

Research Article

# Toward a Unified Theory of Reality and Cognition

Mahir Asef<sup>\*</sup> 

Faculty of Arts and Social Sciences, University of Sydney, Sydney, Australia

## Abstract

This paper examines the relationship between objective reality and human cognition, aiming to develop a unified philosophical framework that integrates perception, language, belief, emotion, and consciousness. It begins by addressing the epistemological problem of how truth can be distinguished from subjective interpretation, arguing that perception—while indispensable—is inherently unreliable and fragmentary. Sensory experience, emotional bias, and belief systems jointly shape how reality is represented in the mind, often obscuring objective structures that exist independently of individual observers. The paper adopts a conceptual and analytical methodology, drawing from philosophy of mind, cognitive science, evolutionary psychology, and the scientific method. Through careful analysis of language and meaning, it demonstrates how abstract concepts acquire instability due to emotional valuation and personal experience, and how precise definitions and logical reasoning can partially stabilize knowledge claims. Emotions are examined not as irrational disturbances, but as evolved functional mechanisms that guide behavior, belief formation, and survival. A central contribution of this work is its model of consciousness as an emergent construct arising from unconscious associative processes, belief architectures, and emotional modulation, with the ego conceptualized as a representational singularity rather than a fundamental entity. The paper further explores the boundaries between awareness and consciousness, extending the discussion to artificial systems and future post-biological intelligences. Finally, it considers the ethical implications of demystifying life and consciousness, particularly in relation to morality, technological advancement, and humanity's future. The paper concludes that while absolute certainty about reality's ultimate origin may lie beyond human comprehension, the disciplined use of logic, empirical methods, and conceptual clarity remains the most reliable pathway for approximating objective truth within an inherently subjective cognitive framework.

## Keywords

Consciousness, Objective Reality, Perception and Cognition, Philosophy of Mind, Belief Systems, Emotions and Reasoning, Scientific Method, Artificial Intelligence Awareness

## 1. Introduction

The relationship between objective reality and human cognition has long occupied a central place in philosophy. From Plato's distinction between appearance and reality [1] to Kant's separation of phenomena and noumena [4], philosophers have repeatedly confronted a persistent epistemolog-

ical tension: how finite, subjective minds can access or approximate an objective world that exists independently of perception. Despite centuries of inquiry, this problem remains unresolved, resurfacing in contemporary debates across philosophy of mind, cognitive science, and artificial intelligence.

\*Correspondence: Mahir Asef ([mahir.asef.1810@gmail.com](mailto:mahir.asef.1810@gmail.com))

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Modern philosophy has offered divergent responses to this tension. Empiricist traditions, exemplified by Hume [3], emphasize the limits of induction and cast doubt on the rational justification of causality itself, thereby undermining claims to objective knowledge. Kant's critical philosophy reframes the problem by arguing that the structure of experience is imposed by the mind, rendering objective reality—understood as the noumenal—ultimately inaccessible [4]. In contrast, scientific realism and methodological approaches influenced by Popper defend the possibility of objective knowledge through falsifiability, logical rigor, and empirical constraint, even while acknowledging the fallibility of perception and theory [5].

Parallel to these epistemological debates, contemporary philosophy of mind and cognitive science have increasingly focused on the internal mechanisms that shape representation, belief, and conscious experience. Dennett's account of the self as a "center of narrative gravity" [6] and Metzinger's Self-Model Theory [8] challenge the intuition of a unified, ontologically fundamental ego, proposing instead that the self is an emergent representational construct. Meanwhile, affective neuroscience, particularly the work of Damasio and Panksepp, has demonstrated that emotion is not merely an irrational disturbance but a structurally consistent and evolutionarily functional component of cognition [9, 10]. Predictive-processing frameworks, such as Friston's free-energy principle, further suggest that perception itself is an inferential process guided by prior beliefs and error minimization rather than passive reception of reality [12].

Despite these advances, much of the existing literature remains fragmented. Epistemology often treats truth and objectivity independently of emotion and belief architecture, while philosophy of mind frequently examines consciousness without fully integrating language, meaning, and epistemic stability. Similarly, discussions of artificial intelligence and future cognition tend to focus on intelligence or agency while leaving the concepts of awareness, consciousness, and moral status under-theorized [13]. What is lacking is a unified conceptual framework that explains how perception, language, belief, emotion, and consciousness jointly mediate the relationship between subjective experience and objective reality.

