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Formalizing Absence: Ontological Framework Between Zero, ∅, and Symbolic Non-being: Toward a Symbolic Metaphysics of Absence and Unrepresentability

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Abstract

This paper examines the ontological and symbolic dimensions of absence and nothingness through a multi-layered analysis spanning classical philosophy, existentialism, and contemporary metaphysics. It distinguishes between three conceptual modalities: the absence within being, the metaphysical zero as a formal placeholder, and the unrepresentable ∅ as a limit-concept. Drawing from ancient sources such as Parmenides and Democritus, and extending through Heidegger, Sartre, and modern symbolic logic, the study proposes an ontological model wherein ∅ is not a void but a pre-representational fold—neither being nor non-being. The paper further engages with thermodynamic entropy and mathematical nullity to support its thesis that symbolic nothingness functions as a condition of potentiality rather than negation. The aim is to bridge metaphysical abstraction with formal semantics, suggesting a new philosophical grammar for understanding absence beyond binary opposition. Implications for the philosophy of language, cosmology, and negative theology are briefly discussed.

Keywords: nothingness; ontology; absence; zero (0); empty set (∅), symbolic logic; metaphysical syntax; ontological matrix; potentiality; void; negation; apophatic theology; computational metaphysics; limits of representation; being

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I. Introduction: The Problem of Nothingness

The sections that follow trace this distinction across classical philosophy, existential thought, symbolic formalism, and metaphysical abstraction—culminating in a proposed ontological matrix that outlines the boundaries of formal representation.

In ordinary language, the word *"nothing"* is often used in a pragmatic sense—to indicate the absence of a particular thing or condition. One might say, "There are no eggs in the refrigerator," and another would reply, "There's nothing," without giving pause to the ontological implications of that claim. In such contexts, the absence is always tethered to a known referent—something that once was or could reasonably be expected to exist. Thus, this type of "nothing" is always relational: it refers to the lack of something within a meaningful system.

However, when we move from everyday speech to philosophical analysis, this casual clarity collapses. The distinction between *non-existence* and *nothingness* becomes not merely semantic, but metaphysical. Non-existence is still bound to possibility —It is the absence of presence, but not the absence of potential. *Nothingness*, in contrast, entails the absence of even potentiality. It is not the opposite of being, nor a form of lack —it is that which lies outside of being and becoming, outside even negation.

What we call "the absence of eggs" still invokes memory, language, and structure. It belongs to a system of symbolic presence. But *nothingness* cannot be recalled, pointed to, or even properly imagined. It does not lack being, it precludes it. And yet, paradoxically, we attempt to speak of it, to think it, and even to give it form —albeit through metaphor, abstraction, and paradox. It is no

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coincidence that thinkers from Parmenides to Heidegger have regarded this as a near-impossible task. As Parmenides famously warned, *"What is not cannot be thought."*[1].

This essay aims to approach *nothingness* not as a void or vacuum, nor as an existential absence, but as a condition of total undifferentiation —a conceptual space prior to presence, prior to possibility, where neither being nor non-being has yet emerged. This view challenges the conventional metaphysical spectrum that places being and nothingness at opposite ends. We argue that this spectrum is incomplete. Between being and non-being lies absence, but beyond both lies nothingness —not as a quantity, but as a limit-concept (*Grenzbegriff*) in the Kantian sense[2].

This paper draws a strict ontological distinction between being**,** non-being, and nothingness**.** Being refers to presence, form, and actuality. Non-being refers to the absence of presence —it still implies a possible referent. But nothingness is neither presence nor absence, neither potential nor negation. It is not form, not emptiness, not even possibility. It is a condition without conditions: a pre-formal field that cannot be thought, represented, or coded**.** Zero is not identical with nothingness. Rather, it belongs to the ontological interval between being and non-being —that fleeting Aristotelian space where actuality has not yet arrived, and potentiality has not yet collapsed.

Rather than attempting to define or formalize nothingness—which would violate its very nature—we propose to trace its periphery through symbolic means. It is not that nothingness can be represented, but that it exerts pressure on the very structures that fail to contain it. Among these symbolic thresholds stands zero, not as a mirror of nothingness, but as a boundary-marker that indicates where presence ends, and absence begins. Zero is not a metaphysical void; it is the lowest structural register of presence—a liminal syntax, a pause, before actual being unfolds. In this sense, zero mediates absence, but does not *embody* nothingness.

This paper, therefore, does not claim to encode nothingness—such a gesture would be metaphysically incoherent. Instead, it argues that the symbolic systems we employ—language, mathematics, logic—are all haunted by the outer contour of nothingness, even though they cannot admit it directly. Zero functions not as the cipher of the void, but as a codified silence: a point of stasis in a world otherwise saturated by being and meaning. It lies not between being and nothingness, but precisely within the ontological interstice between being and non-being—a temporary suspension that permits thought, form, and measure, while remaining ontologically distinct from both full presence and radical absence.

In doing so, this study aims to articulate a symbolic grammar for absence—one that distinguishes between ontological categories and repositions nothingness not as a logical negation, but as a metaphysical outside that destabilizes all representational frameworks.

The subsequent sections elaborate this framework through an interdisciplinary trajectory—beginning with classical metaphysical positions, advancing through existential philosophy, and culminating in symbolic formalism and a proposed ontological matrix mapping the boundaries of representational structure.

