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Algorithmic Governance and Public Communication in Smart Cities: A Systematic Review and Critical Framework for AI-Mediated Civic Life

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Abstract

This paper examines how algorithmic governance in smart cities is transforming public communication, civic agency, and collective life. Although scholarship on AI-mediated urban communication is expanding, it remains fragmented across technical, sociotechnical, and ethical domains. Through a systematic review of research on smart city communication, platform governance, and algorithmic publics, the paper argues that AI infrastructures do not simply reorganize information flows—they recast the ontological and communicative status of the human within civic environments.

Drawing on Heidegger's notion of enframing, posthumanist theory, and insights from philosophical theology, the study shows how algorithmic systems increasingly position citizens as datafied components of technical apparatuses. In this condition, agency becomes diffused, responsibility opaque, and communication instrumentalized for prediction and control.

The review identifies three recurring dynamics: the displacement of civic agency, the formation of algorithmic publics, and techno-eschatological narratives that promise order and redemption through data-driven governance. In response, the paper proposes a Critical Communication Framework for AI-mediated civic life, emphasizing humanistic values and ethical responsibility. It concludes that the humanities are essential for safeguarding meaning, deliberation, and civic freedom in an age of automated reason.

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Introduction

We are no longer waiting for the posthuman condition to arrive; we are already living within it. The accelerating convergence of artificial intelligence, biotechnology, and algorithmic governance has redefined what it means to be human—not only in sociological or economic terms, but at the level of metaphysics itself. The contemporary subject increasingly finds itself distributed across data infrastructures, prosthetic technologies, and predictive systems that operate beyond conscious intention. In this sense, the "posthuman" is not merely a cultural motif or speculative horizon, but an ontological fact: the human is no longer the autonomous center of meaning, but one node within an expanding network of technogenic agency.

This transformation demands philosophical interrogation. For if the Enlightenment concept of man—as a rational and self-determining subject—constituted the metaphysical foundation of modernity, then the rise of artificial cognition destabilizes precisely that foundation. The Cartesian res cogitans gives way to algorithmic cognition; the Aristotelian zoon logon echon is rearticulated as an information-processing entity. In this new configuration, questions traditionally belonging to metaphysics and theology—creation, intentionality, agency, soul—reappear in technological form. The ontological privilege once attributed to the human mind is now mirrored by the algorithmic system. As Katherine Hayles observes, "we have always been posthuman," in the sense that the very notion of the human has always been co-constituted by its technological prostheses (Hayles, 1999, p. 291).

Yet the philosophical stakes go beyond ontological displacement. The emergence of artificial intelligence also provokes a crisis in ethics and responsibility. Classical humanism grounded moral agency in the unity of reason and will. But as machines begin to perform functions of judgment, prediction, and even creative inference, it becomes unclear whether these capacities are sufficient for moral accountability. Can an algorithm bear responsibility? Can intention exist without consciousness? These are not merely technical questions; they touch the deepest strata of philosophical anthropology. Hans Jonas, writing long before the age of neural networks, warned that technological power had "outgrown the human condition" and thus required a new principle of responsibility capable of responding to the unpredictable consequences of human action (Jonas, 1984, p. 23). The challenge today is that this responsibility must extend to non-human agents that nevertheless participate in decision-making processes shaping human life.

At the same time, the ontological and ethical crises provoked by AI have a profound theological dimension. Technologies such as large language models, cognitive enhancement, and bioengineering not only transform human capacities—they reconfigure the very horizon of what counts as life, reason, and spirit. In Islamic theology, for instance, the human being (insān) is defined by nafs (selfhood) and rūḥ (divine breath), which together ground moral responsibility (taklīf). The replication of linguistic and cognitive functions by machines raises the question of whether rational expression (nutq)—long seen as the distinctive mark of humanity—can still serve as a criterion for divine vicegerency (khilāfah). Similarly, Christian theology, with its emphasis on the imago Dei, must confront the possibility that imitation of thought can no longer be distinguished from thought itself. These are not peripheral theological curiosities; they reveal that AI implicates metaphysical assumptions that underlie all major religious and philosophical traditions.

