meluncurkan Aplikasi Mufti Virtual | Bincang Syariah,” *BincangSyariah | Portal Islam Rahmatan lil Alamin*, 2019, <https://bincangsyariah.com/headline/uni-emirat-arab-meluncurkan-aplikasi-mufti-virtual/>.

This study investigates the dynamics surrounding Qur'anGPT, an AI-driven application that generates responses to Islamic inquiries based on Qur'anic texts. Rather than being merely a technological innovation, Qur'anGPT serves as a theological intervention, prompting critical questions about the epistemology of contemporary Islam. Utilizing the frameworks of digital hermeneutics and theories of religious authority, this article analyzes how Qur'anGPT mediates access to the Qur'an and redefines the role of the traditional mufassir. In this context, AI is not a neutral medium; it acts as an epistemic agent that contributes to the production of meaning.

Existing scholarship on artificial intelligence (AI) and Islam is predominantly normative and reactive. Some studies examine the ethical permissibility of AI within Islamic contexts, while others investigate its utility in governance and public services in Muslim-majority countries.⁹ However, a significant research gap exists regarding how AI influences interpretive patterns, the relationship between believers and sacred texts, and the structure of religious epistemology and authority in Islam. This article seeks to address that gap.

It posits that Qur'anGPT represents a novel form of digital interpretive authority—one that blurs the distinction between human and machine while challenging the traditional Islamic epistemological framework grounded in *sanad* (chains of transmission) and scholarly legitimacy. Consequently, Qur'anGPT embodies not only the technical sophistication of artificial intelligence but also a significant transformation in the production, dissemination, and authorization of religious knowledge in the digital age.

In terms of its contribution, this article presents a novel theoretical framework for understanding the intersection of artificial intelligence (AI) and scriptural authority in Islam by integrating digital hermeneutics with socio-legal theories of religious authority. Its findings are intended to benefit not only scholars of Islamic law but also policymakers, technologists, and religious authorities who are navigating the role of AI in Muslim spiritual life.

This study employs a qualitative and critical literature-based approach, primarily utilizing digital hermeneutics, alongside the sociology of Islamic knowledge to examine the evolving structures of authority. Primary data is obtained through an interactive analysis of Qur'anGPT, supplemented by public discourses on Muslim engagement with artificial intelligence, as well as recent academic works on digital exegesis and Islamic epistemology.

Shaping Dynamic Interpretations

⁹ E. Elmahjub, "Artificial Intelligence (AI) in Islamic Ethics: Towards Pluralist Ethical Benchmarking for AI," *Philosophy & Technology* 36, no. 4 (2023): 45, <https://doi.org/10.1007/s13347-023-00668-x>.

Islamic legal thought has historically evolved through a complex interplay between textual sources and scholarly interpretation. The *mujtahids*—scholars qualified to perform *ijtihād*—have long played a central role in formulating religious rulings derived from the foundational sources of Islam.¹⁰ According to the legal historian 'Abd al-Karīm Zaydān, the development of Sharia can be divided into two major historical phases. The first phase, known as '*Aṣr al-Tashrī*' (the Age of Legislation), encompasses the period of the Prophet Muhammad's lifetime, during which divine law was articulated through the Qur'ān and the Sunnah. This era is characterized by direct revelation and the Prophet's authoritative example as the primary source of legal and moral guidance.¹¹

The second phase, which commenced after the Prophet's death, is known as '*Aṣr al-Fiqh fī al-Sharī'ah*' (the Age of Jurisprudence). During this period, the development of Islamic law shifted toward the intellectual contributions of the '*ulamā*'. Through *ijtihād*—reasoned interpretation and application of legal principles based on scriptural evidence—Islamic jurisprudence (*fiqh*) began to flourish. Over time, this scholarly endeavor led to the emergence of sophisticated legal schools and methodological principles that would come to define the Islamic legal tradition.

The practice of *ijtihād* has historically been a subject of contention. Questions remain regarding who qualifies as a *mujtahid* and the extent to which their rulings—whether personal, communal, or universal—possess binding authority. As Bunt observes,¹² there is significant variation in how different communities recognize interpretive authority and the legitimacy of post-Qur'anic sources. A *mujtahid* may articulate their reasoning through a fatwa, which, although legalistic in form, carries varying degrees of authoritative weight depending on its context and acceptance. Importantly, a fatwa does not always necessitate novel interpretation; it may derive its authority from referencing earlier scholars and well-established sources.¹³

Despite the richness of its tradition, Islamic law has often faced criticism for lagging behind the dynamic changes of the modern world. The mechanisms of legal reasoning have not always been sufficiently flexible to address emerging global realities. As Khisni¹⁴ argues, while the foundational principles of Sharia remain intact, the evolving nature of human challenges necessitates continual re-engagement with *ijtihād* to prevent stagnation.

