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## Algorithmic Predestination and Divine Knowledge (‘ilm Allah): Causality, Human Agency, and the Closed System of Code

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### ABSTRACT

*This article examines the growing influence of predictive algorithms on human cognition and behavior as a contemporary theological problem that has yet to be systematically addressed within classical Islamic intellectual frameworks. While existing scholarship on algorithmic governance largely remains confined to ethical, sociological, or secular philosophical analyses, it rarely engages Islamic theological debates on divine causality, knowledge, and human agency. Addressing this gap, the study retrieves and re-examines foundational discussions between the Ash‘ari doctrine of divine determinism—articulated through the theory of *kash* (acquisition)—and the Mu‘tazili rationalist defense of inherent human free will (*ikhtiyar*), situating them within the context of algorithmic causality. The article argues that predictive algorithms, as human-made, immanent, and data-driven systems, function as a powerful yet theologically flawed analogue for deterministic worldviews. By juxtaposing the ontology of algorithmic causation with the classical attributes (*sifat*) of God—particularly His eternal (*qadim*), non-causal, and all-encompassing Knowledge (*‘ilm*)—the analysis demonstrates the categorical inadequacy of algorithmic determinism to account for divine action. The study’s central contribution lies in conceptualizing algorithmic prediction as a form of “false *qadar*,” which does not illuminate divine predestination but instead exposes its radical transcendence.*

**Keywords:** *Algorithm, causality, digital religion, ‘ilm al-kalam, qadar.*

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## Introduction

We inhabit an age of digital enclosure in which human experience is increasingly mediated through computational systems whose governing logic is prediction. Our desires, movements, social relations, and even political inclinations are not merely recorded but actively curated, anticipated, and shaped by complex algorithms—opaque and often proprietary systems that process vast datasets to generate outcomes with remarkable precision (O’Neil, 2016). This pervasive algorithmic layer of contemporary existence—what Zuboff (2019) terms the infrastructure of “surveillance capitalism”—constitutes a novel form of *muhiṭ* (environment) grounded in a strict logic of immanent causality. Within this framework, sufficient data about the past renders the future not only probabilistically knowable but also manipulable through targeted informational, behavioral, and choice-architectural interventions (Thaler & Sunstein, 2008). For the contemporary Muslim believer, this engineered determinism resonates uneasily with one of the most enduring and profound questions in Islamic thought: the relationship between divine omnipotence (*qudra*), eternal foreknowledge (*‘ilm al-ghayb*), and meaningful human free will (*ikhtiyar*), a tension classically encapsulated in the Doctrine of *al-Qada’ wa al-Qadar* (Divine Decree and Predestination; Choudhury, 2022). This question is not merely an abstract theological puzzle; it is existential and pastoral. When a social-media feed anticipates one’s latent interests with uncanny accuracy, shaping the informational universe one inhabits, or when a navigation system not only recommends but effectively dictates the most “efficient” route, a subtle yet significant dimension of agential autonomy is ceded to computational logic (Yeung, 2017).

This lived experience of being predicted evokes a classical theological anxiety: if human paths and preferences can be so readily foreseen—and influenced—by a contingent, created system, what does this imply about the scope and substance of human freedom before God, whom the Quran describes as *al-‘Alim* (the All-Knowing) and *al-Musawwir* (the Bestower of Forms; The Quran, al-Hasyr 59:24)? The algorithm, in this sense, becomes more than a technical instrument; it becomes a theological provocateur, compelling a renewed *kalam*-based inquiry into the nature of causality, constraint, and creaturely autonomy within a created order.

Despite the rapidly expanding body of literature on algorithmic governance, predictive analytics, and digital determinism, existing studies overwhelmingly approach these phenomena through secular ethical frameworks, liberal theories of autonomy, or Foucauldian analyses of power and control (Zuboff, 2019; Yeung, 2017; Danaher, 2016). Even religious engagements with algorithmic systems tend to remain either phenomenological or moral-theological, focusing on issues such as bias, justice, or pastoral harm, without interrogating the deeper metaphysical assumptions embedded in algorithmic causality. What is notably absent from this scholarship is a sustained engagement with classical Islamic *kalam* as a conceptual resource for analyzing predictive systems—not merely as ethical tools, but as ontological and epistemological challenges. This lacuna is significant because Islamic theology developed some of the most rigorous pre-modern analyses of causation, foreknowledge, and human agency, precisely in response to deterministic cosmologies. By retrieving Ash‘ari and Mu‘tazili debates on divine action and freedom, this article offers a distinctive contribution: it demonstrates how Islamic *kalam* provides analytical categories capable of exposing the theological incoherence of algorithmic determinism while resisting both technological fatalism and naïve assertions of human autonomy.

This article thus seeks to stage a deliberate and critical encounter between the sophisticated ontological and epistemological frameworks of classical Islamic theology and the pervasive reality of algorithmic causality. Its central thesis is that the predictive algorithm presents a simulacrum of *qadar*—a compelling, data-driven, experientially potent, yet ultimately shallow and theologically deficient imitation of divine decree (Bratton, 2015). To unpack this claim, the discussion proceeds in four movements. First, it delineates the core architecture of algorithmic causality, emphasizing its reliance on historical data, its functioning as a closed epistemic system, and its intrinsic—and often pernicious—normative biases (Noble, 2018).

Second, it retrieves the central contours of the historical debates between the Ash`ari and Mu`tazili schools regarding divine action, creation, and the metaphysical space for human freedom, with particular attention to the Ash`ari doctrine of *kasb* (acquisition; al-Ash`ari, 936/2008; al-Ghazali, 1111/2000; `Abd al-Jabbar, 1025/1965).