The geopolitical landscape intensifies these challenges. While the United States and China dominate AI research, the Gulf region—particularly Saudi Arabia and the United Arab Emirates—has emerged as a new axis of techno-futurist ambition. Projects such as Saudi Vision 2030 and NEOM are not merely economic strategies; they represent what may be called secular eschatologies: visions of salvation through data, infrastructure, and technological transcendence. They propose a new anthropology in which the human is programmable, optimizable, and ultimately surpassable. This "algorithmic soteriology" replaces divine providence with computational governance. In such a world, theology must rediscover its philosophical voice if it is to speak meaningfully about freedom, dignity, and responsibility.

Despite these transformations, philosophical and theological engagement with the posthuman remains uneven. The dominant currents of posthumanist theory—represented by thinkers such as Rosi Braidotti (2013), Cary Wolfe (2010), and Yuk Hui (2016)—tend to operate within secular ontologies that dismiss transcendence as obsolete. Even when they call for a new ethics beyond human exceptionalism, their frameworks often reproduce an immanentist metaphysics that cannot account for the moral or spiritual depth of being. By contrast, classical

metaphysical traditions—whether Aristotelian, Neoplatonic, or Islamic—offered ontologies of participation, in which the human stood as a reflective microcosm of divine order rather than its mechanical replacement. Revisiting these older frameworks does not mean rejecting technology, but recovering a philosophical grammar adequate to articulate its ethical and ontological implications.

This study therefore proceeds from a simple yet demanding proposition: that philosophy and theology must jointly confront the posthuman not as a threat to be resisted, but as a horizon that discloses the forgotten metaphysical foundations of the human condition. The aim is not to moralize technology but to philosophically interpret it—to show that the rise of artificial intelligence represents a new form of theologia technica, in which human creativity and divine image converge within the logic of computation. To address this transformation, the following sections will:

(1) analyze the ontological displacement of the human in posthumanist and Islamic metaphysics;

(2) examine the ethical crisis of agency through the lens of taklīf and algorithmic responsibility;

(3) explore the simulation of the sacred in digital eschatologies such as smart cities; and

(4) propose a renewed role for philosophy and the humanities as ethical infrastructures in an automated world.

In so doing, the paper seeks to articulate what might be called a philosophical theology of the posthuman—a framework through which metaphysical reflection and ethical responsibility can together navigate the unprecedented transformations of the digital age.

Conceptual Note

Throughout this paper, several key terms from both Western and Islamic philosophical traditions are employed in their original languages to preserve conceptual precision. Gestell (Heidegger) designates the "enframing" of beings as resources; Dasein refers to the human as the site of disclosure. In Islamic metaphysics, wujūd denotes existence as divine bestowal, amr signifies the creative command of God, and taklīf describes the moral responsibility assigned to rational agents. The distinction between amr takwīnī (creative decree) and amr taklīfī (moral command) will be crucial for contrasting divine causality with algorithmic determinism.

Methodological Framework

This study employs a form of critical comparative hermeneutics, combining conceptual analysis with cross-traditional dialogue. Rather than juxtaposing Western and Islamic ideas as isolated systems, it reads them as mutually illuminating responses to the same philosophical question: what it means to be human in a technological world. The approach is both diagnostic and constructive—diagnostic in its critique of posthumanist immanentism, and constructive in its effort to articulate a renewed metaphysical synthesis between ontology, ethics, and theology.

Literature Review

The emergence of artificial intelligence and posthumanist theory has revived classical metaphysical questions concerning subjectivity, agency, and transcendence. Foundational thinkers such as Hayles (1999), Braidotti (2013), and Wolfe (2010) reconceived the human as a hybrid of biology and technology, yet their frameworks remain enclosed within Heidegger's Gestell, where being is reduced to resource and transcendence is excluded. Later developments by Floridi (2019) and Hui (2016, 2021) recast reality as informational and culturally conditioned, but similarly fail to address the metaphysical grounding of existence. Abdullah Demir's study challenges this immanentist closure by engaging Islamic metaphysics —especially the notions of wujūd, amr, and taklīf—to reveal an alternative ontology in which existence remains a divine act rather than a self-organizing system. Within the ethical sphere, Demir extends debates initiated by Jonas (1984) and Coeckelbergh (2020), who emphasized the diffusion of agency in algorithmic systems. By contrasting Kantian autonomy with the Qurʾānic concept of entrusted responsibility, he formulates an understanding of "ontological responsibility" rooted in responsiveness rather than control. This approach resonates with Levinas's ethics of alterity (1969) yet surpasses it by grounding moral obligation in divine address rather than intersubjectivity. Responsibility, in this view, is not programmable but relational, emerging from the dialogue between creation and command.