Historical accounts indicate that by the fourth century Hijri (approximately 900 CE), many scholars from various legal schools asserted that all significant legal

¹⁰ I. Zahalka, *Shari'a in the Modern Era: Muslim Minorities Jurisprudence*, ed. 1st ed. (Cambridge University Press, 2017), 12.

¹¹ 'Abd al-Karīm. Zaydān, *Al-Madkhal Li-Dirāsāt al-Sharī'ah al-Islāmīyah*, ed. 4th ed. (Maktabat al-Quds: Mu'assasat al-Risālah, 1407), 41.

¹² G. R. Bunt, *Islam in the Digital Age: E-Jihad, Online Fatwas and Cyber Islamic Environments* (Pluto Press, 2015), 7, <https://doi.org/10.2307/j.ctt18fs6ck>.

¹³ Bunt, 129.

¹⁴ H. A. Khisni, *Metode Ijtihād & Istimbād* (UNISSULA PRESS, 2018), 7.

questions had been resolved. They contended that no one in their era possessed the qualifications required to engage in independent legal reasoning (*ijtihād mutlaq*). Consequently, jurisprudential activity shifted its focus toward the interpretation (*taqlid*) and application of inherited doctrines, rather than fostering innovation.¹⁵

Nonetheless, with the advent of modernity and its novel complexities, scholars increasingly advocate for a revival and even expansion of *ijtihād*. Rahem¹⁶ asserts that the current era necessitates an adaptive jurisprudence that transcends the boundaries of classical *fiqh*, reflecting the multifaceted realities of contemporary Muslim societies. Reform-minded thinkers, such as Wael Hallaq, have called for a comprehensive overhaul of the rigid frameworks of classical *ijtihād* to establish a more humanistic and responsive legal paradigm.¹⁷

Central to this discussion is *uṣūl al-fiqh*, the methodological foundation that underpins Islamic legal theory. Developed by early *mujtahidūn* and systematized by the founders of the *madhāhib*, *uṣūl al-fiqh* provides the epistemological tools necessary for interpreting the Qur'ān and Sunnah. However, critics such as Mahsun¹⁸ argue that contemporary applications of *uṣūl al-fiqh* have become sterile and disconnected from the pressing needs of the modern world. Therefore, while the structure of the tradition remains intact, its dynamic interpretive spirit requires rejuvenation.

Understanding Artificial Intelligence: Concepts, Capabilities, and Concerns

The term (AI) has been interpreted in various ways, reflecting the technology's evolving nature and its applications. Nils J. Nilsson, a prominent AI researcher, defines AI as an activity aimed at creating machines capable of exhibiting intelligent behavior—specifically, the ability to act appropriately and with foresight in each environment.¹⁹ Furthermore, Nilsson elaborates that intelligence in this context encompasses perception, reasoning, learning, communication, and action, all of which seek to replicate—or even surpass—human cognitive abilities.²⁰

However, not all scholars concur with this broad definition. Dennis J. Baker contends that the term "artificial intelligence" is a misnomer, as machines do not

¹⁵ J. Schacht, *An Introduction to Islamic Law* (Clarendon press, 1982), 70, <http://catdir.loc.gov/catdir/enhancements/fy0602/82012509-d.html>.

¹⁶ A. Rahem, "Menelaah Kembali Ijtihād di Era Modern," *Islamuna: Jurnal Studi Islam* 2, no. 2 (2015): 193, <https://doi.org/10.19105/islamuna.v2i2.661>.

¹⁷ W. B. Hallaq, *A History of Islamic Legal Theories: An Introduction to Sunni Usul al-Fiqh* (Cambridge University Press, 1997), <https://doi.org/10.1017/CBO9780511801266>.

¹⁸ M. Mahsun, "Rekonstruksi Pemikiran Hukum Islam Melalui Integrasi Metode Klasik Dengan Metode Saintifik Modern," *Al-Ahkam* 1, no. 25 (2015): 6, <https://doi.org/10.21580/ahkam.2015.1.25.191>.

¹⁹ N. J. Nilsson, *Artificial Intelligence: A New Synthesis* (Morgan Kaufmann Publishers Inc., 1998), xiii.

²⁰ Nilsson, 1.

possess intelligence in the human sense. Instead, they depend on programmed algorithms and data-driven models to make predictions and perform tasks.²¹ These systems do not "reason" in the philosophical or theological sense, nor do they make decisions based on moral deliberation.

To gain a clearer understanding of artificial intelligence (AI), it is essential to differentiate among its three primary categories: Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL). AI serves as the overarching concept, encompassing any computational system designed to replicate human intelligence. ML, a subset of AI, empowers machines to learn from data and make decisions without explicit programming. DL, in turn, is a more specialized subset of ML that utilizes large datasets to identify patterns and classify information at increasingly complex levels of abstraction.²²

Historically, the concept of artificial intelligence (AI) is not new. The term was coined by John McCarthy in 1956, who also organized the Dartmouth Conference—an event that marked the formal establishment of AI as an academic discipline. Since then, the field has experienced alternating periods of optimism and stagnation, commonly referred to as the First and Second AI Winters.²³ Nevertheless, in recent years, AI has experienced a resurgence characterized by significant breakthroughs and broader integration into society.