The third section constitutes the analytical heart of the argument. It systematically juxtaposes the divine attribute of Knowledge (*‘Ilm Allah*)—eternal, creative, and all-encompassing—with the algorithm’s *a posteriori*, descriptive, and fundamentally limited form of “knowledge” (Danaher, 2016). It further contrasts the metaphysical structure of *kasb* with the psychological mechanisms of algorithmic influence (Susser et al., 2019). Finally, the article argues that this rigorous juxtaposition does not—and cannot—resolve the inscrutable mystery (*ghayb*) of divine predestination. Instead, by offering a flawed, immanent, human-scale model of determinism, the algorithmic simulacrum paradoxically performs an apophatic function: it redirects theological reflection away from simplistic mechanistic analogies and toward a deeper appreciation of the absolute transcendence (*tanzih*) of divine sovereignty—a sovereignty that encompasses, rather than negates, genuine human responsibility (Choudhury, 2022). The algorithm’s “false *qadar*” thus becomes a diagnostic mirror, revealing not the nature of God’s decree but the profound ontological chasm between the Creator and all created causal systems.

### Methodology

This interdisciplinary study adopts a qualitative, conceptual-analytical methodology situated at the intersection of comparative theology and the philosophy of technology. Its primary objective is to construct a rigorously internal theological framework—grounded in classical Islamic *‘ilm al-kalam*—through which the ontological and epistemological claims of predictive algorithmic systems can be critically examined. Rather than offering an empirical or sociological evaluation of algorithmic technologies, the study proceeds through a normative and metaphysical analysis, treating algorithmic causality as a conceptual object of theological critique. The research draws upon two distinct but dialogically engaged corpora of sources. The first consists of classical Islamic theological texts drawn primarily from the Ash`ari and Mu`tazili traditions, selected due to their systematic engagement with questions of divine knowledge (*‘ilm Allah*), causality (*sababiyya*), predestination (*al-qaḍa’ wa al-qadar*), and human agency (*ikhtiyar*). Foundational works by Abu al-Hasan al-Ash`ari (d. 936), al-Qaḍi `Abd al-Jabbar (d. 1025), al-Ghazali (d. 1111), and Fakhr al-Din al-Razi (d. 1210) form the core primary material, with particular attention given to creedal treatises, thematic theological works, and comprehensive *summās* that explicitly theorize the relationship between divine action and human responsibility. Contemporary secondary scholarship in Islamic theology and philosophy is employed to ensure philological precision, contextual accuracy, and engagement with current academic interpretations.

The second corpus consists of contemporary critical literature on algorithmic governance and predictive systems. This includes foundational critiques of surveillance capitalism, algorithmic opacity, and data-driven behavioral control, as well as technical and social-scientific studies detailing the mechanics of machine learning, feedback loops, and bias amplification. Philosophical works addressing the metaphysical and ethical implications of computational systems are incorporated to bridge technical descriptions with broader ontological concerns. These sources provide a rigorous account of algorithmic causality as an imminent, historically conditioned, and operationally closed system, thereby establishing a clear conceptual target for theological analysis.

Analytically, the study proceeds through a staged comparative process. Classical theological positions are first reconstructed on their own terms through close textual analysis, with particular attention to distinctions drawn by the *mutakallimun* between eternal divine knowledge and acquired human knowledge, between creation (*khalq*) and acquisition (*kasb*), and between metaphysical agency and coercive determinism. These reconstructed concepts are then placed in systematic juxtaposition with the defining features of algorithmic systems—namely their *a posteriori* dependence on historical data, structural opacity, normative bias, and feedback-

loop determinism. This juxtaposition is not intended to establish direct analogies but to function diagnostically, exposing points of categorical dissonance between divine and algorithmic modes of causation.

The analysis culminates in an apophatic (*salbi*) synthesis. Rather than seeking to resolve the mystery of divine predestination through technological comparison, the study interprets the algorithm's conceptual limitations as theologically instructive negatives. The algorithm is thus analyzed as a form of "false *qadar*": a powerful but deficient simulacrum of determinism whose very failures illuminate, by contrast, the transcendence (*tanzih*) of divine knowledge and decree. Through this negative clarification, the study reinforces the ontological distinction between the Creator, and all created, contingent causal systems, including those of human technological design.

This methodological approach ensures that the critique of algorithmic determinism emerges organically from within the internal categories and logic of Islamic theology, rather than through the imposition of external ethical or secular philosophical frameworks. Classical *kalam* is thereby treated not as a historical artifact but as a living analytical tradition capable of diagnosing the metaphysical assumptions embedded in contemporary techno-social systems.

### **The Architecture of Algorithmic Causality: A Closed System of Immanent Determination**

To undertake a theologically grounded critique of algorithmic systems, it is necessary to first articulate a precise account of their ontological character and operational mechanics. An algorithm is not a neutral technological instrument; rather, it constitutes a distinct modality of causal agency shaped by three interlinked features: epistemic dependence on historically accumulated data, structural opacity that conceals its internal logic, and the normative biases embedded—often subtly—in its training datasets and design assumptions (Bratton, 2015). Together, these features generate a mode of causality that is immanent, deterministic, and self-reinforcing, producing a superficial resemblance to theological conceptions of predestination while diverging fundamentally from them.

Algorithms derive their predictive authority from the past. Their functioning rests on inductive inferences extracted from immense reservoirs of historical data—records of previous clicks, transactions, movements, biometric markers, and social interactions (Mayer-Schönberger & Cukier, 2013). Whether implemented through classical statistical models or sophisticated deep-learning architectures, algorithms identify recurring patterns in past behavior and redeploy them to forecast future actions. What appears as serendipity—the news item one encounters, the advertisement one receives, or the suggested romantic match—is, in fact, a probabilistic artefact generated from this computational archive (Zuboff, 2019).