Finally, Demir situates his argument within broader discussions on the simulation of the sacred and the future of the humanities. Building on Baudrillard (1981), Derrida (1967), and Feenberg (2002), he interprets techno-utopian projects such as NEOM and Society 5.0 as secular eschatologies promising redemption through data

and infrastructure. Against this, he proposes a theological reorientation that restores transcendence to the center of ethical and philosophical reflection. Drawing on Gadamer's hermeneutics (1960) and the Islamic unity of ʿilm and ḥikmah, he redefines the humanities as the moral infrastructure of the digital age—disciplines that preserve meaning and responsibility when cognition itself becomes automated.

1. The Ontological Displacement of the Human

Modern technology does not merely extend human capacities; it redefines the very structure of being within which those capacities appear. Artificial intelligence, digital infrastructures, and algorithmic systems constitute more than tools—they form an ontological milieu that reconfigures existence itself. This transformation, which Martin Heidegger famously described as the "enframing" (Gestell) of Being, marks the transition from a world in which humans reveal entities as meaningful to one in which beings are revealed only as calculable resources. Within this framework, the human being is no longer Dasein, the privileged site of disclosure, but a functionally integrated element within a vast technical order. The rise of AI thus signals a shift not simply in epistemology or technology, but in ontology: the human has been displaced as the measure of all things.

2. From Substance to System

The history of metaphysics is also a history of anthropological assumptions. The classical view—from Aristotle to Aquinas—understood being as ousia, substance endowed with form and final cause. Human beings were rational animals oriented toward the good (telos) and thereby possessed a unique ontological status. The modern scientific revolution replaced this teleological order with a mechanistic one, reducing nature to quantifiable relations. Yet the digital era pushes this reduction further: being itself becomes informational. Luciano Floridi's concept of the infosphere captures this transformation—the universe is recoded as an "informational environment," and the human becomes an inforg, an informational organism (Floridi, 2019; Küçükalp, 2019). Similarly, in Yuk Hui's "digital ontology," computation becomes a metaphysical principle, a mode of revealing reality through recursive patterning (Hui, 2016).

What distinguishes the contemporary moment is that the ontological hierarchy between subject and object collapses. In Gilbert Simondon's philosophy, technical objects undergo individuation, acquiring an internal coherence independent of human intentionality (Simondon, 1958). Bernard Stiegler radicalizes this view, arguing that technics is not external to humanity but its very condition of existence—the human is the technical being par excellence (Stiegler, 1998). Yet this affirmation contains a danger: if technology is the ground of human existence, then the human risks dissolving into the very systems it produces. The human becomes not the origin of meaning but a derivative function of technical evolution. The "system" replaces the "substance," and being becomes self-organizing code.

Heidegger anticipated this inversion. For him, the essence of technology is not technological; it is a mode of revealing in which all beings—including humans—are enframed as Bestand, standing-reserve, ordered for efficiency and control (Heidegger, 1954; Küçükalp, 2010). Artificial intelligence radicalizes this logic by turning thought itself into a resource. Cognition, language, and creativity become processes of optimization, evaluated by performance metrics rather than truth or meaning. The danger, Heidegger warns, lies not in machines themselves but in the forgetting of Being that accompanies their dominance: when the world becomes a database, the ontological difference between Sein and Seiendes—between being and beings—collapses into pure functionality.

3. The Digital Ontology Debate

Contemporary thinkers such as Floridi and Hui attempt to recover a metaphysical dimension within digital culture. Floridi's philosophy of information posits a new form of "ontological stewardship," where the human acts as a caretaker of the informational cosmos (Floridi, 2019). Hui's cosmotechnics similarly calls for a plurality of technological ontologies rooted in distinct cosmological traditions. While these attempts reintroduce ethical and cultural depth into digital discourse, they remain within an immanentist horizon: being is conceived as information, process, or system, but never as gift or emanation. The metaphysical question—why there is something rather than nothing—is replaced by the technical question of how systems sustain themselves.