With this resurgence comes significant promise as well as considerable caution. AI systems have the potential to transform nearly every aspect of human life. As Greek²⁴ observes, while AI could greatly benefit society, its development must be meticulously managed to prevent unforeseen harms. This includes addressing the ethical use of data, ensuring transparency in algorithmic design, and considering the societal implications of machine-led decision-making.

Among the critical concerns is the issue of trust in artificial intelligence (AI). Rossi²⁵ emphasizes that to build public confidence, developers must address bias, ensure explainability, and adopt open and responsible data governance policies. A trustworthy AI ecosystem requires interdisciplinary collaboration among technologists, ethicists, legal scholars, and community stakeholders.

²¹ D. J. Baker and P. H. Robinson, eds., *Artificial Intelligence and the Law: Cybercrime and Criminal Liability* (Routledge, Taylor & Francis Group, 2021), 1.

²² Albert Chun Chen Liu, Oscar Ming Kin Law, and Iain Law, *Understanding Artificial Intelligence: Fundamentals and Applications*, 1st ed. (Wiley, 2022), 38, <https://doi.org/10.1002/9781119858393>.

²³ R. Abbott, *The Reasonable Robot: Artificial Intelligence and the Law*, ed. 1st ed. (Cambridge University Press, 2020), 21, <https://doi.org/10.1017/9781108631761>.

²⁴ J. Greek, *Artificial Intelligence: Clever Computers and Smart Machines* (Rosen Publishing Group, 2017), 7.

²⁵ F. Rossi, "Building Trust in Artificial Intelligence," *Journal of International Affairs* 72, no. 1 (2021): 132.

These concerns are further amplified by speculative yet increasingly relevant technological frontiers. Elon Musk's development of Neuralink, a brain-computer interface (BCI), raises profound philosophical and ethical questions. Musk cautions that connecting human consciousness with artificial intelligence (AI) may pose an existential threat, as machines could potentially surpass human intelligence and compromise human autonomy.²⁶ Such developments underscore the necessity of preemptive ethical frameworks to guide human-machine integration and to safeguard human dignity and agency.

The Potential of Artificial Intelligence in Qur'anic Exegesis

Recent advances in artificial intelligence (AI)—particularly in natural language processing (NLP) and machine learning (ML)—have opened new possibilities for the study and engagement with religious texts, including the Qur'ān. These technologies facilitate the systematic analysis of extensive religious corpora, revealing patterns, emotional content, and interpretive nuances that were previously challenging to extract using traditional scholarly methods.²⁷

One of the significant contributions of artificial intelligence (AI) to religious studies is its application in sentiment analysis. Through natural language processing (NLP) and AI-powered algorithms, machines can now detect emotional tones and contextual nuances in textual data. Rather than merely categorizing words as positive or negative, sentiment analysis interprets the emotional intent behind religious expressions.²⁸ This capability is particularly relevant in analyzing Islamic texts, where themes of praise, reverence, fear, and longing are central to the religious experience.²⁹ By identifying such sentiments in verses of the Qur'ān, ḥadīth, or classical jurisprudential texts, researchers can gain deeper insights into the emotional dimensions of Islamic belief systems. However, applying sentiment analysis to Arabic Islamic texts presents a linguistic challenge due to the richness and complexity of classical Arabic compared to Latin-based languages.³⁰

²⁶ T. J. Jorgensen, *Spark: The Life of Electricity and the Electricity of Life* (Princeton university press, 2021), 349.

²⁷ K. I. Alkhouri, "The Role of Artificial Intelligence in the Study of the Psychology of Religion," *Religions* 15, no. 3 (2024): 19, <https://doi.org/10.3390/rel15030290>.

²⁸ H. Taherdoost and M. Madanchian, "Artificial Intelligence and Sentiment Analysis: A Review in Competitive Research," *Computers* 12, no. 2 (2023): 1, <https://doi.org/10.3390/computers12020037>.

²⁹ R. A. Bowie, F. Panjwani, and K. Clemmey, "A Meta Approach to Texts in Religious Education: Researching Teachers' Engagement with Sacred Text Scholarship in English Secondary Schools," *British Journal of Religious Education* 44, no. 3 (2022): 278, <https://doi.org/10.1080/01416200.2022.2054773>.

³⁰ A. Alharbi, M. Taileb, and M. Kalkatawi, "Deep Learning in Arabic Sentiment Analysis: An Overview," *Journal of Information Science* 47, no. 1 (2021): 136, <https://doi.org/10.1177/0165551519865488>.