This paper addresses that gap. It advances a unified philosophical account in which cognition is understood as an emergent, layered system shaped by unconscious associative processes, emotional valuation, belief-driven prediction, and linguistic stabilization [8, 12]. Within this framework, emotions are treated as functional regulators rather than obstacles to reason [9, 10], and the ego is reconceptualized as a representational singularity rather than a metaphysical entity [6, 8]. Consciousness, on this view, does not originate thought or action but serves as an interface that renders selected cognitive outputs accessible to the organism.

The central research claim of this paper is that objective truth, while never fully accessible in an absolute sense, can be progressively approximated through disciplined logical reasoning, precise conceptual definition, and empirical methods

operating within an inherently subjective cognitive architecture. By integrating insights from philosophy of mind, epistemology, cognitive science, and evolutionary psychology, the paper aims to clarify how knowledge is possible despite perceptual unreliability, emotional bias, and belief instability.

## 2. The Fabric of Reality

At its core, the pursuit of knowledge revolves around a single, profound question: how can we discern truth from what is not? Truth is objectivity, the network of ideas and abstractions independent of subjective interpretation. Observers—human and animal alike—perceive only fragments of reality, minute segments that invariably fail to capture the vastness of the universe.

Perception itself appears dual in nature: one aspect shaped by sensory experience of the physical world, the other emerging from the inner realm of thoughts, feelings, and ideas. Yet this perceived duality can be misleading, for sensory perception is not always reliable. Visual and auditory illusions demonstrate that even normal perception can be deceived. Moreover, the brain may distort sensory input, producing delusions and hallucinations that disconnect the self from reality—a phenomenon known as psychosis, common in several mental illnesses, particularly schizophrenia.

It follows that there is no duality within consciousness, and all distinctions between inner and outer reality are constructs of perception, emerging from the brain's attempt to interpret a singular, unified flow of existence [3].

The true challenge, then, lies in discerning reality as it is from reality as it is represented in the mind—a task guided by logic, which gives rise to reason and forms the foundation of the quintessential tool for bridging the gap between objective reality and subjective experience: the scientific method [5]. Through it, we uncover the underlying patterns of reality, patterns that exist independently of time or individual interpretation.

## 3. The Language of Thought

Individuals access ideas through interactions with the environment, while words derive their meaning from the contexts in which they were previously used. As experience is unique to each individual, meaning varies [14].

When a person refers to chairs or tables, they are referring to a compilation of all the information derived from the contexts of their previous encounters with these objects. Most words convey simple ideas, the contexts are easy to grasp, and meaning is relatively stable. However, with complex concepts such as good and evil, individual experiences vary substantially, making the meaning quite unstable.

An example of an objective statement might be: "Near the surface of the Earth, objects fall when dropped." If one understands language, this idea is easy to communicate, as all the

words used are very stable.

In contrast, a question like “What is success?” is unstable because its meaning depends heavily on each person’s unique experiences, values, and interpretations, so there is no single, universally agreed-upon definition.

This, however, does not mean the question is useless; the key is to stabilize complex concepts by clearly defining them. For example, when discussing success, we can specify whether we mean financial success, career achievement, or personal fulfillment. By doing so, conversations become clearer and more meaningful.

Why do certain words have such unstable meanings in the first place? If we look closer, we notice the common traits among words with high instability—words like good, evil, beauty, honor and duty. All of these concepts are deeply connected to emotions and personal convictions.

Before we act or decide, the brain quietly judges ideas as useful or useless. This fast, intuitive process—shaped by survival and reproductive considerations—forms the basis of our beliefs, subtly guiding emotional responses and behavior.

At the same time, emotions—emerging from complex neural activity—respond to internal and external stimuli, shaping perception and gradually reshaping our beliefs, creating a continuous, paradoxical loop at the very core of human experience.

In essence, knowledge is a careful navigation between the objective world and the subjective mind—an attempt to impose order on chaos. Individuals tend to form opinions in inherently chaotic domains, where an overabundance of indeterminate possibilities often leads to unfalsifiable statements.

While perception, language, and belief introduce instability [9, 10], the rigorous application of logic, precise definitions, and repeated observation allows humanity to approximate truth.

## 4. Emotions and Their Utility

Emotions can be understood as functional regulators within the proposed unified cognitive architecture rather than as arbitrary subjective experiences. While conscious awareness registers emotions phenomenologically, their origin and utility lie primarily in unconscious evaluative processes shaped by evolutionary pressures. Across individuals—and even across species—emotions exhibit remarkable structural consistency, suggesting that they are objective functional patterns instantiated in biological systems rather than idiosyncratic mental artifacts.