II. Classical Foundations: From Eleatics to Atomists

The Eleatic school, notably through Parmenides and his successor Melissus, introduced a radical principle that would reverberate throughout the history of metaphysics: only being is; non-being is not. In his didactic poem *On Nature*, Parmenides maintains that "what is, is", and "what is not, cannot be thought"[3]. This proposition, at once tautological and absolute, forms the basis of an ontological rationalism that denies the reality of change, becoming, or multiplicity. According to this framework,

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[1] Parmenides. "On Nature." In G.S. Kirk, J.E. Raven, and M. Schofield, *The Presocratic Philosophers*. Cambridge: Cambridge University Press, 1983.

[2] Kant, Immanuel. *Critique of Pure Reason*. Translated by Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press, 2015.

[3] Parmenides, *On Nature*.

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reality is a singular, unchanging, indivisible whole, and any perception of transformation is attributed to illusion or *doxa*.

Melissus extends this reasoning even further, asserting that if being is infinite, it must also be eternal, immobile, and incapable of suffering division[4]. Any attribution of movement or plurality implies a transition from being to non-being—an impossibility if non-being is excluded from rational discourse. What emerges from this logic is a doctrine of radical identity, one that privileges internal consistency over empirical observation.

However, this Eleatic logic, grounded in the law of non-contradiction, encounters substantial challenges when applied to the phenomenal world. The pre-Socratic atomists, notably Leucippus and Democritus, contested this rigid unity by positing the *void* as a structural necessity for motion and differentiation[5]. Later, Aristotle, in *Metaphysics*, critiques Parmenides for conflating ontological and logical categories, asserting that "being is said in many ways"[6]. For Aristotle, potentiality and actuality offer a more nuanced account of change, one that does not violate logical coherence.

In modern philosophy, Immanuel Kant reframes this tension through the concept of the *noumenon*: the "thing-in-itself" that exists independently of perception yet remains inaccessible to human cognition[7]. Kant acknowledges the limits of rational categories when applied beyond the bounds of experience, suggesting that ontological claims must be synthetically grounded in the conditions of appearance. In this sense, the Eleatic denial of non-being finds an echo in Kant's insistence that reason cannot reach beyond phenomena without contradiction.

Similarly, Baruch Spinoza, in his *Ethics*, advances a monistic ontology in which everything that exists is a modification of one infinite substance[8]. For Spinoza, there is no room for contingency or negation; nothing happens *ex nihilo*, and non-being has no reality. Yet, unlike Parmenides, Spinoza's God-substance is dynamic, immanent, and expressive—reality is not static unity but eternal causality.

What these engagements show is that the Eleatic commitment to the impossibility of non-being—while foundational—requires reinterpretation. In a dialectical or phenomenological frame, non-being may not exist, but functions relationally as a horizon, a negation, or an absence that gives form to presence. Hegel, for instance, treats being and nothing as dialectical moments—sublated in the movement of becoming[9]. And Heidegger, centuries later, will reassert that the question of Being must begin with a reckoning with *das Nichts*—the Nothing itself[10].

Thus, what begins as an ontological axiom in Parmenides evolves into a series of epistemic, logical, and existential tensions in modern thought. The law of non-contradiction may forbid non-being from being said, but it cannot prevent it from being felt, imagined, or invoked as a necessary boundary. In this way, the logic of being is never self-contained—it is shaped by the very limits it seeks to exclude.

To better understand how this theoretical tension gave rise to alternative metaphysical models, we must return to the earliest counterproposal offered in response to Parmenides.

Parmenides' denial of non-being and his insistence on the unity and immutability of being provoked one of the earliest ontological counterarguments in Western philosophy. In direct response to his static and monistic worldview, the atomist philosophers Leucippus and Democritus proposed a radically different ontological model—one that incorporated void (*kenon*, or vacuum) as a necessary condition for motion and multiplicity. Their innovation was not merely physical but metaphysical:

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[4] Melissus. "Fragments." In McKirahan, *Philosophy Before Socrates*.
[5] Leucippus and Democritus. In Kirk, Raven, and Schofield, *The Presocratic Philosophers*, 1983.
[6] Aristotle. *The Complete Works of Aristotle: The Revised Oxford Translation*. 2 vols. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.
[7] Kant, *Critique of Pure Reason*.
[8] Spinoza, Baruch. *Ethics*. In *The Collected Works of Spinoza*, vol. 1, edited and translated by Edwin Curley. Princeton: Princeton University Press, 1985.
[9] Hegel, G.W.F. *Science of Logic: Book I – Being*. Translated by George di Giovanni.
[10] Heidegger, Martin. "What is Metaphysics?" In *Pathmarks*, edited by William McNeill, Cambridge: Cambridge University Press, 1998.

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the universe, they argued, consists of indivisible atoms that move within a backdrop of emptiness[11]. Without such a void, they contended, motion would be impossible, and Parmenides' world would remain a frozen totality.

Democritus famously declared that "what is" consists of both being (atoms) and non-being (the void[12]). This formulation reintroduced nothingness into the philosophical conversation—not as an absolute absence, but as a structural condition that allows for the organization, rearrangement, and emergence of all forms. In atomist thought, nothingness becomes not the antithesis of being, but its enabling space. Atoms, though indivisible, can move, combine, and reconfigure only because they are suspended in a non-substantial matrix: the void is the hidden medium of all motion.