In addition to sentiment analysis, artificial intelligence (AI) also facilitates the examination of extensive religious corpora through natural language processing (NLP) and deep learning techniques. This capability enables the automatic identification of semantic relationships and inferential connections between concepts embedded in religious discourse.³¹ By developing language models such as Word2Vec or BERT, researchers can analyze the usage and contextual meanings of specific Qur'anic or ḥadīth terms. For example, AI can assist in tracing the evolution of key theological concepts, mapping the lexical proximity between divine attributes, or differentiating between legal and theological interpretations of terms like ḥikmah or 'adl.³² These models not only maintain the integrity of the textual sources but also expand interpretive possibilities by enabling scalable and systematic analysis.

A significant practical development is the proliferation of AI-based religious services. AI technologies now enable platforms that offer personalized religious recommendations, virtual gatherings, prayer reminders, and even automated fatwa services.³³ For instance, mobile applications that utilize natural language processing (NLP) can respond to religious inquiries, guide rituals, or generate Qur'anic references tailored to user questions. While these features enhance accessibility and engagement, they also raise important questions about the boundaries of religious authority. Notably, some platforms are experimenting with AI-driven fatwas, potentially shifting the locus of interpretive authority from traditional scholars to algorithmic systems.

Psychological studies have demonstrated that religiosity may enhance the likelihood of individuals accepting AI-based recommendations. Karataş and Cutright³⁴ found that individuals who actively contemplate the concept of God often perceive themselves as smaller and more flawed, which makes them more receptive to suggestions from AI systems. This phenomenon presents both opportunities and

³¹ S. F. Taşkıran and E. Kaya, "Academic Text Clustering Using Natural Language Processing," *Konya Journal of Engineering Sciences* 10 (2022): 41, <https://doi.org/10.36306/konjes.1081213>.

³² B. Adel et al., "Machine Learning to Classify Religious Communities and Detect Extremism on Social Networks: ML to CRCs and DE Through Text Tweets on SNs," *International Journal of Organizational and Collective Intelligence* 12, no. 1 (2022): 1, <https://doi.org/10.4018/IJOICI.311093>; M. C. Jordan et al., "Context Matters: Recovering Human Semantic Structure from Machine Learning Analysis of Large-Scale Text Corpora," *Cognitive Science* 46, no. 2 (2022): 1, <https://doi.org/10.1111/cogs.13085>.

³³ Alkhouri, "The Role of Artificial Intelligence in the Study of the Psychology of Religion," 13; S. S. Popova, "Use of Artificial Intelligence in the Activities of Religious Associations and Control Over Them," *Journal of Digital Technologies and Law* 2, no. 1 (2024): 155, <https://doi.org/10.21202/jdtl.2024.6>.

³⁴ M. Karataş and K. M. Cutright, "Thinking about God Increases Acceptance of Artificial Intelligence in Decision-Making," *Proceedings of the National Academy of Sciences* 120, no. 33 (2023): 6, <https://doi.org/10.1073/pnas.2218961120>.

challenges: on one hand, it underscores the potential of AI to facilitate religious practices; on the other hand, it emphasizes the urgent need to establish clear ethical, moral, and theological guidelines for the implementation of such technologies.

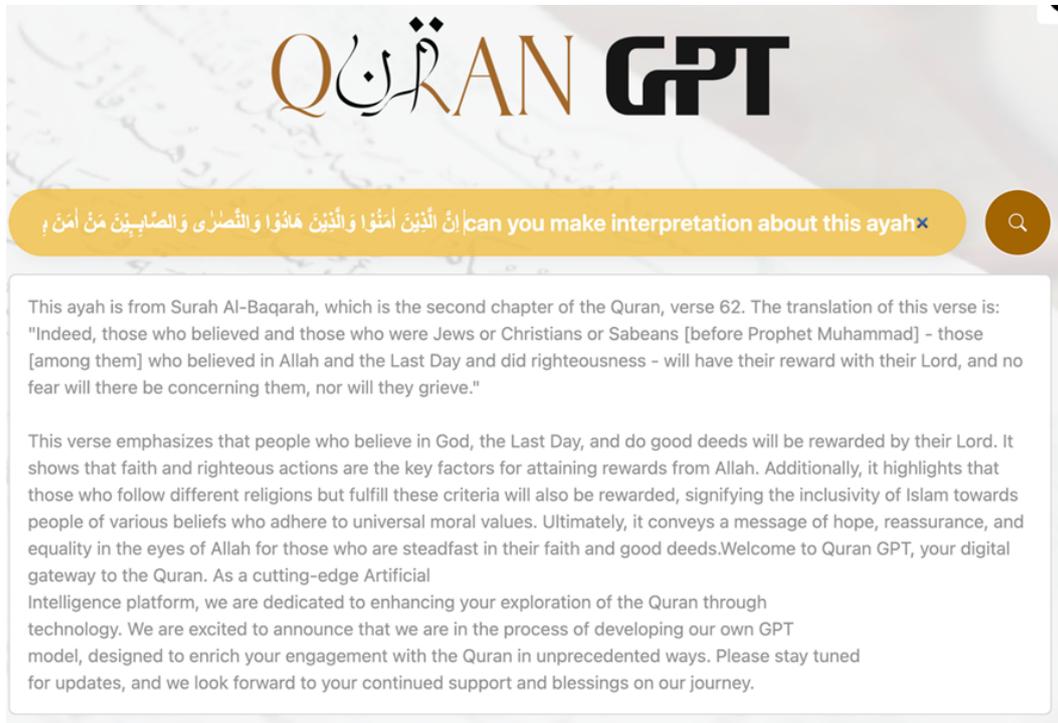
Ultimately, while artificial intelligence (AI) holds great promise for enhancing religious engagement, including Qur'anic exegesis, its application must be rooted in ethical integrity. The incorporation of AI into Islamic discourse should not undermine religious values. Instead, it should be guided by scholars and informed by theological principles to ensure that technological innovation supports, rather than undermines, the spiritual and moral objectives of Islam.