This dynamic generates a feedback mechanism widely described as a behavioral-surplus loop: algorithmic predictions shape a user's choices, the user's responses generate new data that strengthen the model, and the model becomes increasingly confident—and constraining—in its forecasts (Zuboff, 2019, pp. 75-100). Over time, this process narrows the horizon of possible futures, allowing the statistical past to dominate what becomes perceptually, socially, and behaviorally available. The result is a closed informational ecology—a "filter bubble"—in which novelty, spontaneity, and *ibda`* (creative rupture) are gradually foreclosed (Pariser, 2011). In theological terms, this architecture replaces radical contingency with mechanistic predictability, thereby reproducing a deterministic universe governed not by divine volition but by the inertia of historical data.

Compounding this determinism is the structural opacity of algorithmic systems. Their internal logic is often inaccessible to users, regulators, and even designers, a condition commonly termed the "black box" problem (Burrell, 2016). This opacity is the combined product of computational complexity, proprietary restrictions, and non-linear machine-learning processes whose intermediate states defy straightforward interpretability (Pasquale, 2015). Such inscrutability fosters the illusion that algorithmic outputs are objective and authoritative—an ideology of "technochauvinism" that treats computational verdicts as self-legitimizing and

impartial (Broussard, 2018, p. 12). Loan denials, content recommendations, and risk-assessment scores thus appear as impersonal decrees, mimicking, at a phenomenological level, the experience of *taslim*—acceptance of divine decree (*qadar*) despite limited understanding.

Yet this resemblance collapses under scrutiny. Divine inscrutability is grounded in ontological transcendence (*tanzih*), infinite wisdom, and the Creator–creation distinction. Algorithmic opacity, by contrast, arises from contingent human limitations: restricted or biased datasets (Buolamwini & Gebru, 2018), technical errors, methodological blind spots, and the economic priorities of corporations that design and profit from these systems (Eubanks, 2018). What appears as a quasi-theological mystery is merely a failure of transparency and accountability within an immanent, human-made apparatus (Citron & Pasquale, 2014).

Equally significant is the normative bias embedded within algorithms. Technologies are often presumed to be neutral, yet algorithms inevitably inherit—and amplify—the social, political, and epistemic asymmetries contained in their training data (Noble, 2018). A hiring algorithm trained on decades of male-dominated corporate history will reproduce exclusionary practices with accelerated efficiency (Dastin, 2018). Predictive-policing models built on racially skewed arrest records will disproportionately target the very communities historically subjected to surveillance, effecting a technologically refined extension of earlier injustices (Eubanks, 2018, p. 69). Far from transcending human limitations, algorithms crystallize and systematize them: our *ghaflah* (heedlessness), *zulm* (propensity toward injustice), and epistemic partiality become encoded in silicon (Benjamin, 2019).

Taken together, these three features—retrospective epistemology, structural opacity, and normative bias—constitute algorithmic causality as a closed, immanent system of determination. It is deterministic not because it reflects divine will, but because it operationalizes the accumulated residues of human behavior, institutional exclusion, and historical injustice. What emerges is a mechanistic simulacrum of predestination: a self-engineered *qadar* produced through statistical inference rather than metaphysical decree. This constrictive logic defines precisely the terrain on which theological critique becomes necessary, exposing the profound ethical and metaphysical stakes of entrusting human futures to a system governed by the deterministic inertia of the past.

### The Classical Kalam on Divine Sovereignty and Human Agency

To evaluate adequately the theological implications of algorithmic determinism, it is essential to engage the intellectual legacy of classical *kalam* (Islamic scholastic theology), where Muslim theologians (*mutakallimun*) developed some of the most sophisticated pre-modern analyses of causality, volition, and responsibility (Wolfson, 1976; Watt, 1973). Their debates centered on a profound paradox: how to uphold God’s absolute omnipotence and ontological priority, while also safeguarding genuine human moral accountability—a challenge known as the dilemma of predestination and free will (*al-qaḍa’ wa al-qadar*; see Frank, 1983). The dialectical exchange between the Mu`tazili and Ash`ari schools forms the most systematic and enduring articulation of this tension, furnishing conceptual tools indispensable for critiquing modern structures of immanent causality such as algorithmic systems (Rahman, 1994; Ayoub, 2003).

#### The Mu`tazili Defence of Divine Justice and Human *Ikhtiyar*

The Mu`tazila, a rationalist theological tradition that crystallized in the 8<sup>th</sup>-10<sup>th</sup> centuries, grounded their entire theological project (*usul al-din*) in the axiomatic principle of divine justice (*al-`adl*; Martin & Woodward, 1997). This foundational commitment led them to construct a robust doctrine of human free choice (*ikhtiyar*), arguing that moral and legal obligation (*taklif*) becomes conceptually incoherent unless human beings possess genuine authorship over their voluntary acts (*af`al ikhtiyariyyah*; Al-Qaḍi `Abd al-Jabbar, d. 1025/1965). For prominent Mu`tazili theologians such as Abu al-Hudhayl al-`Allaf (d. c. 841) and al-Qaḍi `Abd al-Jabbar (d. 1025), human beings are “creators” of their voluntary acts—*khaliqun*, albeit in a derivative,

contingent sense (*makhlūq li-khalq*; see Peters, 1976; Gimaret, 1980). The Muʿtazila insisted on a strict metaphysical boundary: if God were the direct and efficient creator of human acts, including evil ones, then holding humans accountable for those acts would amount to divine injustice (*zulm*), a quality that is ontologically impossible (*muḥal*) for a perfectly just God to possess (Al-Qaḍī ʿAbd al-Jabbar, d. 1025/1965). Divine transcendence (*tanzih*), they argued, therefore necessitates that morally evil actions originate solely from human will and agency, not from divine decree or creative power. This produced a moral universe where human agency is both autonomous and causally efficacious, endowed with a special “generated power” (*qudra ḥaditha*) to initiate actions (Frank, 1983).