This conceptual shift represents a major departure from Parmenides' logic. While Parmenides refused to grant ontological status to non-being, atomists reframed the void as something that, although devoid of substance, still participates. Yet this move is not without contradiction. To assert that the void "exists" is to confer upon it a form of being, thereby undermining its status as nothing. As Bertrand Russell would later put it: "If the void exists, then it is not nothing; it is something, and hence not void[13]." The atomist solution solves the problem of motion, but at the cost of creating a paradoxical category: a being of non-being.

The metaphor of a tree—introduced earlier in this paper—may be repurposed to illustrate this shift in thought. If a tree contains within its form the potential to become thousands of matchsticks, this transformation depends on both material structure (the atoms of the tree) and the void through which these atoms may be rearranged. Potentiality, in this framework, is inseparable from emptiness—not because emptiness has power, but because it grants being the freedom to become other. Void is no longer a negation, but a condition for transformation.

This echoes the more general theme of this paper: that absence is not mere lack, but structural latitude. Zero does not equal nothingness, but it opens a syntactic space within which the logic of absence can operate. In this way, Democritus' void is the ancestor of zero—a symbolic threshold that enables the mobility of meaning, form, and existence.

In sum, the atomists expanded the ontological map by formalizing the role of absence as a kind of existential infrastructure. Their contribution would later be echoed in fields as diverse as physics, metaphysics, and information theory, where the void—or structural emptiness—remains a precondition for emergence, distinction, and relation. And yet, their conceptual leap does not fully escape Parmenides' haunting logic: to speak of the void is still, in some sense, to speak of something.

III. Contextual Absence and Logical Mediation

In contrast to Parmenides' radical exclusion of non-being from the domain of thought, Plato offered a more nuanced and context-sensitive understanding of absence. While he does not fully endorse the concept of absolute nothingness, he also avoids collapsing all absence into being. Instead, in the *Sophist*, Plato introduces the concept of "otherness" (*heteron*) to preserve the intelligibility of non-being without contradicting the principle of being itself[14]. Through this formulation, Plato reframes non-being not as total negation, but as relational differentiation: to be not something is to be something else.

This reconfiguration is significant. Rather than conceiving nothingness as a void beyond all comprehension, Plato positions it within a logical and linguistic framework. What is not does equate to what absolutely is not but rather denotes an entity or condition that fails to appear in a specific referential or ontological context. Thus, absence becomes contingent upon a frame of reference. When one asserts, "There are no eggs in the refrigerator," one does not deny the existence of eggs in an

[11] Leucippus and Democritus, *The Presocratic Philosophers*.

[12] Democritus. "Fragments." In *The Presocratic Philosophers*, edited by Jonathan Barnes, London: Routledge.

[13] Russell, Bertrand. *A History of Western Philosophy*. New York: Simon & Schuster, 1945.

[14] Plato. (1997). *Complete Works* (J. M. Cooper & D. S. Hutchinson, Eds.). Hackett Publishing Company.

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absolute sense but rather signals their absence within a particular space and time. The potential for those eggs to exist elsewhere—perhaps still under the hen—remains intact.

In this way, Plato's conception of non-being anticipates relational ontologies, in which identity and existence are defined not in isolation, but in relation to other entities or conditions. Non-being, then, becomes a dynamic category, not a static void. It is shaped by context, and as such, it remains embedded within the very structure of thought and speech. Plato thus rescues the concept of absence from the metaphysical exile imposed by Parmenides and reintroduces it into philosophical discourse through a logic of differentiation rather than annihilation.

By preserving non-being as other-being, Plato establishes the groundwork for later developments in dialectical reasoning and linguistic philosophy. In doing so, he reopens the possibility of speaking meaningfully about absence—not as sheer nothingness, but as relative invisibility, or what might be called contextual negation. This insight forms a conceptual bridge between the ontology of being and the phenomenology of absence, offering a stable midpoint between presence and void.

While Plato relocates absence into the terrain of logical and linguistic structure, theological traditions approached nothingness from an entirely different vantage point—not as a relational differentiation, but as a divine prerogative.

The enduring philosophical challenge posed by the concept of nothingness ultimately migrated into the realm of theology, where it was reinterpreted not as an impossibility or logical paradox, but as a divine prerogative. Within this framework, nothingness is not an empty negation but the very condition that only the divine can overcome. The theological tradition reframes creation from nothing (*creatio ex nihilo*) as an act of absolute sovereignty—a gesture that lies beyond the reach of finite beings[15].

Augustine of Hippo articulates this view with remarkable clarity. He argues that God not only created the world *ex nihilo* but also brought time itself into existence. In this system, temporality is not an eternal backdrop but a byproduct of divine intention. Thus, the question "What existed before creation?" loses its coherence, for the very notion of before presupposes time, which did not yet exist. God, in Augustine's theology, is not bound by temporal succession; all moments are present to Him simultaneously. This vision situates the divine as radically transcendent, both spatially and temporally, and thereby uniquely capable of generating being from absolute non-being.

Moreover, this act of creation from nothing is deemed inimitable. No creature—be it human, angelic, or otherwise—possesses the capacity to bring forth being *ex nihilo*[16]. Created agents can transform, combine, or cultivate that which already exists, but the origination of substance from void belongs solely to the divine. Augustine's well-known analogy likens human activity to the act of sowing seeds, while divine creation resembles the generation of the very ground in which such seeds might be planted.

While Christian theology framed creation *ex nihilo* as an expression of divine sovereignty, Islamic philosophy developed a more graded and nuanced account of divine causality. Influenced by Neoplatonism yet deeply rooted in Qur'anic ontology, thinkers such as al-Fārābī and Avicenna (Ibn Sīnā) proposed an emanationist metaphysics. Here, being flows from the Necessary Existent (*wājib al-wujūd*) through successive levels of intellect[17], without implying creation from nothing in the absolute sense. Nothingness, in this view, is not the raw material of creation, but the absence of actualization in contingent essences.