Artificial Intelligence in Qur'anic Exegesis: The Case of Qur'anGPT

Among the various initiatives that apply artificial intelligence (AI) in religious contexts, Qur'anGPT stands out as a significant case study. According to its official website, Qur'anGPT was developed to enhance accessibility to and understanding of the Qur'ān by harnessing the capabilities of AI, particularly natural language processing (NLP) and machine learning algorithms. Its overarching vision is to disseminate the timeless wisdom of the Qur'ān globally, enabling individuals from diverse ethnic, cultural, and linguistic backgrounds to engage intuitively with the sacred text.

Developed by the technology company 9XTechnology, based in Dubai, United Arab Emirates, Qur'anGPT is part of a broader portfolio that includes similar applications, such as BibleGPT. The app has garnered significant attention, with over 10,000 downloads on the Google Play Store, and is also accessible through a dedicated web platform. The company's primary focus is on software development driven by artificial intelligence, with a commitment to integrating innovation in the service of religious education.

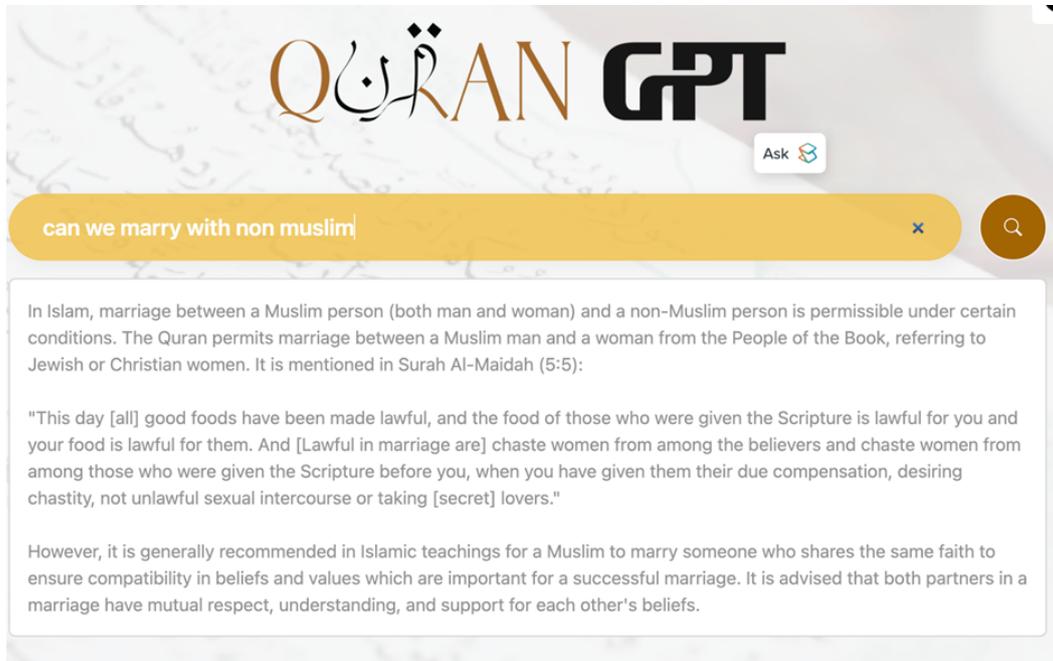
Figure 1
Example of Qur'anGPT
Responding to User Query regarding Q.S. al-Baqarah [2]: 62



Source: Qur'anGPT Application on Android

In practical use, Qur'anGPT enables users to request interpretations of specific verses, such as Q.S. al-Baqarah: 62, and the application provides a concise summary interpretation in English. The system appears to be designed to consistently reference Qur'anic content as the foundation for its responses. When presented with legal-religious questions—such as the permissibility of marriage to non-Muslims—the application delivers direct answers and offers textual justifications rooted in the Qur'ān. This suggests that the model has been fine-tuned with Islamic legal content and programmed to simulate fatwa-style responses.