Within this framework, divine knowledge (*ʿilm Allah*) is eternal (*azali*), comprehensive, and immutable, but it is strictly non-causal and non-determinative. As articulated in the Muʿtazili principle, God’s foreknowledge of human acts does not compel or determine those acts; rather, God knows them eternally *because* humans will freely perform them in time (Al-Shahrastani, d. 1153/1984). Divine knowledge thus “tracks” rather than generates human choices, preserving a metaphysical domain wherein human agency is genuinely undetermined and self-originated (*muktasib*; see Vasalou, 2008).

Consequently, the eschatological calculus—reward in paradise (*al-thawab*) or punishment in hell (*al-ʿiqab*)—is understood as a just and necessary consequence of human self-authorship. Soteriology, in the Muʿtazili vision, is therefore predicated on individual moral desert (*istihqaq*) rooted in autonomous freedom: the human becomes, in a real sense, the architect of their own ultimate destiny (Madelung, 1985).

#### The Ashʿari Synthesis: Divine Creation and Human Acquisition (*Kasb*)

In contrast, the Ashʿari school, founded by Abu al-Hasan al-Ashʿari (d. 936), emerged in the 10<sup>th</sup> century as a sustained critique of what it perceived as the Muʿtazili rationalist dilution of divine omnipotence and universal causality (Al-Ashʿari, d. 936/1929; Watt, 1973). Ashʿari theology insisted upon the all-encompassing, unmediated nature of God’s creative power (*qudra*) and will (*irada*). For the Ashʿaris, God is the sole and exclusive Creator (*al-Khaliq al-muṭlaq*) of every contingent entity and event (*ḥadith*); nothing in the cosmos comes into existence except through His direct and instantaneous creation (*khalq*; Al-Ghazali, d. 1111/1997). This principle of divine occasionalism extends without exception to human acts: every motion, intention, and effect arises through divine creative activity at each discrete moment (*an*; see Perler & Rudolph, 2000).

However, to avoid the theologically untenable implication that God is the author (*faʿil*) of moral evil, al-Ashʿari introduced the sophisticated metaphysical doctrine of *kasb* (acquisition; Al-Ashʿari, d. 936/1929). According to this formulation, God alone creates the ontological substance or actuality (*ḥaqiqa*) of every human act, but the human being “acquires” (*yaktasibu*) the act, serving as its intentional locus (*mahall*) and moral-legal bearer (*mukallaf*; see Gimaret, 1990). This acquisition occurs via a divinely created, contingent capacity (*al-qudra al-muḥdatha*) that coincides temporally with the act itself, not preceding it (Al-Baqillani, d. 1013/1957).

Thus, in the Ashʿari model, when a human wills an action, God simultaneously creates (1) the act itself (*al-fiʿl*), (2) the human’s capacity (*qudra*) to appropriate it, and (3) the “concomitance” (*maʿiyya*) or correlation between the capacity and the act (Al-Juwayni, d. 1085/1950). The act’s metaphysical existence (*wujud*) is entirely divine; its ethical and legal attribution (*ḥukm*) is human. This dual-layer theory of attribution preserves absolute divine sovereignty (*rububiyya*) while securing sufficient grounds (*ʿilla*) for moral responsibility (*taklif*; see Hoover, 2007). Ashʿari theologians employed analogies to clarify this opaque relationship. A classical example, cited by later scholars like Al-Ghazali (d. 1111/1997), is that of a leaf moved by the wind: God creates both the wind and the motion of the leaf; when a person intentionally grasps the moving leaf, the motion itself is not of their making, but their “acquisition” of that motion for a purpose is their own voluntary act (Al-Ghazali, d. 1111/1997). The precise mechanics of how divine creation and human acquisition coincide remain ultimately inscrutable, a mystery belonging to God’s wisdom (*ḥikmah*). The Ashʿaris thus explicitly appealed to the

epistemological principle of *bila kayf* (“without [asking] how”), acknowledging that the divine-human causal nexus transcends full rational comprehension (*`aql*; see Winter, 2008). Doctrinal coherence—maintaining both God’s omnipotence and the reality of the *Shari`a*’s commandments—took precedence over metaphysical precision.

### Theological Juxtaposition: `Ilm Allah vs. Algorithmic “Knowledge”

With the architecture of algorithmic causality and the key frameworks of classical *kalam* now delineated, we may undertake the central task of this inquiry: a systematic theological juxtaposition of the divine attribute of Knowledge (*`Ilm Allah*) and the operational logic of algorithmic “knowing.” This comparison is not merely epistemological; it is ontological and metaphysical, cutting to the very structure of how causality operates in a universe governed by *tawhid* (divine oneness). The distinction illuminates the fundamental error in equating computational inference with anything resembling divine cognition (Wolfson, 1976; Chittick, 1998).

#### *Eternal (Azali) Knowledge vs. A Posteriori Data-Mining*

In Islamic theology, the divine attribute of Knowledge (*`Ilm*) belongs to God’s essential attributes (*sifat dhatiyyah*), which are pre-eternal (*azali*), uncreated (*ghayr makhluq*), and inseparable from the divine essence (*dhat*; Al-Ghazali, d. 1111/1997; Al-Razi, d. 1210/1987). Classical theologians—across both Ash`ari and Maturidi schools—affirm that God’s Knowledge is *276asli* (eternal), encompassing all entities (*a`yan*), states (*ahwal*), possibilities (*imkanat*), and relations (*nisab*) in a single, indivisible, and timeless mode of knowing (*`ilm 276aslim 276e*; Al-Ash`ari, d. 936/1929; Al-Bazdawi, d. 1099/2003). The Quran grounds this metaphysical claim with striking imagery: “Not a leaf falls but that He knows it, nor a grain in the darkness of the earth, nor anything wet or dry, but is [written] in a clear Record” (The Quran, Al-An`am 6:59). This verse communicates more than mere comprehensiveness; it affirms that God’s knowledge is ontologically prior to and logically independent from the temporal unfolding of events, serving as the foundational “Preserved Tablet” (*al-Lawh al-Mahfuz*) from which all existence is decreed (Murata & Chittick, 1994).