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[15] Peters, Ted. *God—The World's Future: Systematic Theology for a Postmodern Era*. Minneapolis: Fortress Press, 2000.

[16] Thomas Aquinas. *Summa Theologica*. Translated by Fathers of the English Dominican Province. New York: Benziger Bros., 1947. Book I, Question 45, Articles 5–7.

[17] Fakhry, Majid. *A History of Islamic Philosophy*. 2nd ed. New York: Columbia University Press, 1983.

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Avicenna distinguishes between essence (*māhiyya*) and existence (*wujūd*), arguing that all contingent beings are merely possible until actualized by the Necessary[18]. While this appears like Augustine's metaphysical hierarchy, it eliminates temporal creation in favor of ontological dependence. In this schema, nothingness resides in the realm of potentiality—not as an absolute void but as a condition of non-actualized being.

Later, Ibn ʿArabī extends this metaphysical vision through a mystical lens. For him, the Divine is the only true being (*al-Ḥaqq*), and the world is a series of self-disclosures (*tajalliyāt*) veiled by relative non-being (*ʿadam*). He writes, "The Real is hidden by the very intensity of His manifestation."[19]. In this way, what appears as absence or non-being is the veil of overwhelming presence. Here, nothingness becomes not the absence of God, but the condition that enables God's knowability.

Such mystical and hierarchical visions, however, would later be challenged by a radically rationalist approach—most notably by Spinoza—who rejected both creation from nothing and divine transcendence in favor of immanent necessity.

This view, dominant throughout the medieval period, stands in contrast to the rationalist metaphysics of Baruch Spinoza, who radically reconfigures the relationship between being, causality, and divinity. In Spinoza's system, nothingness has no ontological footing whatsoever. Reality, he contends, consists of a single infinite substance—*Deus sive Natura*—from which all things necessarily follow. There is no void, no rupture, no emergence from absence. Everything that exists does so as an expression of the one eternal substance. To speak of non-being is, for Spinoza, a misunderstanding: whatever can be conceived, is; and whatever cannot be, is not part of the order of nature.

Thus, where Augustine affirms the miraculous possibility of being arising from nothing through divine will, Spinoza denies the metaphysical relevance of nothingness entirely, grounding all existence in a closed system of necessary causes. For him, the statement "nothing comes from nothing" is not merely a logical axiom—it is the cornerstone of a rational universe.

These two theological paradigms—creation *ex nihilo* and immanent necessity—offer divergent responses to the same metaphysical dilemma. Yet in both systems, nothingness is not left unexamined; it is either suspended in divine transcendence or dissolved in ontological immanence. In either case, the human mind is confronted not with a void, but with a principle—whether miraculous or mechanical—that shapes the structure of reality itself.

Yet the question of nothingness is not limited to cosmology or divinity. It extends inward, into the mechanics of human cognition—where the absence of certainty becomes a philosophical dilemma of its own.

The problem of nothingness intersects not only with logic and metaphysics but also with the limits of human cognition—particularly in relation to perception and belief. A mind constrained by the illusion of linear time is susceptible to misinterpreting the data it receives through the senses[20]. What is taken to be a perception of reality may in fact be a projection, distortion, or hallucination. Under the influence of external substances or internal states, the human subject can easily lose the capacity to distinguish between what appears to be and what is. A familiar taste, an ambient sound, or a fleeting scent can induce an experience so vivid that it rivals, or even overrides, the clarity of verifiable reality.

In the face of such perceptual uncertainty, the human intellect attempts to anchor sense impressions in rational structures. It is through this need for validation that the problem of absence arises—not as a lack of stimulus, but as a crisis of meaning. Bertrand Russell, addressing this issue from an epistemological standpoint, argued that information derived purely from sensory experience

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[18] Avicenna. *The Metaphysics of the Healing*. Translated by Michael Marmura. Provo, UT: Brigham Young University Press, 2005.

[19] Ibn Arabi. (2013). *Fütuhat-ı Mekkiyye* (Çev. E. Demirli). Litera Yayınları.

[20] Husserl, Edmund. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*. Translated by F. Kersten. Dordrecht: Springer, 1982.

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cannot be reliably categorized as knowledge[21]. Sensory data, by itself, yields only beliefs, which remain subjective and fallible unless corroborated by reason or intersubjective verification.

To illustrate: one might assert having seen or touched an egg. While such statements rely on sense experience, they remain embedded in personal interpretation. For this impression to attain the status of knowledge, it must be externally confirmed—measurable, repeatable, or at least communicable within a shared framework. Otherwise, what is perceived may well be illusory. Thus, absence, understood through this lens, becomes not merely a lack of presence, but the absence of epistemic certainty.

This reframing of absence has profound implications. While presence may offer the comfort of sensory validation, absence exposes the mind's dependency on prior categories and contextual anchors. It reminds us that our awareness of "what is not" is always mediated by a remembered or anticipated "what is."[22]. As such, even absence is a mode of presence—not of the object itself, but of the idea of the object, lingering in cognition.

The concept of nothingness, then, cannot be fully explained through sensory or empirical means. It does not arise from a failed perception, but from the awareness that perception itself is never absolute. Knowledge may begin in sensation, but it achieves its form through interpretation, coherence, and justification. In this sense, absence does not signify a metaphysical void, but rather the cognitive limits of immediacy, reminding us that even when the world appears empty, the mind remains full of its own constructs.