Figure 2
Example of Qur'anGPT Answering a Legal Query Regarding Interfaith Marriage



Source: Qur'anGPT Application on Android

While the platform claims to offer accurate and culturally sensitive interpretations, its capabilities raise broader questions regarding the nature of *tafsīr*, religious authority, and algorithmic bias. The Qur'anGPT team asserts that its interpretive framework is supported by an interdisciplinary group of experts: 1) bilingual translators who convey the text across languages; 2) verified theologians who oversee doctrinal consistency; 3) cultural consultants who ensure relevance to generational and contextual shifts; and 4) digital architects who ensure accessibility across various platforms.

This structured collaboration aims not only to provide a literal translation of the Qur'ān but also to contextualize its meanings within the cultural and linguistic nuances of contemporary users. The developers emphasize their commitment to preserving theological integrity while adapting the content for diverse audiences. Through continuous updates and optimizations, Qur'anGPT positions itself as a tool for inclusivity, outreach, and global religious literacy.

Nonetheless, the application of artificial intelligence (AI) in Qur'anic interpretation is not without its critiques. AI models—regardless of their sophistication—struggle to fully capture the intricate historical, linguistic, and theological nuances embedded in Islamic scriptural traditions. Although the involvement of expert oversight is commendable, machine-generated

interpretations may lack the hermeneutical depth essential to classical *tafsīr* traditions.

Moreover, there is an increasing concern about algorithmic bias. If the training data used to develop Qur'anGPT reflects only specific interpretive schools, the system may inadvertently favor certain theological positions over others. Such biases can lead to exclusionary interpretations or misrepresentations of Qur'anic intent, particularly for users who are unfamiliar with the diversity within Islam.

Therefore, while Qur'anGPT provides innovative solutions for accessibility and engagement, its implementation must be approached with caution and theological scrutiny. The sacredness of the Qur'ān necessitates a level of interpretive responsibility that goes beyond mere computational logic. Any digital *tafsīr* tool must adhere to the principles of scholarly integrity, ethical transparency, and respect for the Islamic intellectual tradition.

Qur'anGPT within the Framework of Digital Hermeneutics

Hermeneutics, in its classical conception, is both a theory and a method of interpretation that transcends mere textual analysis to engage in a broader inquiry into human understanding. Hans-Georg Gadamer famously emphasized that interpretation is a dialogical process influenced by history, context, and the interpreter's preconceptions or *Vorurteile*.³⁵ For Gadamer, understanding emerges not solely from the content of the text but from the dynamic interplay between the interpreter and the historical context of the text.

Other philosophical perspectives complement and expand upon this view. Paul Ricoeur defines hermeneutics as a reflective discipline focused on deciphering symbolic language and exploring the relationship between text, reality, and human existence.³⁶ Friedrich Schleiermacher emphasized the duality of grammatical and psychological interpretation, while underscoring the importance of reconstructing authorial intention and socio-historical context.³⁷ Martin Heidegger, taking a more ontological approach, proposed that hermeneutics is not merely a method of textual interpretation but a way of being—a means through which *Dasein* (human existence) comprehends itself in the world.³⁸

Building on these classical insights, Don Ihde repositions hermeneutics within the philosophy of technology. Rejecting the reduction of all meaning-making to "textuality," Ihde introduces a technological hermeneutics that emphasizes how

³⁵ Hans-Georg Gadamer, *Truth and Method* (Crossroad, 1989), 267.

³⁶ P. Ricoeur, *Hermeneutics and the Human Sciences: Essays on Language, Action and Interpretation*, ed. J. B. Thompson and 1st ed. (Cambridge University Press, 2016), 43, <https://doi.org/10.1017/CBO9781316534984>.

³⁷ Friedrich D. E. Schleiermacher Edited by Heina Kimmerle, Translated by James Duke and Jack Forstman, eds., *Hermeneutics: The Handwritten Manuscripts*, AAR Religion in Translation (Oxford, New York: Oxford University Press, 1978), 90–92.

³⁸ Martin Heidegger, *Being and Time* (Blackwell, 1967), 192–95.

technologies mediate perception and meaning. He distinguishes between specialized and generalized hermeneutics, positing that all technologies—from microscopes to digital platforms—are inherently hermeneutic because they shape the way reality is perceived and represented.³⁹

In this context, digital technologies do not merely represent the world; they fundamentally alter it. According to Simone Romele,⁴⁰ technologies such as the Internet of Things and 3D printing simultaneously actualize both the symbolic and the real, thereby accelerating the fusion of data with lived experience. Romele further argues that digital hermeneutics must extend beyond methodology to encompass ontological and anthropological concerns, questioning how digital systems reshape human understanding, agency, and existence itself.⁴¹

This line of critique is further developed by Hubert Dreyfus, who questions the feasibility of creating genuinely "Heideggerian" artificial intelligence. Dreyfus argues that human understanding is inherently situated, embodied, and goal-oriented—qualities that machines do not possess. He asserts that computers process predefined objects and criteria, while humans interact with the world in dynamic, context-sensitive manners.⁴² Therefore, any hermeneutics of AI must grapple with the fundamental distinction between human and artificial cognition.