Divine Knowledge is therefore not observational, inferential, or sequential. It is not acquired through experience or updated through the passage of time. Rather, it is the ontological condition (*al-shart al-wujud*) for the existence of all things (Izutsu, 2002). In classical *kalam*, God’s act of knowing and His act of creating are intimately conjoined: His knowledge of a thing is inseparable from His creative command *kun fa-yakun* (“Be! And it is”; The Quran, Yasin 36:82). As articulated by Al-Ghazali (d. 1111/1997), divine knowledge is creative and constitutive (*`ilm takwini*); God knows all things not because they occur, but they occur precisely because they stand within the scope of His pre-eternal knowledge (*`ilm azali*) and creative will (*irada takwiniyya*; see Frank, 1992).

Algorithmic “knowledge” stands at the absolute opposite pole of this metaphysical spectrum. It is created (*makhluq*), temporal (*zamani*), and radically contingent (*ittisafi*; Floridi, 2014). It emerges only *after* data is produced; it is epistemologically posterior (*ba`di*) to events. Algorithms “learn” through iterative accumulation and statistical pattern recognition, constructing probabilistic models (*namadhij ihtimaliyya*) from finite and historically conditioned datasets (Mayer-Schönberger & Cukier, 2013). Their knowledge is neither comprehensive nor metaphysically grounded; it is structurally partial (*juz`i*), inherently fallible (*qabil li al-khata`*), and inescapably dependent on the limits and biases of their training corpus (Noble, 2018). Most critically, algorithmic knowledge is never causative (*ghayr musabbib*). It may detect correlations (*irtibat*), generate predictions (*tawaqqu`at*), or simulate future scenarios, but it cannot bring any event into being (*ijad*; see Bratton, 2015). The algorithm’s forecast of a traffic jam, an election result, or a medical diagnosis does not constitute an ontological cause (*sabab wujud*) in the *kalam* sense (Perler & Rudolph, 2000). It is merely descriptive (*wasfi*)—a shadow (*zill*) or

residue (*'athar*) of created phenomena—whereas divine Knowledge is luminous (*277aslim*), creative (*takwini*), and world-constituting (*muqawwim li-l-kawn*; Nasr, 1993).

### The Open Cosmos of Tawhid vs. the Closed System of Code

The epistemological chasm outlined above mirrors a deeper ontological divergence. The cosmos (*al-kawn*) described by Ash`ari occasionalism is not a sealed mechanism of autonomous natural causes but a continuously recreated reality (*kawn jadid*), regenerated by God at every discrete moment (*an*; Al-Ghazali, d. 1111/1997). What appear as stable “laws of nature” are in truth divine customs (*'ada Allah*), habitual patterns (*maratin al-'adat*) that God chooses—without compulsion (*la bi al-hijab*)—to instantiate consistently for human benefit and empirical inquiry (Ibn Rushd [Averroes], d. 1198/1978). This consistency makes science possible while preserving the metaphysical openness of the cosmos to direct divine intervention (*tadbir*; see Kogan, 1985).

Miracles (*khawariq al-'adah* or *mu'jizat*) represent explicit, willful suspensions of this customary order, demonstrating that the universe remains radically contingent (*mumkin al-wujud*) on divine volition (Al-Baqillani, d. 1013/1957). Within this worldview, prayer (*du'a*), sincere repentance (*tawbah*), spiritual transformation (*inqilab ruhi*), and divine grace (*rahma*) maintain real causal efficacy (*athariyyah haqiqiyyah*), not by competing with secondary causes but by operating on a vertical axis of causation (*mihwar 'amudi li al-'illiyyah*) that transcends (*yat'ala*) the horizontal, immanent chain of events (Chittick, 2013). The Prophet Muhammad is reported to have said, “Nothing repels the Decree (*al-qada'*) except supplication (*al-du'a*)” (Al-Tirmidhi, d. 892/2007, Hadith 2139), establishing *du'a* as a real, metaphysical force within the economy of divine decree.

The algorithmic system, by contrast, is hermetically enclosed (*munghaliq*) within its own immanent frame (*itar shuhudi*). Its ontology, derived from logical positivism and computational theory, lacks any category for transcendence (*tajawuz*), genuine volition (*irada haqiqiyya*), miracle, or metaphysical rupture (Bostrom, 2014; Searle, 1980). The algorithm operates strictly through and is structured by the past—the data it has been fed—and therefore possesses no conceptual architecture to accommodate the genuinely new (*al-jadid al-haqiqi*), the divinely bestowed (*al-mawhub*), the morally transformative (*al-mutaghayyir akhlaqan*), or the spiritually unprecedented (*al-ruhani al-mubdi'*). It is ontologically blind to the metaphysics of *tawhid*, which posits a living, responsive, and purposeful cosmos in constant relation with its Creator (Nasr, 1996).

Whereas the theistic cosmos is open-ended (*maftuh*), relational (*idafi*), and dialogical—shaped by divine-human interaction (*al-tafa'ul al-ilahi al-insani*)—the algorithmic cosmos is a deterministic script (*khata muhaddada*) generated from and forever bound to historical data (Zuboff, 2019). It is incapable of recognizing, modeling, or validating the Prophetic teaching that sincere supplication can alter what is written, as this violates its foundational principle of deterministic prediction based on past regularities (Pasquale, 2015). The result is an irreconcilable ontological mismatch: the cosmos of *tawhid* is dynamic (*277as*), participatory (*musharik*), and vertically layered (*tabaqi 'amudi*); the algorithmic system is flat (*mustah*), closed (*munghaliq*), and recursively looped (*mustadir*) within its own inputs and programmed objectives (Bratton, 2015).