IV. Theological Thresholds: Between Ex Nihilo and Emanation

As previously noted, absence may be explained through knowledge, if knowledge remains grounded in verifiable presence. But as one moves toward the conceptual frontier of nothingness, knowledge itself begins to destabilize, reverting into belief. At this epistemic threshold, Aristotle offers an alternative route one that bypasses both absolute non-being and radical void. Rather than attempting to conceive nothingness directly, Aristotle introduces the concept of potentiality (*dynamis*) to explain change, emergence, and transformation[23].

In his *Metaphysics*, Aristotle famously asserts that "nothing comes from nothing."[24]. However, unlike Parmenides, who took this to mean that all change is illusory, Aristotle reinterprets it to mean that becoming is never *ex nihilo*—but always the actualization of what was already potentially present. This formulation allows him to preserve the logical rigor of Parmenidean ontology while also accounting for the empirical reality of change.

As Mortimer J. Adler observes, Aristotle's solution hinges on the distinction between potential being and actual being[25]. The former refers to a capacity or tendency that exists within a given substance, while the latter is the full realization of that capacity. A seed is potentially a tree; an unlit match is potentially fire. In this schema, what emerges is never born from nothing, but from the unseen readiness of something to become.

Applied to the metaphor of the absent egg, the transition from presence to absence—and potentially back to presence—can be interpreted as a movement between actualization and latency. The absence of eggs in the refrigerator does not negate the possibility of their future presence; it merely signals a temporarily unfulfilled potential, contingent on causality and context.

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[21] Russell, Bertrand. *The Problems of Philosophy*. Oxford: Oxford University Press, 1912.

[22] Merleau-Ponty, Maurice. *Phenomenology of Perception*. Translated by Colin Smith. London: Routledge, 2002.

[23] Owens, Joseph. *The Doctrine of Being in the Aristotelian Metaphysics*. Toronto: Pontifical Institute of Mediaeval Studies, 1978.

[24] Aristotle, *Complete Works of Aristotle*.

[25] Adler, Mortimer J. *Aristotle for Everybody*. New York: Touchstone, 1997.

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Aristotle thus avoids the void by filling it with potential being. In his framework, there is no such thing as true nothingness—only delayed emergence. Change is not the passage from non-being to being, but a transformation within being itself. This view not only secures ontological continuity but also aligns with scientific and metaphysical observations about how things arise, evolve, and decay.

Yet this elegant solution is not without limitations. While Aristotle offers a coherent mechanism for natural processes, he does not directly engage with the existential weight of nothingness—the sense of ontological finitude, the confrontation with total erasure, the dread of non-return. His model is robust within the bounds of logic and biology, but it stops short of addressing the human condition's emotional encounter with annihilation. In this respect, Aristotle's interval between potential and actual may be read not only as a metaphysical mechanism but as a psychological buffer—a protective veil the mind casts over the abyss of absolute absence.

Even as existential philosophy posits nothingness as a condition for freedom, the lived experience of many individuals reveals that this freedom is often illusory confined by the limitations of material conditions, social hierarchies, and existential exhaustion. The subject, seeking to shape their identity through available choices, inevitably confronts the insufficiency of those very choices. When the tools of self-construction are unevenly distributed—or absent altogether—even a fleeting moment of existence can resemble a metaphysical imprisonment.

In this context, nothingness does not emerge simply as a negation or threat, but as a threshold to a higher kind of liberation—one that transcends worldly possibility and defies rational formulation. Sartre argued that freedom arises not from essence, but from its absence. Yet this absence, when pushed beyond personal autonomy, begins to resemble not a path to self-realization, but a void into which meaning dissolves.

While much of classical and modern metaphysics seeks to stabilize the meaning of nothingness through logic or ontology, another current emerges—one that treats nothingness not as a conceptual impasse, but as an existential confrontation.

This existential turn is embodied in the thought of Søren Kierkegaard. Rather than viewing nothingness solely through the lens of freedom or rational negation, Kierkegaard frames it as the precondition for spiritual confrontation. In his theology-infused existentialism, nothingness becomes not the absence of meaning, but the space in which one is compelled to face God. The experience of existential anxiety (*Angest*)[26] is not simply dread at the loss of being, but a revelation of the abyss between the finite self and the infinite divine.

Kierkegaard does not suggest that this anxiety is pathological. On the contrary, it is a necessary passage: the soul must confront nothingness to perceive the magnitude of the divine call[27]. In this framing, freedom is no longer a secular project of self-definition but a sacred challenge, marked by uncertainty, dependency, and faith. The question shifts from "What shall I become?" to "Who—or what—makes me capable of becoming at all?"

Returning to the earlier metaphor: if the egg is no longer in the refrigerator, its return depends not merely on natural processes, but on a creative force beyond comprehension. If the chicken creates the egg, then who or what creates the chicken? This recursive question exposes the limitations of causal reasoning and gestures toward a transcendent origin—an ontological source that cannot be reduced to empirical terms. In Kierkegaard's thought, nothingness thus becomes a veil that conceals the divine, a spiritual trial through which the soul is summoned toward higher awareness.

In this way, Kierkegaard reorients the discourse on nothingness from existential absence to theological encounter. Nothing is not only that which terrifies; it is that which demands faith.