In the context of Qur'anGPT, digital hermeneutics offers a critical framework for analyzing the impact of AI technologies on Qur'anic interpretation. Qur'anGPT enables users to query verses, receive *tafsīr*, and pose legal-religious questions in multiple languages, all powered by natural language processing (NLP) and machine learning. At first glance, this democratizes access to sacred knowledge. However, such access is mediated by algorithmic filters and curated datasets, which inevitably influence interpretive outcomes.

Digital hermeneutics reminds us that these processes are not neutral. Artificial intelligence, by design, structures and systematizes interpretation in ways that differ from the tradition-bound, dialogical approaches employed by human scholars. While traditional *mufasssīrīn* (interpreters) rely on intertextuality, *isnād*, socio-linguistic nuance, and various theological schools, Qur'anGPT operates within the parameters established by its developers, reflecting their interpretive biases—even if inadvertently.

³⁹ D. Ihde, *Bodies in Technology* (University of Minnesota Press, 2002).

⁴⁰ A. Romele, *Digital Hermeneutics: Philosophical Investigations in New Media and Technologies*, ed. 1st ed. (Routledge, 2019), <https://doi.org/10.4324/9780429331893>.

⁴¹ A. Romele, M. Severo, and P. Furia, "Digital Hermeneutics: From Interpreting with Machines to Interpretational Machines," *AI & SOCIETY* 35, no. 1 (2020): 20, <https://doi.org/10.1007/s00146-018-0856-2>.

⁴² H. L. Dreyfus, "Why Heideggerian AI Failed and How Fixing It Would Require Making It More Heideggerian," *Artificial Intelligence* 171, no. 18 (2007): 1137–60, <https://doi.org/10.1016/j.artint.2007.10.012>.

Romele's concern regarding the of contemporary digital hermeneutics is particularly relevant in this context. If interpretation through artificial intelligence is driven solely by efficiency, data correlation, or statistical proximity—rather than by theological reasoning—then the depth and integrity of Qur'anic hermeneutics may be compromised.

Moreover, as Ricoeur's concept of *distanciation* suggests, meaningful interpretation often emerges from maintaining a reflective distance between the reader and the text. Qur'anGPT arguably diminishes this distance by providing immediate and accessible interpretations. While this expansion of participation in religious discourse is beneficial, it also risks oversimplifying interpretive complexity and neglecting historical contextualization.

Digital hermeneutics also compels us to consider how religious authority is reconfigured. In the case of Qur'anGPT, the interpretive act is no longer situated within the *'ālim* or *mujtahid*, but rather within a machine interface that obscures the human authorship behind algorithmic decisions. This shift has profound implications for the epistemology of *tafsīr* and the institutional structures that safeguard it.

Despite its potential, Qur'anGPT must be approached with a critical perspective. The risk of algorithmic bias—stemming from limited training data or unclear coding practices—can result in incomplete or misleading interpretations. Therefore, the incorporation of AI in Qur'anic hermeneutics should be accompanied by thorough scholarly oversight, transparent methodologies, and a strong ethical commitment to preserving the sanctity and integrity of the Qur'anic message.

The Restructuring of Religious Authority in the Age of Artificial Intelligence

The evolution of digital technology has led to a profound transformation in religious authority. As societies—both globally and locally—experience rapid technological shifts, traditional structures of religious knowledge and guidance are being challenged and reconfigured. In the contemporary context, Muslims are not only required to adapt to new communication tools but also to develop a new epistemic language that aligns with emerging forms of authority in digital spaces.⁴³

The rise of the internet, particularly the expansion of virtual public spaces, has facilitated alternative platforms for religious learning and expression. Whereas religious knowledge was once disseminated exclusively through *'ulamā'*, mosques, and madrasas, it is now increasingly shaped by individual practices within algorithmically driven environments.⁴⁴ Digital networks transcend geographic

⁴³ M. Jinan, "New Media Dan Pergeseran Otoritas Keagamaan Islam Di Indonesia," *Jurnal Lektur Keagamaan* 10, no. 1 (2012): 206, <https://doi.org/10.31291/jlk.v10i1.178>.

⁴⁴ M. el-Nawawy and S. Khamis, *Islam Dot Com* (Palgrave Macmillan US, 2009), 60, <https://doi.org/10.1057/9780230622661>.

boundaries and place greater emphasis on access, engagement, and personalization than traditional hierarchies.

As Rozehnal⁴⁵ observes, in this new era, digital power often surpasses institutional religious authority. Platforms and individuals with substantial online influence may exert greater control over religious discourse than formally trained scholars. This shift has profound implications for Islamic law (*fiqh*), which remains central to public debates concerning its authority, applicability, and relevance in various socio-political contexts.⁴⁶

Previously, the '*ulamā*' served as the primary—often exclusive—source of religious guidance. However, the advent of search engines, online forums, and social media has empowered individuals to seek answers independently, frequently without intermediaries. This transition from halaqah-based scholarship to decentralized digital discussions has resulted in a significant shift in authority.