Within this framework, emotions operate as modulatory signals that bias perception, belief formation, and action selection in ways that historically enhanced survival and reproduction. Pleasure functions as a reinforcement signal, marking experiences and behaviors that should be repeated. Sorrow acts as a demotivational mechanism, suppressing behaviors associated with loss or harm while simultaneously promoting

comfort-seeking and social bonding. Desire represents the anticipatory component of reward processing, directing attention and behavior toward predicted pleasure.

Anger functions as an evolved response to perceived threat or unfairness, facilitating defensive or aggressive action and often serving to reassert dominance or protect resources. Pride, in its adaptive form, enhances confidence and competence following success, whereas excessive or hubristic pride reflects a breakdown in accurate self-modeling. Curiosity drives exploratory behavior and information acquisition, accelerating learning and long-term adaptability. Regret enables social repair by motivating apology, forgiveness, and the restoration of cooperative equilibria.

Jealousy promotes competitive behavior in response to perceived loss of valued resources, historically increasing the likelihood of resource acquisition or mate retention. Love operates as a long-term bonding mechanism: platonic love facilitates cooperation, while romantic love supports pair-bonding and child-rearing in a species with unusually dependent offspring. Lust, by contrast, incentivizes reproduction without necessitating long-term commitment. Fear functions as a predictive avoidance system, biasing perception and behavior away from potential threats before direct harm occurs.

Taken together, these emotional mechanisms form an integrated control layer within cognition, mediating between unconscious associative processes and conscious decision-making. Prior to the development of complex language and explicit reasoning, such mechanisms constituted humanity’s primary means of navigating the environment. Even in modern cognition, emotions continue to shape belief stability, value attribution, and behavioral choice, underscoring their central role in the architecture of consciousness rather than their opposition to reason.

## 5. Consciousness: Part I

The conscious self is not a fundamental entity but an emergent representational construct. What we experience as the “ego” can be understood as a functional singularity: the point at which diverse streams of neural information—sensory input, affective signals, memory, and conceptual associations—are integrated into a coherent first-person perspective. This self-model has no independent ontological status; rather, it is a useful abstraction generated by underlying cognitive processes.

This view aligns closely with Metzinger’s Self-Model Theory of Subjectivity [8], according to which the brain continuously generates a transparent self-model that is not experienced as a model but as reality itself. The organism does not experience the representational process; it experiences only its result. Consequently, the sense of being a unified, controlling subject arises despite the absence of a central executive entity.

Cognitive processing is predominantly unconscious. Associative mechanisms operate below the level of awareness, generating perceptions, evaluations, and action tendencies

prior to conscious access. Empirical evidence from neuroscience and psychology supports the conclusion that decisions are initiated unconsciously and only later accompanied by conscious rationalization. Consciousness, therefore, does not function as the originator of thought or action, but as an interface through which the organism accesses selected outputs of unconscious processing.

Despite this lack of causal primacy, the belief in agency plays an important functional role. Beliefs form higher-order constraints on associative processes by shaping expectation, attention, and interpretation. In predictive-processing terms, prior beliefs influence perception and cognition by acting as top-down models that guide inference and minimize prediction error. The experience of control, even if illusory in a metaphysical sense, contributes to behavioral coherence and long-term planning.

Emotions further modulate conscious experience by assigning value and urgency to representations. Rather than irrational disturbances, emotions function as evolved evaluative mechanisms that bias attention, memory, and decision-making. They influence which representations enter conscious awareness and how they are interpreted, thereby shaping the contents of the self-model.

Reasoning emerges as a specialized cognitive tool that allows the organism to manipulate representations abstractly, test hypothetical scenarios, and refine beliefs. As Dennett argues, the self can be understood as a “center of narrative gravity”—a useful fiction that enables social coordination, communication, and self-regulation, rather than a metaphysically distinct inner observer.

Importantly, belief systems are both products and regulators of unconscious cognition. Conceptual frameworks are constructed in response to uncertainty and informational limitations, yet once formed, they recursively shape perception, interpretation, and future belief formation. This reciprocal relationship explains the apparent circularity between belief and unconscious processing without invoking metaphysical creation or agency.

In summary, consciousness is best understood as an emergent representational process arising from unconscious associative mechanisms, emotional valuation, and belief-driven predictive models. The ego is not a hidden ruler within the mind, but a dynamically maintained self-representation that enables coherent interaction with the world while obscuring its own constructed nature.