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[26] Kierkegaard, Søren. *The Concept of Anxiety*. Translated by Reidar Thomte. Princeton: Princeton University Press, 1980.

[27] Kierkegaard, Søren. *Fear and Trembling*. Translated by Alastair Hannay. London: Penguin Classics, 2003.

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V. Existential Horizons: Heidegger, Sartre, and Beyond

The human struggle with the concept of nothingness is not merely intellectual—it is existential. It may well be humanity's refusal to accept total annihilation, its deep-seated resistance to the idea of eternal nonexistence, that prompted Martin Heidegger to reconceptualize nothingness not as a mere void, but as a phenomenological space wherein being reveals its significance. In *Being and Time*, Heidegger argues that it is precisely in confronting nothingness—particularly in moments of anxiety—that one gains access to the truth of one's existence. Anxiety, in this context, is not simply fear of death or loss, but an ontological opening in which the familiar world withdraws, and the self becomes exposed to the groundlessness of being.

Through this encounter with nothingness, Heidegger contends, human beings are compelled to ask questions they would otherwise suppress. The loss of everyday meaning triggers a metaphysical reevaluation. Nothingness, far from being an external absence, becomes internalized—a background against which meaning can appear. In this view, it is the experience of nothingness that gives rise to the search for authenticity.

Yet Heidegger is not alone in linking nothingness with freedom. Jean-Paul Sartre, writing in *Being and Nothingness*, redefines the relationship between the human subject and the void by asserting that "man is the being through whom nothingness comes into the world." For Sartre, the human capacity for negation—for saying no, for imagining what is not, for rejecting what is—marks the emergence of nothingness within being itself. This act of negation is not merely a linguistic gesture but the foundation of human freedom. The subject is not determined by essence or function; it is defined by absence, by a lack that enables self-definition.

Sartre's existential framework thereby positions nothingness as a productive force, a precondition for ethical agency and creative choice. However, this radical freedom is also fraught with ambiguity. While the ability to shape one's essence may seem liberating, it is constrained by the material and social structures into which one is thrown. One may be free to choose, but not to choose under equal conditions. Thus, nothingness becomes not only the ground of freedom but also the measure of its limitation.

Simone de Beauvoir, a central yet often underrecognized figure in existentialism, extends this insight by emphasizing the lived experience of embodied absence—particularly in the context of gendered subjectivity. In *The Second Sex*, she explores how the female body is constructed as "the other,"[28] defined not by its own essence but through relational negation. Here, nothingness is not an abstract ontological category, but a concrete historical condition imposed upon subjects.

Similarly, Nishitani Keiji, a key figure of the Kyoto School, reframes nothingness through a Buddhist lens. In *Religion and Nothingness*, he argues that the nihilism encountered in modern Western philosophy[29] must be overcome not through negation but through a radical affirmation of emptiness (*śūnyatā*) as the ground of true selfhood. For Nishitani, the nothingness of existential dread must be passed through—emptied out—so that a more profound nothingness, free from the ego, can emerge.

The metaphors that appear throughout this discourse—whether the egg that vanishes or the absence that follows its consumption—serve to underscore a recurring tension: the fragility of being, the inevitability of absence, and the yearning for ontological continuity. These thinkers attempt to reclaim nothingness as a space of transformation—not a destination, but a threshold. It is the abyss that simultaneously terrifies and emancipates, a silent terrain upon which the drama of human existence unfolds.

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[28] Beauvoir, Simone de. *The Second Sex*. Translated by Constance Borde and Sheila Malovany-Chevallier. New York: Vintage, 2011.

[29] NiNishitani, Keiji. *Religion and Nothingness*. Translated by Jan Van Bragt. Berkeley: University of California Press, 1982.

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VI. Formal Abstraction of Absence: The One, Zero, and ∅

The recursive question of origin—who creates the creator—elevates nothingness beyond the dichotomy of existence and non-existence. It becomes not a mere metaphysical curiosity, but one of the most profound conceptual thresholds in humanity's search for meaning. It is at this ontological limit that Plotinus, building upon Parmenidean monism, proposes a radically mystical reinterpretation of being and non-being through his concept of The One.

For Plotinus, The One transcends all categories, including existence itself[30]. It is neither being nor non-being, but a supranumerical, ineffable principle—the ultimate source from which all emanations arise. Crucially, Plotinus associates The One with a form of metaphysical nothingness: a generative void that lies beyond comprehension, differentiation, or attribution. It is the condition of all that is, yet it is not in any ordinary sense. The One is not composed, not divisible, and not multiple—yet all multiplicity flows from it.

This paradox—that the foundation of everything is not a thing—mirrors the tension found throughout the philosophical tradition. Plotinus resolves it not by denying nothingness, but by divinizing it: The One becomes an invisible principle of order, both wholly empty and wholly sufficient. Every number, every form, and every structure arise from its repetition—yet The One remains untouched by what it generates. In this way, nothingness becomes the hidden face of unity, a shadowless origin that contains within itself the infinite potential of all becoming.

Plotinus' framework profoundly influenced subsequent mystical and metaphysical traditions, including early Islamic thought. For instance, the Brethren of Purity (Ikhwān al-Ṣafāʾ) echoed his vision in their own synthesis of number, ontology, and divine unity, interpreting the Quranic phrase "Say: He is Allah, the One" as not merely monotheistic assertion, but as numerical metaphysics[31]. The One, they argue, carries nothing but itself—yet from its repetition, the universe unfolds.