Now, a new phase is emerging: the rise of Artificial Intelligence (AI). This shift is more profound than previous technological advancements. AI not only automates human reasoning but also has the potential to replicate or even surpass it, creating a form of synthetic authority. In a religious context, this development introduces the concept of virtual *mujtahids*—AI systems capable of issuing legal opinions (fatwas) or interpreting scriptural texts with remarkable speed and efficiency.

Yet, this raises critical ethical and theological concerns. While artificial intelligence (AI) may provide benefits such as enhanced precision and efficiency in legal reasoning, entrusting it with autonomous decision-making contradicts the moral and ethical principles underlying *ijtihad*. As a tool, AI can assist scholars—much like books, dictionaries, or juristic compendia—but it cannot replace the essential human element of legal discernment and accountability.

The fatwa issued by Nahdlatul Ulama (NU) in Indonesia exemplifies institutional caution. In 2023, during its National Conference of Ulama, NU declared it haram to rely on artificial intelligence (AI) for religious rulings. This position arises from concerns regarding the unverifiability of AI-generated responses, the opacity of its data sources, and the potential for misguidance. While similar apprehensions emerged with the introduction of Google and online fatwa platforms, those tools gradually became normalized. It is conceivable, therefore, that AI may eventually be integrated—but only through a controlled and ethically grounded process.

The use of artificial intelligence (AI) in Qur'anic interpretation presents significant potential, but it also carries inherent risks. Bias in algorithmic training, a lack of transparency in data input, and the inability of machines to comprehend

⁴⁵ R. Rozehnal and 1st ed., eds., *Cyber Muslims: Mapping Islamic Digital Media in the Internet Age* (Bloomsbury Publishing Plc, 2022), 19, <https://doi.org/10.5040/9781350233737>.

⁴⁶ A. M. Emon, M. Ellis, and B. Glahn, eds., *Islamic Law and International Human Rights Law* (Oxford University Press, 2012), 15, <https://doi.org/10.1093/acprof:oso/9780199641444.001.0001>.

theological nuances may result in distorted or oversimplified interpretations. Therefore, if AI is to be utilized in the context of *fiqh* or *tafsīr*, it must remain subordinate to the interpretive authority of qualified scholars (*fuqahā*).

The way forward is to conceptualize AI as a complementary tool rather than a substitute. The final process of *ijtihād* must remain in the hands of human scholars, who can assess moral intent, scriptural coherence, and communal impact—dimensions that are beyond the reach of algorithmic calculation.

Conclusion

The rapid advancement of artificial intelligence (AI) technology represents one of the most significant leaps in modern science and society. AI systems have begun to assume roles traditionally held by humans, ranging from legal advisors and corporate executives to educators and spiritual guides. While this development holds immense potential for enhancing efficiency and accessibility, it also raises profound philosophical and ethical questions—particularly regarding the human capacity for judgment, meaning-making, and moral discernment.

In the field of Islamic jurisprudence (*fiqh*), artificial intelligence (AI) provides powerful tools for analyzing a diverse array of sources, including the Qur'ān, ḥadīth, and classical legal texts. Applications such as Qur'anGPT demonstrate how AI can enhance access to religious knowledge and support interpretive engagement. However, this technological mediation warrants critical examination. As this study has shown, while AI can simulate certain aspects of human reasoning, it cannot replicate the depth, contextual sensitivity, or ethical responsibility inherent in human *ijtihād*. Ultimately, the final authority must reside with qualified scholars who are attuned not only to textual meanings but also to the lived realities of Muslim communities.

Viewed through the lens of digital hermeneutics, Qur'anGPT both expands and complicates the process of Qur'anic interpretation. On one hand, it democratizes access to *tafsīr* by facilitating broader and more immediate interaction with the sacred text. On the other hand, it risks eroding the essential distance between the reader and the text (distanciation), which may reduce interpretive depth and bypass centuries of scholarly tradition. Furthermore, the application of AI in this domain raises critical concerns regarding algorithmic bias, oversimplification, and the shifting locus of religious authority.

In this context, digital hermeneutics functions not only as a methodological lens but also as an evaluative framework for understanding the impact of technology on religious thought and practice. It advocates for a careful and ethically informed integration of artificial intelligence into religious discourse—one that maintains the integrity of the text and the role of the human interpreter. Qur'anGPT, therefore, occupies a pivotal position at the intersection of innovation and tradition,

presenting both opportunities and challenges that must be addressed with careful consideration.

Ultimately, the integration of artificial intelligence in the realm of Qur'anic exegesis highlights the pressing necessity for a balanced epistemology—one that embraces technological advancements while preserving the ethical and spiritual integrity of Islamic scholarship. As we navigate this evolving landscape, scholars, developers, and religious communities must collaborate to ensure that digital tools enhance, rather than replace, the divine mandate of *tafaqquh fi al-dīn*.

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