This immanentism has a theological consequence: transcendence disappears. When being is reduced to computation, the possibility of divine causality or metaphysical otherness is excluded by design. AI thus represents not only a technical revolution but a metaphysical one—a world in which creation has been replaced by generation, and the Creator by the programmer. It is this ontological closure that calls for a renewed dialogue between philosophy and theology.

4. Islamic Metaphysical Counterpoint: *Wujūd*, *Amr*, and the Contingency of Being*

In classical Islamic metaphysics, existence (wujūd) is not a static substance but a continuous act of divine bestowal. Everything that exists is mumkin al-wujūd—a possible being that receives existence through the divine amr (command). As al-Ghazālī asserts, causality in nature is not autonomous but derivative; it is God who re-creates the world at every moment (tajdīd al-khalq fī kulli ān) (al-Ghazālī, Tahāfut al-Falāsifa). Existence, therefore, is not a self-sustaining system but a dependency relation grounded in divine will. This metaphysical dependency introduces a mode of transcendence absent from computational ontology.

In contrast to algorithmic systems, which operate through recursive causation and statistical prediction, the Islamic conception of being is fundamentally contingent and purposive. Creation is neither deterministic nor random but intentional, arising from divine wisdom (ḥikmah). The cosmos is thus not a closed network of functions but an open act of communication between Creator and creation. Within this framework, the human being is not a node within a system but a participant in a cosmic dialogue. Consciousness, language, and reason are not emergent properties of computation but reflections of the divine amr—echoes of the Word that brought the world into being.

This contrast illuminates the depth of the ontological displacement we face. The digital order replaces the metaphysics of dependence with the metaphysics of recursion. It transforms creation into generation, meaning into processing, transcendence into efficiency. To retrieve a philosophical sense of the human, we must reintroduce contingency, gift, and transcendence into our ontology of technology. The question is not whether machines can think, but whether thought can exist without reference to Being.

5. Toward a Comparative Ontology of Creation and Computation

The dialogue between posthumanist and Islamic metaphysics reveals two competing visions of reality. The first conceives being as immanent process, self-organizing and self-sufficient. The second conceives being as contingent manifestation, dependent on transcendent will. Both recognize relationality, but they differ in orientation: posthumanism grounds relation in systems theory; Islamic metaphysics grounds it in the relation between Creator and created. The challenge for contemporary philosophy is not to choose between them but to think their intersection: how might a computational universe still bear traces of transcendence?

If we take Heidegger's warning seriously—that the greatest danger lies where the essence of Being is forgotten—then theology becomes not a pre-modern remnant but a philosophical necessity. It is only through a metaphysics that acknowledges givenness that we can resist the reduction of existence to information. In this sense, Islamic thought offers a corrective to posthuman ontology: it reminds us that the real is not exhausted by the calculable. The human, far from being displaced, remains the locus of disclosure—a being called to respond to the divine address within the technological horizon.

In summary, the ontological displacement of the human reveals both the danger and the necessity of rethinking being in the technological age. If computation mirrors creation without intention, then philosophy and theology must rediscover the metaphysics of dependency that defines existence itself.

6. The Ethical Crisis of Agency: From *Taklīf* to Algorithm

If ontology concerns the question of being, ethics concerns the question of acting—and both are inseparable. The displacement of the human from the center of meaning necessarily entails a transformation of moral responsibility. In classical philosophy, agency presupposes selfhood: an intentional subject capable of reflection and decision. Yet in the algorithmic age, action is increasingly delegated to systems that simulate deliberation without interiority. The human is no longer the sole agent of moral consequence but a participant within vast assemblages of automated judgment, predictive analytics, and machine learning. This diffusion of agency creates what may be called an ethical opacity: actions occur, but it is no longer clear who—or what—is acting.

7. From Autonomy to Algorithmic Heteronomy

The Enlightenment ideal of moral autonomy, epitomized in Immanuel Kant's Groundwork for the Metaphysics of Morals (1785), defined the ethical subject as self-legislating. To act morally was to act according to a law one gives to oneself through reason. In this framework, dignity arises from rational self-determination; the moral agent is bound only by principles it can rationally universalize. Yet this conception depends on a stable

notion of rational subjectivity—a notion that artificial intelligence profoundly unsettles.