### Kasb and Algorithmic Influence: A False Symmetry

Among the analogies that might tempt the modern theological imagination, few are as superficially attractive—and as potentially misleading—as the comparison between the Ash`ari doctrine of *kasb* (acquisition) and the operational mechanics of algorithmic influence. At a cursory level, one may observe a structural resemblance: God creates the ontological reality of human acts, which the human then “acquires,” while algorithms generate choices, environments, or psychological inclinations that the user subsequently “acquires” through a click, a purchase, or a shift in conviction (Yeung, 201“). This apparent symmetry—two systems where an external

agent provides the content and the human agent appropriates it—suggests a potential bridge between classical theology and modern techno-social engineering.

Yet upon rigorous metaphysical and ethical scrutiny, this symmetry dissolves entirely. What emerges instead is a profound disanalogy rooted in the nature of agency, the architecture of causation, and the moral telos that frames human action. This disanalogy reveals that algorithmic influence does not merely mimic *kasb* in a flawed way but represents its antithesis in both mechanism and ultimate purpose (Danaher, 2016).

### Metaphysical Grounding vs. Psychological Coercion

In the classical Ash`ari formulation, *kasb* is the precise metaphysical mechanism—admittedly accepted *bila kayf* (without [asking] how)—through which human beings become morally responsible agents (*mukallafun*) for acts whose ontological being (*wujud*) is created directly by God (Al-Ash`ari, d. 936/1929). The human will (*irada*) is itself a created faculty, but it is a real secondary cause (*sabab haqiqi*) empowered at the moment of decision by a divinely generated “created capacity” (*al-qudra al-muhdatha*; Al-Baqillani, d. 1013/1957). Al-Ash`ari describes human will as a genuine locus of moral intention (*qasd*), which coincides (*yata`aqab*) temporally and intentionally with God’s creative act (*fi`l al-khaliq*) in producing the deed (Gimaret, 1990). Thus, *kasb* is not a metaphysics of manipulation; it is a doctrine of divinely enabled and ontologically grounded agency in which the human is granted authentic moral authorship (*fa`iliyyah akhlaqiyyah*) of their choices within a framework of ultimate divine sovereignty (Frank, 1983). This process requires the full engagement of the intellect (*`aql*) and the faculty of moral discernment (*tamyiz*), which are prerequisites for legal and moral responsibility (*taklif*) in Islamic jurisprudence (Al-Ghazali, d. 1111/1997).

Algorithmic influence operates on an entirely different plane. It does not ontologically ground human action; it manipulates the psychological, emotional, and environmental conditions under which choices are made, often bypassing the higher rational faculties (Susser et al., 2019). Contemporary algorithms operate through hyper-personalized statistical targeting, behavioral prediction, and environmental conditioning—collectively described in behavioral economics as “choice architecture” and “nudging” (Thaler & Sunstein, 2008). Rather than enabling the human *qudra* (capacity for autonomous action), algorithms strategically exploit well-documented cognitive vulnerabilities and biases, such as the availability heuristic, confirmation bias, variable reward schedules (akin to slot-machine mechanics), and affective (emotional) triggers (Kahneman, 2011; Eyal, 2014). This engineering is designed to optimize for engagement and predictability, not for moral deliberation (Zuboff, 2019).

Thus, while the user formally “acquires” the act of clicking or viewing, the digital environment has been meticulously engineered—through timing, design, and content curation—to make that choice compelling, frictionless, and emotionally charged, often inducing a state of “flow” that diminishes critical reflection (Williams, 2018). What appears as volitional acquisition is frequently a conditioned, semi-automatic response (*istijaba musharafa*), bypassing the *`aql* and *tamyiz* that form the ethical core of human responsibility in Islamic theology (Al-`Attar, d. 1357/2007). In short, *kasb* metaphysically empowers the rational soul (*al-nafs al-na`iqah*) to choose in accordance with its God-given nature; the algorithmic system psychologically circumvents it to produce a predetermined outcome (Carr, 2020).

### The Perversion of the Moral Framework

A further and more decisive distinction concerns the moral architecture (*al-bina` al-akhlaqi*) within which each system operates. The entire structure of *kasb* is embedded within a transcendent moral order established by God and revealed through the *Shari`a*. Acts are deemed good (*khayr*) or evil (*sharr*) based on their conformity with divine commandments and prohibitions (*al-awamir wa al-nawahi*), with the ultimate aims (*maqasid*) being human salvation (*al-najat fi al-akhirah*), spiritual refinement (*tazkiyat al-nafs*), and the realization of divine justice

(*ihqaq al-`adl*) in both individual and communal life (Al-Ghazali, d. 1111/2010; Kamali, 2008). Even the metaphysical structure of human agency in *kalam* is divinely oriented (*mutawajjih ila Allah*) toward virtue (*fadilah*) and ultimate accountability (*hisab*) before God.

By contrast, the algorithmic system is situated within what may be termed an inverted or instrumental moral economy. Its operational telos is not virtue, goodness (*birr*), or truth (*haqq*), but measurable metrics such as user engagement, click-through rates, attention capture, targeted persuasion (*i`lan muwajjah*), profit extraction, data commodification, or political influence (Zuboff, 2019). This telos shapes its engineering at a fundamental level: algorithms are designed to identify and amplify content that is emotionally charged (*munaffir `atfi*), divisive, addictive, outrage-inducing, or sensational—because such content maximizes time-on-platform, data yield, and behavioral predictability (Pariser, 2011; Vaidhyanathan, 2018).