Still, as conceptually potent as it is, Plotinus' One remains bound by the limits of metaphor. It gestures toward the ineffable, but it must do so in the language of number, structure, and emanation. In this sense, The One is not quite nothingness, but rather a cosmic abstraction of it—a placeholder for that which thought cannot reach but must circle endlessly.

Thus, Plotinus does not discard the language of absence. Instead, he transmutes it into transcendence, offering a vision of reality in which nothingness is not annihilation but creative silence—the groundless ground from which all things arise, and into which all must return.

While The One represents an ineffable unity beyond multiplicity, it's very abstraction raises the question of how such transcendence might be rendered within symbolic or operational systems. If The One cannot be counted, how then do we begin to represent the unrepresentable? In contrast to this supranumerical metaphysics, the notion of zero offers a more formalized—yet no less profound—way of encoding absence. What Plotinus expresses through mystical emanation, zero articulates through structural precision.

While the concept of The One offers a philosophical abstraction of unity and transcendence, there exists another concept—zero—that is both mathematically precise and symbolically profound. Often dismissed as a mere placeholder in numerical systems, zero, upon closer inspection, reveals itself to be a metaphysical symbol of absence, potentiality, and existential transition. Unlike The One, which posits unity as an ineffable principle beyond multiplicity, zero embodies the very threshold between being and non-being.

The formalization of zero in mathematics began with Brahmagupta in 7th-century India[32], where it functioned not merely as a numeral, but as a conceptual marker of emptiness. Later transmitted

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[30] Plotinus. *The Enneads*. Translated by Stephen MacKenna. London: Penguin Classics, 1991.

[31] Nasr, Seyyed Hossein. *An Introduction to Islamic Cosmological Doctrines*. Albany: State University of New York Press, 1993.

[32] Joseph, George Gheverghese. *The Crest of the Peacock: Non-European Roots of Mathematics*. Princeton: Princeton University Press, 2011.

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through Arabic scholarship, it gained the name ṣifr, meaning "empty" or "void," and was introduced to the Western world through the work of al-Khwārizmī[33]. In both linguistic and logical terms, zero represents not only the absence of quantity, but the structural space in which value emerges.

Philosophically, zero is more than a number—it is a conceptual aperture. To speak of "zero income" or "zero motivation" is not simply to state a lack, but to imply the possibility of change—that a shift from zero to one remains imaginable. This makes zero not an end, but a latent beginning, a point of origin suspended in stillness.

Unlike nothingness in its absolute form—which defies cognition and language—zero is domesticated absence: it can be written, calculated, and even given place value. It renders the invisible visible, encoding lack as intelligible. But zero's real metaphysical power lies in its function as a boundary object—an axis upon which positive and negative values rotate. It not only separates but connects opposites. It is the pivot between absence and presence, between what has been and what could be.

When placed beside the number one, zero becomes exponentially powerful: it multiplies one into ten, one hundred, or a thousand. Yet on its own, it signifies emptiness without annihilation. In this way, zero preserves the logic of nothingness while making it operable. It is both a placeholder and a gateway—holding open the space through which being can pass.

Thus, zero functions not only as a mathematical tool but as a philosophical cipher—one that encodes the fragile balance between presence and void. It embodies potential without actualization, silence with the possibility of sound, space without content. As such, zero becomes the axis of metaphysical rhythm, the still point around which time, value, and existence themselves are allowed to turn.

VII. Metaphysical Dynamics: Entropy and the Threshold Form

The transitional quality of zero, as a metaphysical boundary between being and non-being, finds a striking analogue in the laws of thermodynamics, where energy, order, and disorder shape the conditions for emergence. Far from being a purely numerical concept, zero—when situated within physical theory—becomes a lens through which the limits of existence and the irreducibility of nothingness can be reexamined.

According to the First Law of Thermodynamics, energy can neither be created nor destroyed; it merely transforms[34]. This principle denies the possibility of creation ex nihilo in a physical sense, reinforcing the philosophical maxim that nothing comes from nothing. The conservation of energy reflects a closed causal system—resonating with Spinoza's view of a self-contained universe governed by necessity rather than contingency.

The Second Law of Thermodynamics introduces the concept of entropy—a measure of disorder within a system. In an isolated system, energy naturally disperses from regions of high concentration to low, leading to an overall increase in entropy. Yet this increase is not purely entropic decay; it also creates the conditions for new forms of order to arise[35]. This paradox—the simultaneous proliferation of disorder and the potential for reorganization—mirrors the dual nature of zero: as both negation and origination.

This dynamic can be metaphorically illustrated through the earlier image of a hen sitting on an egg. The hen's body heat does not merely warm the egg; it initiates a thermodynamic transfer that reorganizes the internal structure of the egg, triggering biological formation. The entropy generated in this process does not lead to collapse but to gestation—a movement from potential toward

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[33] Ifrah, Georges. *The Universal History of Numbers: From Prehistory to the Invention of the Computer*. Translated by David Bellos et al. New York: Wiley, 2000.

[34] Clausius, Rudolf. *The Mechanical Theory of Heat*. Translated by T. Archer Hirst. London: Macmillan, 1879.

[35] Schrödinger, Erwin. *What is Life?*. Cambridge: Cambridge University Press, 1944.

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actuality. In this framework, entropy becomes the grammar through which zero speaks: it is the silent transformation that links nothingness to becoming.