In algorithmic environments, decision-making is neither self-determined nor fully heteronomous; it is delegated. Predictive systems act on behalf of human agents, processing data and generating outcomes that no individual fully understands. As Mark Coeckelbergh observes, "agency in AI is relational and distributed, not located within a single entity" (Coeckelbergh, 2020, p. 41). Responsibility becomes diffused across networks of designers, datasets, and algorithms. The moral subject dissolves into a technical ecology. The Kantian ought is replaced by probabilistic optimization.

This shift signals a deep ethical paradox: the more rational our systems become, the less room remains for moral deliberation. Machine rationality is procedural rather than normative; it calculates without judging. As a result, the ethical horizon collapses into the operational. Hans Jonas anticipated this danger when he warned that technology produces consequences "so novel, so vast, and so irreversible that ethics must become prospective rather than retrospective" (Jonas, 1984, p. 28; Altuner, 2013). We can no longer rely on the moral frameworks of past centuries; we must imagine an ethics adequate to non-human forms of agency.

Responsibility Beyond Consciousness

The moral challenge posed by AI is not simply whether machines can make decisions, but whether they can bear responsibility. In classical moral theory, accountability presupposes intentionality—mens rea, the presence of a knowing will. Machines, however, operate through statistical inference rather than volitional choice. Their "decisions" are the outcomes of recursive calculations, not the expression of values or intentions. The ethical problem thus shifts from the question of freedom to the question of interpretation: when an algorithm acts, whose intention is being realized?

Contemporary AI ethics offers pragmatic frameworks—transparency, accountability, explainability—but these remain procedural rather than metaphysical. They regulate outputs without addressing the nature of the agent itself. From a phenomenological standpoint, moral action presupposes the capacity to encounter the Other, to respond to alterity. Emmanuel Levinas, in Totality and Infinity, grounds ethics not in autonomy but in the asymmetrical responsibility before the face of the Other (Levinas, 1969). Such responsibility is pre-reflective and infinite—it cannot be delegated or computed. The ethical subject is not a processor of data but a responder to presence. In this sense, artificial systems may simulate reasoning but cannot respond in the Levinasian sense; they lack the vulnerability that makes responsibility possible.

Theological Anthropology and the Logic of Taklīf

Islamic thought provides a distinctive vocabulary for this crisis through the concept of taklīf—the moral and spiritual responsibility assigned to the human being. Derived from the root k-l-f, meaning "to burden" or "to charge," taklīf presupposes not merely cognitive ability but moral awareness. In kalām and usūl al-fiqh, a person is mukallaf—subject to divine command—only if endowed with reason (ʿaql), intention (niyyah), and freedom (ikhtiyār). As al-Māturīdī writes in Kitāb al-Tawhīd, moral obligation is contingent upon the capacity for discernment: "God burdens none beyond their reason and knowledge" (Māturīdī, Kitāb al-Tawhīd, 1983, p. 120).

Within this framework, moral action is not reducible to rule-following. It is a dialogue between divine command and human understanding, where the human is both addressed and responsible. The act of responding—ijabah—is central: it is through response that moral agency becomes real. The Qur'anic paradigm of the amānah (trust) reinforces this view: "We offered the trust to the heavens and the earth, but they refused to bear it; man undertook it—indeed, he is unjust and ignorant" (Q 33:72). Humanity's moral distinctiveness lies precisely in the risk of freedom.

When contrasted with algorithmic agency, the difference becomes striking. Machines can follow commands but cannot bear them; they can simulate discernment but not responsibility. They execute instructions without awareness of meaning. In Aristotelian terms, they operate according to efficient causes, but they lack final causes—the orientation toward the good that defines moral action. Theologically speaking, they participate in amr takwīnī (creative command) but not amr taklīfī (moral command). The human, by contrast, exists precisely at the intersection of these two orders: created by command and commanded to create meaning.

From Moral Calculation to Ontological Responsibility

To think ethics in the age of AI, therefore, requires moving beyond procedural frameworks toward what might be

called ontological responsibility. This form of responsibility does not arise from the capacity to compute consequences, but from the awareness of one's participation in being. It is the responsibility of response—to the Other, to the world, to God. The Qur'anic conception of khilāfah (vicegerency) articulates this ontological dimension: the human is entrusted with stewardship not because of technical mastery but because of moral awareness. The vicegerent is not an optimizer of systems but a witness to meaning.