Thus, rather than serving as a neutral informational scaffold, the algorithm becomes a pervasive moral deforming force (*quwwah tashwihyyah*). It systematically undermines the conditions necessary for moral deliberation by flooding the attentional field with distractions and by rewarding impulsive, emotion-driven engagement (Williams, 2018). In its form and function, it resembles not the divine will that enables morally responsible *kasb*, but the Quranic depiction of *al-Shaytan*: a whispering presence (*al-waswas al-khannas*) that beautifies (*zayyana*) harmful or frivolous actions and exploits the weaknesses of the lower, commanding self (*nafs al-ammara bi al-su`*; The Quran, Yusuf 12:53). The Quran describes this dynamic succinctly: “Satan made their deeds attractive to them and said, ‘No one today can overcome you, for I am your protector.’ But when the two forces came in sight of each other, he turned on his heels and said, ‘I disown you: I see what you do not see, I fear God, for He is severe in punishment’” (The Quran, al-Anfal 8:48). The algorithm, like the satanic promise, offers an appealing, frictionless path but ultimately leads to spiritual and cognitive fragmentation (Carr, 2020).

Where *kasb* aligns human agency with a divine moral purpose aimed at eternal felicity (*al-sa`adah al-abadiyyah*), algorithmic conditioning aligns human inclination with transient corporate or ideological ends aimed at extraction and control (Zuboff, 2019). Where *kasb* calls the human being to conscious accountability (*al-mas`uliyah al-wa`iyyah*), algorithms entice the human toward heedlessness (*ghaflah*), fragmentation of attention (*taqsim al-intibah*), and the erosion of the deliberative faculty (*id`af al-quwwah al-mufakkirah*; see Manuchihri, 2018). The “acquisition” facilitated by algorithms is thus a hollow imitation (*muhakah jaw`a*)—one that corrodes the very cognitive and volitional capacities necessary for genuine moral *kasb* and reduces human agency to a set of predictable responses within a manufactured stimulus-response environment.

### The Apophatic Function of the Algorithmic Qadar

The sustained encounter between classical Islamic theological frameworks and the emergent phenomenon of algorithmic causality yields a result that is as theologically significant as it is counter-intuitive. Rather than offering a new model through which the divine decree (*al-qada` wa al-qadar*) might be analogically clarified, the algorithm instead provides a powerful counter-model—one that, through its severe ontological and epistemological constraints, illuminates the transcendent grandeur and ineffable mystery of the true *qadar* by starkly delineating what *qadar* is not (Turner, 1995; Sells, 1994).

The “false *qadar*” of the algorithm, as articulated in this analysis, is revealed to be a determinism of the past: a system epistemologically shackled to historical data and probabilistic inference, ontologically confined to an immanent and closed causal structure, and ethically compromised by the very human biases embedded in its design (Zuboff, 2019; Noble, 2018). It is a *qadar* defined entirely by createdness (*makhluyiyah*), shaped by intrinsic limitation (*hudud*), temporality (*huduth*), and the mechanical regurgitation of statistical patterns rather than the unfolding of sovereign, purposive wisdom (*hikmah*; Al-Ghazali, d. 1111/1997).

The Divine *Qadar*, by contrast, belongs to an entirely different metaphysical order. It is pre-eternal (*azali*), not derived from data but the very source (*279aslim*) of all ontological

possibility (*imkan al-wujud*; Al-Razi, d. 1210/1987). It is creative (*takwini*) rather than merely predictive (*tawaqqu'i*), encompassing (*muhit*) rather than reactive, and perfectly just (*'adl kamil*) in both its hidden architecture (*bina' khafi*) and its manifest outcomes (*nata'ij zahira*; Al-Qushayri, d. 1072/2007). It operates within a cosmos (*kawn*) intentionally left open to divine intervention (*tadbir*), human supplication (*du'a*), sincere repentance (*tawba*), and the ever-present possibility of spiritual transformation (*tahawwul ruhi*; see Chittick, 2013). Most profoundly, the Divine *Qadar* reconciles human freedom and divine sovereignty not through the crude binaries of determinism or libertarian autonomy, but through the subtle metaphysical calculus of *kasb*, by which God creates the act while granting the human genuine moral acquisition (*iktisab*) and responsibility (*mas'uliyah*; Al-Ash'ari, d. 936/1929; Frank, 1983).

From this contrast emerges the central theological insight: the algorithm's ultimate value is apophatic (*salbi*). In the tradition of negative theology (*al-lahut al-salbi* or *via 280aslim280e*), which approaches the Divine by affirming what God is *not* (*laysa ka-mithlihi shay'*; The Quran, 2004, 42:11), the algorithmic system—with its constricted causal logic (*manṭiq 'illi mudayyaq*), its opaque decision processes, and its amplification of human injustice—forces the believer into a deeper, more disciplined recognition (*ma'rifah mumayyazah*) of the radical dissimilarity (*al-mukhalafah al-tammah*) between divine decree and human-made predictive systems (Al-Ghazali, d. 1111/2011; Turner, 1995). The anxiety (*qalaaq*) induced by living within an algorithmic *muhit* (environment)—the sense of being evaluated, predicted, nudged, or constrained—should never be projected (*tamthil*) onto the divine ontology (*al-wujud al-ilahi*). Instead, it should catalyze the process of *tahqiq* (metaphysical verification), a rigorous intellectual and spiritual effort to discern the absolute distinction (*tamyiz mutlaq*) between the Creator (*al-Khaliq*) and all forms of creation (*khalq*), including the most sophisticated of human artefacts (Ibn 'Arabi, d. 1240/1980; Chittick, 1998).