Yet thermodynamics also outlines a boundary that zero can never fully cross: absolute zero (0 Kelvin), a state in which all molecular motion ceases. According to the Third Law of Thermodynamics, this point is theoretically definable but practically unreachable[36]. No system can attain absolute stillness. Even at the edge of total emptiness, some residue of being remains—a pulse, a possibility, a delay. Zero, then, is not a destination but an asymptote, a limit that structures reality without ever fully manifesting.

In this light, entropy and zero converge not as mere scientific abstractions, but as philosophical constants: each denotes a boundary between order and chaos, being and non-being, presence and dissolution. What emerges is not the void of nihilism, but a deeper understanding of nothingness as a structured, dynamic field—one in which the grammar of existence is always already at work.

VIII. Conclusion: ∅ as a Limit-Concept in Representation

In the structure of modern mathematics, zero occupies a pivotal role—dividing positive integers, aligned with being, from negative ones, often associated with absence or negation. The number "one," as the first act of individuation, marks the threshold of presence, a discrete event in the field of multiplicity. Yet it casts its own shadow across the void: for something to be, it must be surrounded—bordered—by what is not.

This dialectic between presence and absence, being and non-being, is not merely logical; it is ontological. Zero emerges as a hinge, a fulcrum where dualities coalesce, collapse, and reconfigure. It mediates form and formlessness, sound and silence, memory and loss. It is a black hole in arithmetic—a place of disappearance—and yet also a seedbed of order.

But even as zero takes on these metaphysical functions, we must remember: zero is not ∅. It is not the pure nothingness beyond structure, but the trace of that nothingness in symbolic space. It is the point at which being begins to tremble, language begins to stutter, and logic begins to spiral.

To illustrate this distinction, we propose an Ontological Matrix, outlining the three principal domains—Being, Non-being, and Nothingness—across their potential, actual, and negated modes.

The ontological matrix proposed above offers more than a classification—it reframes how presence and absence interact within symbolic systems. If being (1) and non-being (0) occupy representable domains, nothingness (∅) marks the boundary where such representations collapse. It is the space where logic is suspended but not destroyed—where language falters but meaning is not yet born. In this unstable zone, perception turns metaphorical, and philosophy turns poetic.

Ontological Mode	**Potential**	**Actual**	**Negation**
Being (1)	1(p) – Dunamis	1(a) – energeia	¬1 – contradiction
Non-being (0)	0(p) – lack	0(a) – absence	¬0 – nullity
Nothingness (∅)	∅(p) – pre-form	∅(a) – unthinkable	¬∅ – **impossible**

Here, ∅(p) refers to a pre-formal condition: a latent, undifferentiated field that precedes all representation, measurement, or negation. It is not merely empty, but unmarked—uninscribed by

[36] Atkins, Peter. *Four Laws That Drive the Universe*. Oxford: Oxford University Press, 2007.

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presence or absence. It does not reside within being, nor even within the logical grammar of non-being. To negate ∅ is not to contradict a thing, but to rupture the very frame within which contradiction is possible—a metaphysical collapse of ontology itself.

To exist, then, is not simply to be—it is to dwell within a suspension, a liminal threshold between negation and emergence. This threshold is marked by zero—not as a numerical quantity, but as a temporal fold, a fleeting "now" between what has receded and what has not yet arrived. It is the aperture of time: a hinge between entropy and intention.

Consider a painting on the wall. To the casual viewer, it appears as a surface—an image fixed in a singular moment. But for the one who painted it, or for the one whose memory it evokes, that surface conceals strata of memory, intention, loss, and desire. Each pixel is a portal to another dimension. Likewise, zero is not the absence of image, but the hidden geometry of potential worlds suspended in symbolic silence.

Just as the image reveals more than its surface, time too is more than its forward motion. To traverse time is not to accelerate toward light, but to dissolve into structure. In a culture obsessed with speed, we forget that time is not conquered by velocity, but by disintegration. A form that shatters into its ontological fragments—into the silence before articulation—is not destroyed but returned. From Plato's ideal realm to Bergson's durée, philosophers have long sought what lies beyond time. But perhaps what lies beyond is not eternity, but ∅—an unformed interstice where time, form, and self are not erased, but transfigured.

In such a temporal field, zero emerges not as an end, but as a radial center—a still point within the flow. In a world governed by certainty and enumeration, perhaps it is in zero that we must dwell: not as a finality, but as the silent geometry of all beginnings. Not as a placeholder for nothing, but as a symbolic whisper of the unthinkable.

This interplay between absence and symbolic potential finds echoes in mystical traditions—Neoplatonic, Christian apophatic, and Sufi alike. For thinkers like Pseudo-Dionysius the Areopagite, God is "beyond being"—not merely hidden, but unnameable. Similarly, in the metaphysics of Ibn Arabi, the divine essence (dhat) remains forever inaccessible; only its manifestations can be perceived. Across these traditions, divinity is not represented, but encountered—through withdrawal, not declaration. In this sense, what ∅ symbolically gestures toward is not a divine entity per se, but the structural boundary encountered when representation reaches its limit.

If zero veils what precedes presence, then ∅ designates that which resists unveiling altogether—the ineffable. In many theological systems, God is identified as "the One," the unity that transcends multiplicity. Yet even "One" is already a number, already within the logic of enumeration. True divinity, perhaps, lies not in unity, but in unutterability. What we name as "God" may be no more than a reflection of the unrepresentable within the structure of speech itself. ∅, then, does not name God, but marks the symbolic rupture through which the divine becomes thinkable—only as that which exceeds all thought. The divine is not what we know—it is the trace of unknowing within what we call knowledge.

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