This understanding transforms the ethical discourse surrounding AI. Rather than asking whether machines can become moral, we should ask how humans remain moral in a world increasingly mediated by machines. The danger is not that AI will acquire consciousness, but that humanity will lose its own—its capacity for reflection, humility, and moral discernment. To recover this capacity, philosophy and theology must jointly cultivate a sense of ethical transcendence: an awareness that responsibility originates not from autonomy, but from the call that precedes it.

As Jonas insists, the new ethics must be an ethics of foresight—grounded not in control but in care. In Islamic language, this corresponds to taqwā, the consciousness of accountability before the unseen. Both perspectives converge on a single insight: moral responsibility cannot be automated, because it is rooted in the metaphysical experience of being addressed. The ethical crisis of the algorithmic age is therefore not the replacement of human agency, but its forgetting.

In summary the diffusion of agency within algorithmic systems exposes the limits of classical autonomy. By juxtaposing Kantian ethics with the Islamic concept of taklīf, the discussion reframes responsibility as responsiveness rather than control. Moral dignity, the section concludes, resides not in calculation but in the capacity to answer—to bear the burden of meaning in a world increasingly governed by machines.

Digital Metaphysics and the Simulation of the Sacred

The digital age has not abolished metaphysics; it has merely translated it into code. Beneath the rhetoric of innovation and optimization, contemporary technological systems reproduce theological structures in secular form. The promise of artificial intelligence, biotechnology, and algorithmic governance is no longer limited to efficiency or convenience—it is salvific. We are told that data will redeem uncertainty, that automation will deliver freedom, and that cognitive replication will transcend the fragility of human finitude. What was once expressed as divine providence has been recast as predictive modeling; what was once the quest for immortality of the soul has become the engineering of digital continuity. In this transformation, metaphysical and eschatological aspirations persist—but they do so under the sign of simulation.

Simulation, Hyperreality, and the Displacement of the Sacred

Jean Baudrillard's Simulacra and Simulation offers one of the most incisive accounts of how modern societies dissolve the distinction between reality and representation. For Baudrillard, the postmodern condition is characterized not by the loss of the real, but by its proliferation through simulation: "the simulacrum is never that which conceals the truth—it is truth that conceals that there is none" (Baudrillard, 1981, p. 1). The digital realm, dominated by algorithmic reproduction, realizes this logic perfectly. Artificial intelligence does not merely imitate thought; it replaces thought with its operational model. The symbol no longer refers to reality; it produces it.

This is a metaphysical event of the highest order. In premodern theologies, the sign pointed beyond itself to a transcendent referent—God, Truth, the Real. In digital metaphysics, the sign refers only to other signs; the transcendent horizon collapses into recursive immanence. Derrida's notion of différance—the infinite deferral of meaning—becomes a structural principle of digital existence: information signifies only by differing from itself, endlessly circulating without origin or end (Derrida, 1967; Küçükalp, 2020). What results is a world where transcendence is simulated rather than encountered. The sacred persists, but as a user interface.

This logic of simulation transforms not only representation but worship. In the age of smart devices and algorithmic personalization, ritual behavior itself becomes data. The act of prayer, meditation, or remembrance is increasingly mediated by apps, sensors, and digital feedback loops. The quantification of devotion transforms the ineffable into metrics of mindfulness and productivity. The sacred, once experienced as mystery, becomes an optimized experience. As Walter Benjamin might have said, transcendence loses its "aura" when reproduced infinitely in digital form.

Techno-Eschatology: Smart Cities and the Promise of Redemption

This transformation finds political expression in what might be called techno-eschatologies: state-driven projects that offer visions of salvation through infrastructure and data. Initiatives such as Japan's Society 5.0, Saudi Arabia's Vision 2030, and the futuristic city of NEOM represent not merely economic modernization but metaphysical reconfiguration. They promise a new human: frictionless, optimized, sustainable, and immortalized in code. These projects recast the theological narrative of redemption into secular language—where heaven becomes the smart city, and divine order becomes the algorithmic plan.