## 6. Consciousness: Part II

Imagine you have to prove that a friend of yours is conscious, how do you go about doing that? [7] It's important to recognize that the only conscious experience we've had is that of ourselves, despite the existence of providential diversity in consciousness among individuals. How do we know that the conscious experience of individuals with profound mental retardation is truly any different from that of chimps?

What we refer to as consciousness is a subset of awareness. Life itself isn't special—dogs, for instance, live lives just as meaningful as ours. How does that make us feel? Regardless, life allows marvelous experiences, produced by its phenomenal processes, but awareness isn't life-specific.

Entirely different forms of awareness emerge from all sorts of mechanisms. For example, an AI that processes and learns from information in real time can be said to be "aware" of environmental stimuli, but not 'conscious', for it will never experience intricate mammalian emotions unless it's made to do so.

Emotional experience can be inflicted upon certain aware agents, by utilizing the mechanisms of reward and punishment. An illustration of this idea can be seen in the famous recent experiment of teaching neurons in a dish to play pong by rewarding them with predictability and punishing them with chaos, as in, randomness.

This is known as operant conditioning; the researchers achieved it by simulating predictable bursts of electric activity as a reward and unpredictable bursts of electrical activity as a punishment [11, 13]. Polydimensional layers of such a simple mechanism may lead to the emergence of complex emotions, mirroring how 0s and 1s have led to the grandeur of 21st century technology.

## 7. Implications on Morality and the Future of Humanity

Within the proposed framework, morality does not arise from the intrinsic sanctity of life, nor from metaphysical notions of objective good and evil. Instead, it emerges as a functional extension of predictive cognition operating in social environments [12]. If consciousness is an emergent representational process [8], emotions are evolved evaluative mechanisms, and beliefs act as top-down constraints on behavior [12], then moral systems can be understood as socially stabilized predictive models that regulate interaction among agents.

A central implication of this view is that human conscious experience is not categorically distinct from that of other animals. Given the absence of principled criteria for establishing the superiority of one conscious experience over another, claims of inherent moral hierarchy between species lack objective grounding. However, this conclusion does not necessitate moral paralysis nor the indiscriminate extension of moral status to all life forms. Rather, it forces a reevaluation of the foundations upon which moral value is assigned [15].

Importantly, the rejection of inherent value does not imply that killing—or harm more generally—becomes morally neutral. Within the model, moral judgments are grounded in social predictability and cooperative stability [12]. Agents embedded in social systems benefit from norms that minimize unpredictable threat, reduce internal conflict, and preserve long-term coordination. Killing is judged as morally wrong

not because life possesses intrinsic value, but because it destabilizes social equilibria by undermining trust, safety, and predictability. In predictive-processing terms, violent behavior introduces intolerable uncertainty into shared models of the social world.

Morality, therefore, functions as a constraint system imposed on individual behavior to preserve collective viability. Emotional mechanisms such as fear, guilt, empathy, and anger evolved precisely because they bias agents away from actions that would erode cooperative structures [9, 10]. Guilt and regret facilitate social repair; anger deters exploitation; empathy enables the modeling of others' internal states, improving prediction and coordination. Moral norms emerge when these emotional responses are culturally codified and linguistically stabilized [14].

From this perspective, the devaluation of life as a metaphysical category does risk promoting amorality—but only in the absence of an alternative stabilizing framework. If moral reasoning remains tied to outdated notions of sacredness or inherent worth, its collapse becomes likely as biological life is increasingly demystified [15]. However, when morality is explicitly grounded in social function, predictive stability, and cooperative optimization, its justification remains intact even under radical technological transformation [12, 13].

As future developments—such as near-immortality, post-biological intelligence, brain–computer interfaces, and genetic engineering—reshape the conditions of existence, traditional moral intuitions will become increasingly unreliable. Yet the underlying cognitive architecture that gives rise to morality will persist: agents will still seek to minimize threat, maximize predictability, and sustain mutually beneficial interactions. Moral systems will therefore evolve not by preserving life for its own sake, but by regulating the conditions under which complex agents can coexist without catastrophic breakdown [13, 15].

In this sense, morality is neither absolute nor arbitrary. It is an emergent property of social prediction under uncertainty. As the concept of “life” loses its mystique, morality must be reframed not as a defense of inherent value, but as a rational response to the practical requirements of coexistence among predictive, goal-directed systems—biological or otherwise.

## 8. The Edge of Reason

Imagine a window shattered on the ground. Why is the window broken? Because a ball hit it. Why did the ball hit the window? Because a child threw it. Why did the child throw it? Because he was playing. Each answer points to a prior cause, and each cause invites a further “why.”