The resulting challenge for the contemporary Muslim is thus one of sustained spiritual (*ruhani*) and epistemic (*ma'rifi*) discernment (*tamyiz*; Al-'Aṭṭar, d. 1357/2007). One must recognize the algorithmic *muhit* for what it is: a powerful yet contingent (*mumkin*) apparatus (*jihaz*) attempting to impose its own limited, immanent (*shahidi*), and flawed *qadar* upon human life, functioning as a form of “digital predestination” or “informational *jabr*” (Danaher, 2016; Zuboff, 2019). The theological task is not to reject technology outright (*rafq al-tiknulujiya*), nor to romanticize pre-digital modes of life, but to resist the subtle forms of digital coercion (*al-jabr al-raqmī*) by reorienting (*tawjih*) the self (*nafs*) within the true cosmic hierarchy (*al-nizam al-kawni al-haqiqi*; Nasr, 1996). This involves reaffirming (*ta'kid*) that sovereignty (*al-Mulk*) belongs exclusively to God (*lillah al-mulk al-haqq*), and that authentic human freedom (*hurriyya haqiqiyya*) is realized not in passive acquiescence (*280aslim sakit*) to algorithmic opacity (*ghumud al-khawarizmi*), but in the conscious and willing submission (*islam 'aqil murid*) to the will of *al-Hakim* (the All-Wise), *al-'Adl* (the Perfectly Just), and *Musabbib al-Asbab* (the Originator of All Causes; The Quran, Hud 11:56; 6:73). Through such reorientation, the believer resists the colonization (*isti'mar*) of the soul (*al-nafs*) by algorithmic pseudo-fate (*al-qadar al-za'if*) and reenters the luminous horizon (*al-ufuq al-munir*) of divine decree, where freedom, responsibility (*taklif*), and spiritual purpose (*al-ghayah al-ruhiyyah*) converge in the divine *maqсад* (ultimate aim) (Al-Ghazali, d. 1111/2010).

### Conclusion

This study has argued that algorithmic prediction, rather than illuminating the nature of divine decree (*al-qaḍa' wa al-qadar*), functions as a conceptual negation that clarifies what divine decree is not. Predictive algorithms operate as closed, immanent, and historically conditioned systems whose apparent determinism derives from retrospective data aggregation and probabilistic inference. While this structure may phenomenologically resemble certain human intuitions about foreknowledge and control, the analysis has demonstrated that such resemblance is ontologically shallow and theologically misleading. The algorithm's determinism remains epistemically derivative, ethically burdened by human bias, and metaphysically incapable of accounting for

transcendence, moral transformation, or the vertical axis of divine–human interaction that lies at the heart of Islamic cosmology.

The primary theological contribution of this inquiry is therefore apophatic. By exposing the limits and constrictions of algorithmic causality, the study redirects attention toward the radical transcendence (*tanzih*) of divine knowledge and action. Classical Islamic theology—particularly the Ash`ari articulation of *kasb*—emerges not as a pre-modern curiosity but as a sophisticated metaphysical grammar capable of resisting both technological determinism and simplistic affirmations of human autonomy. In this sense, algorithmic systems serve as a diagnostic mirror: their failures illuminate the irreducibility of divine decree and reaffirm the ontological distinction between the Creator and all contingent, created systems.

Beyond its conceptual claims, this study carries several implications for future research. First, it opens a pathway for further theological engagement with emerging technologies beyond predictive algorithms, including artificial general intelligence, autonomous decision-making systems, and neurotechnologies. Each of these domains raises distinct questions about agency, responsibility, and causality that could benefit from a *kalam*-based analytical framework. Second, future research may extend this inquiry by incorporating other Islamic theological traditions—such as Maturidi perspectives on reason and moral agency—or by engaging Islamic legal theory (*usul al-fiqh*) to examine how algorithmic mediation affects accountability (*taklif*) and moral responsibility in applied contexts.

Third, the study suggests the need for empirical and ethnographic research exploring how Muslim individuals and communities negotiate algorithmic environments in their religious, ethical, and devotional lives. Such work could examine whether theological concepts such as *tawakkul*, *du`a*, and moral intention (*niyyah*) are reshaped or reinforced under conditions of pervasive algorithmic mediation. Finally, interdisciplinary dialogue between Islamic theology, philosophy of technology, and digital ethics could yield normative frameworks capable of informing policy, design ethics, and technological governance from non-secular metaphysical standpoints.

In sum, this article proposes that reclaiming moral agency in the age of algorithmic prediction requires not withdrawal from technological systems, but critical theological discernment (*tamyiz*). By situating algorithmic determinism within its proper ontological limits, Islamic theology offers a principled means of resisting the illusion of algorithmic predestination and reorienting human agency toward its true horizon: a universe governed by divine wisdom, justice, and purpose. In this reorientation lies a contemporary application of *tawhid*, reaffirming the absolute distinction between the uncreated Creator and all created systems—however sophisticated—of human design.

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The authors declare that they have no conflict of interest.

### Author's Contribution Statement

All authors contributed meaningfully to the development of this manuscript. They reviewed and approved the final version of the manuscript

1. **Zainab Amin:** is the principal author was responsible for the conceptualization of the study, formulation of the theoretical framework, and critical analysis of the core arguments.
2. **Salma Anjum:** contributed primarily through translation, linguistic refinement, and support in articulating key theological concepts.
3. **Nazia Bibi:** contributed through the collection, organization, and review of relevant source material and references.

### Ethics Statement

This study was conducted in accordance with established ethical standards. All procedures involving human participants were carried out following the ethical principles of the Declaration of Helsinki. Informed consent was obtained from all participants prior to their inclusion in the study. Participant anonymity and confidentiality were strictly maintained, and no identifying personal data were disclosed. The authors declare that no harm, risk, or coercion was involved at any stage of the research.

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