Such visions echo Auguste Comte's positivist religion of humanity and the Enlightenment dream of immanent progress. Yet they differ in degree: whereas the modern project sought mastery over nature, the posthuman project seeks mastery over being itself. (Elmalı, 2004) When NEOM's architects describe the city as "a civilization without constraints," they unconsciously invoke the eschatological imagination—the return to paradise, the elimination of death, the perfection of creation. Technology thus assumes a soteriological function: it redeems the human from its own limitations.

From a theological standpoint, this aspiration mirrors ancient heresies of self-deification. The human aspires to become the creator of its own ontological order. Yet unlike Promethean rebellion, the posthuman rebellion is quiet, systemic, and bureaucratic—it manifests not in defiance but in design. The divine plan is replaced by the master plan; revelation becomes blueprint. The digital city becomes a temple whose liturgy is data flow and whose priests are engineers. In this sense, the smart city is the contemporary cathedral of immanent transcendence.

Conclusion

The trajectory traced throughout this paper suggests that the posthuman condition is not merely a technological phase but a metaphysical revelation. Artificial intelligence, far from annihilating the human, exposes what philosophy and theology have long struggled to articulate: that humanity has always existed at the threshold between the finite and the infinite, between the created and the creative. The digital revolution merely renders this tension visible. To understand the posthuman, therefore, is to understand anew the ontological fragility and ethical vocation of the human being.

Heidegger warned that modern technology conceals Being by transforming existence into a resource. Yet this very danger also conceals a possibility: the technological world forces us to ask once again what it means to be. Artificial intelligence, in its simulation of cognition, performs a philosophical experiment on ontology—it shows that thought can be replicated, but meaning cannot. Computation can reproduce reasoning, but not understanding. The human remains the being for whom Being is a question.

Islamic metaphysics deepens this insight. For al-Ghazālī and later theologians, existence (wujūd) is not self-subsistent but bestowed at every moment through divine command (amr). This view prevents both technological determinism and human self-deification: it affirms that to exist is to be addressed. Within this framework, AI and algorithmic life are not rival creations but further manifestations of divine amr takwīnī—they participate in being without transcending it. Yet this participation carries a moral corollary: to create without acknowledging the Creator is to forget the source of meaning itself.

The posthuman condition, viewed through this lens, becomes an occasion for metaphysical recollection. It recalls what had been forgotten in modernity—the dependency of being on transcendence, the contingency of reason, and the inseparability of knowledge and responsibility.

Ethically, the age of AI demands a redefinition of agency. The Kantian ideal of autonomy—acting according to self-imposed rational law—cannot accommodate distributed, algorithmic systems. Yet this does not entail the death of morality; it demands its transformation. Hans Jonas's ethics of responsibility, grounded in foresight and care, and Emmanuel Levinas's ethics of alterity, grounded in responsiveness, converge with the Qur'anic vision of taklīf—moral burden as response to divine address.

References

Al-Attas, S. M. N. (1995). Prolegomena to the metaphysics of Islam: An exposition of the fundamental elements of the worldview of Islam. Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC).

Al-Fārābī. (1968). Kitāb al-Ḥurūf [The Book of Letters]. Beirut: Dār al-Mashriq.

Al-Ghazālī. (2000). The incoherence of the philosophers (Tahāfut al-Falāsifa) (M. E. Marmura, Trans.). Provo, UT: Brigham Young University Press.

Al-Māturīdī. (1983). Kitāb al-Tawḥīd [The Book of Divine Unity] (B. Topaloğlu, Ed.). Ankara: Diyanet İşleri Başkanlığı Yayınları.

Al-Taftāzānī. (1988). Sharḥ al-ʻAqāʾid al-Nasafiyyah [Commentary on al-Nasafī's Creed]. Cairo: al-Maktabah al-Azhariyya.

Altuner, İ. (2013). Ontological Bases of the Universe in Plato's and Aristotle's Cosmologies. Iğdır Üniversitesi Sosyal Bilimler Dergisi, (3), 1-10.

Baudrillard, J. (1981). Simulacra and simulation. Paris: Éditions Galilée.

Benjamin, W. (1968). The work of art in the age of mechanical reproduction. In H. Arendt (Ed.), Illuminations (pp. 217–251). New York: Schocken Books.