The first cause argument begins by generalizing this pattern. Everything we encounter in the world seems to exist or occur because of something else [2]. A thought arises because neurons fire; neurons fire because they are electrically active; and so on.

Since every cause depends on a prior cause, the chain appears to stretch endlessly into oblivion. However, this sequence cannot regress infinitely, because an infinite chain would mean that there is no first cause, an ultimate explanation for why anything exists or happens at all.

The first cause is often equated with ‘God,’ but the existence of a first cause may also be explained simply by the existence of reality itself. Reality exists; therefore, there must be a first cause.

*Why does reality exist?*

Perhaps it stems from divinity, perhaps from the Big Bang, or perhaps we are just a brain in a vat—but fundamentally, the simple truth is that we do not know. The question of why reality exists may lie forever beyond human comprehension, a boundary at the edge of understanding where cause and reason themselves lose meaning [3, 4].

Taken together, the arguments developed throughout this paper converge on a single, coherent conclusion: human cognition operates within an irreducibly subjective architecture, yet this does not render truth arbitrary nor knowledge impossible [3, 4]. From the instability of perception and language [14], through the functional role of emotion [9, 10], to the emergent nature of consciousness [6, 8] and morality [12, 15], each section has reinforced the same underlying claim—that objectivity is not given directly to the mind, but can be progressively approximated through structured constraint.

Logic, precise definition, and empirical testing function as stabilizing forces within an otherwise fluid cognitive system, allowing agents to converge on models of reality that are increasingly predictive, coherent, and intersubjectively reliable [5, 12]. At the edge of reason, where explanation dissolves into mystery, inquiry does not end—it becomes more disciplined. What lies beyond may be unknowable, but what lies within remains open to understanding, refinement, and progress [5].

## Abbreviations

AI Artificial Intelligence

## Author Contributions

**Mahir Asef:** Conceptualization, Formal Analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing

## Conflicts of Interest

The author declares no conflicts of interest.

## References

- [1] Plato. *Republic*. c. 375 BCE. (Greek dialogue exploring justice, theory of Forms, and distinction between appearance and objective reality).
- [2] Aristotle. *Metaphysics*. c. 350 BCE. (Investigation of first causes, causal regress, and the unmoved mover).
- [3] Hume, D. *An Enquiry Concerning Human Understanding*. (Skepticism of causality; limits of inductive reasoning). London: A. Millar, 1748.
- [4] Kant, I. *Critique of Pure Reason*. (Phenomena vs. noumena; limits of human perception and cognition). 1781.
- [5] Popper, K. R. *The Logic of Scientific Discovery*. Routledge, 1959. (Falsifiability; scientific method bridging theory and reality).
- [6] Dennett, D. C. *Consciousness Explained*. Little, Brown & Co. 1991. (The self as a narrative construct; critique of Cartesian theater model of mind).
- [7] Chalmers, D. J. *The Conscious Mind: In Search of a Fundamental Theory*. Oxford University Press, 1996. (The hard problem of consciousness; subjective experience).
- [8] Metzinger, T. *Being No One: The Self-Model Theory of Subjectivity*. MIT Press, 2003. (Self-model theory; ego as emergent representation).
- [9] Damasio, A. *Descartes' Error: Emotion, Reason, and the Human Brain*. Putnam, 1994. (Role of emotion in reasoning and decision-making).
- [10] Panksepp, J. *Affective Neuroscience: The Foundations of Human and Animal Emotions*. Oxford University Press, 1998. (Evolutionary foundations of emotion and cross-species affective systems).
- [11] Skinner, B. F. *Science and Human Behavior*. Free Press, 1953. (Operant conditioning; reward and punishment mechanisms).
- [12] Friston, K. *The free-energy principle: A unified brain theory?* *Nature Reviews Neuroscience*. 2010, 11(2), 127–138. <https://doi.org/10.1038/nrn2787> (Predictive processing; perception as inference).
- [13] Bostrom, N. *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press, 2014. (Post-biological intelligence; future cognition and agency).
- [14] Derrida, J. *Of Grammatology*. Johns Hopkins University Press, 1967. (Linguistic deconstruction; instability of meaning; critique of objectivity).
- [15] Kagan, S. *How to Count Animals, More or Less*. Oxford University Press, 2019. <https://doi.org/10.1093/oso/9780198829676.001.0001> (Moral status; animal consciousness and value).