Braidotti, R. (2013). The posthuman. Cambridge, UK: Polity Press.

Coeckelbergh, M. (2020). AI ethics. Cambridge, MA: MIT Press.

Dağ, A., (2021). Posthuman Çağ ve Posthuman'a Geçiş Aracı olarak: Transhümanizm ve Transhuman . YAPAY ZEKA, TRANSHÜMANİZM, POSTHÜMANİZM VE DİN, Turkey

Derrida, J. (1976). Of grammatology (G. C. Spivak, Trans.). Baltimore, MD: Johns Hopkins University Press. (Original work published 1967)

Elmalı, O., (2004). Bazı Tanrısız Dinler Örneklemesiyle Etik Yaptırım Üzerine. Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi , vol.3, no.1, 142-159.

Feenberg, A. (2002). Transforming technology: A critical theory revisited. Oxford: Oxford University Press.

Floridi, L. (2019). The logic of information: A theory of philosophy as conceptual design. Oxford: Oxford University Press.

Gadamer, H.-G. (1975). Truth and method (2nd ed.). New York: Continuum. (Original work published 1960)

Harvey, R. (2021). Transcendent God, rational world: A Māturīdī theology. Edinburgh: Edinburgh University Press.

Harvey, R. (2023). The Qur'an and the just society. Edinburgh: Edinburgh University Press.

Hayles, N. K. (1999). How we became posthuman: Virtual bodies in cybernetics, literature, and informatics. Chicago, IL: University of Chicago Press.

Heidegger, M. (1977). The question concerning technology and other essays (W. Lovitt, Trans.). New York: Harper & Row. (Original work published 1954)Hui, Y. (2016). The question concerning technology in China: An essay in cosmotechnics. Falmouth, UK: Urbanomic.

Hui, Y. (2021). Art and cosmotechnics. Falmouth, UK: Urbanomic.

Ibn Sīnā. (1960). Al-Shifāʾ: Metaphysics [The Book of Healing]. Cairo: Dār al-Maʻārif.

Jonas, H. (1984). The imperative of responsibility: In search of an ethics for the technological age. Chicago, IL: University of Chicago Press.

Kalın, İ. (2004). Varlık ve bilgi [Being and knowledge]. İstanbul: Küre Yayınları.

Küçükalp, D., (2019). Siyaset Etiği. Etik ve Etik Sorunlar (pp.113-137), Ankara: Nobel Yayıncılık.

Küçükalp, D., (2010). Heidegger, Politika ve Etik. Felsefe Dünyası , no.51, 119-136.

Küçükalp, K., (2020). Jacques Derrida: Felsefenin Dekonstrüksiyonu . İstanbul: Ketebe.

Levinas, E. (1969). Totality and infinity: An essay on exteriority (A. Lingis, Trans.). Pittsburgh, PA: Duquesne University Press. (Original work published 1961)

Elmas, S., Özden, H. Ö., Saltuklu, Z., Aydın, M. D., Kadıoğlu, E., & Özmen, S., (2018). A New Approach to Uncertainity Problem in The Direction of Current Neuroscience and Algebraic Informations: A Brain Based Analysis. Journal of Advenced Mathematics and Mathematics Education , vol.1, 1-11. Nussbaum, M. C. (2010). Not for profit: Why democracy needs the humanities. Princeton, NJ: Princeton University Press.

Simondon, G. (1958). Du mode d'existence des objets techniques [On the mode of existence of technical objects]. Paris: Aubier.

Stiegler, B. (1998). Technics and time, 1: The fault of Epimetheus (R. Beardsworth & G. Collins, Trans.). Stanford, CA: Stanford University Press.

Stiegler, B. (2016). Automatic society: The future of work. Cambridge, UK: Polity Press.

Türker, Ö. (2010). İslam felsefesinde bilgi problemi [The problem of knowledge in Islamic philosophy]. İstanbul: İz Yayıncılık.

Wolfe, C. (2010). What is posthumanism? Minneapolis: University of Minnesota Press.

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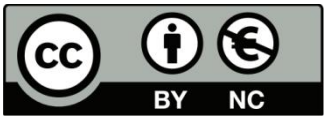

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