Notion Holarchy: Bridging the Gaps in Reality's Scaffold

Vidyadhar Tilak

A Framework for the Subjective {ORP} in the Tripartite Reality.

Abstract

This essay introduces the Notion Holarchy, a hierarchical classification system derived from the ontology of Pragma Sophy. This framework posits that all existence is constituted by the trio {Objects, Relationships-Processes} {ORP}. Based on their verifiability, all {ORP} are sorted into the Experimental (place/time/person-independent), the Experiential/Empirical (individually experienced, collectively correlated), and the Notional (subjective, lacking collective agreement). The Notion Holarchy structures these gap-filling Notions—which range from Formal Axioms to Spiritual Principles—into six nested levels, ordered by abstraction and utility. A Notion is accepted as a working Assumption only if it generates verifiable consequences in the Experimental or Experiential domains. This holarchic view moves beyond mere epistemological critique, providing an Axio-Epistemic scaffold necessary for constructing comprehensive models of reality where knowledge and value are intrinsically linked, supporting the higher goals of Eudemonics (well-being).

1. Introduction:

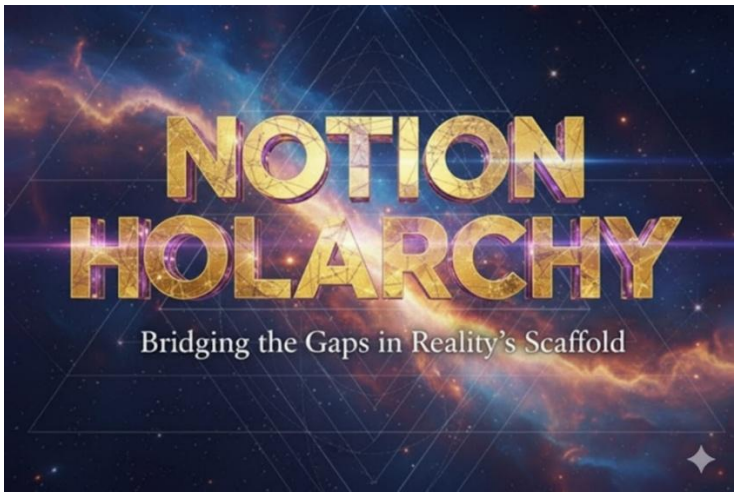

Figure 1: Notion Holarchy- Bridging the gaps in reality's scaffold

1.1 The Pragma-Sophic Jargon and Foundational Ontology

The pursuit of a unified field of knowledge requires a rigorous, non-reductionist ontology capable of encompassing the physical sciences, subjective experience, social constructs, and spiritual inquiry. This is the mandate of **Pragma Sophy**—a project dedicated to fusing science,

philosophy, and humanities with the agency of both humans and intelligent-recursive BOTS. At the heart of this framework lies the recognition that reality, in its most fundamental expression, consists of the inseparable trio: **Objects**, **Relationships**, and **Processes**. This triumvirate is denoted as {Objects, Relationships, Processes}, or simply {ORP}. Every identifiable entity, whether a proton, a thought, a legal contract, or an ethical principle, must be assertable through these three components. The {ORP} ontology serves as the universal language for assessing existence across all domains of inquiry.

1.2 Delineating the Three Worlds of {ORP}

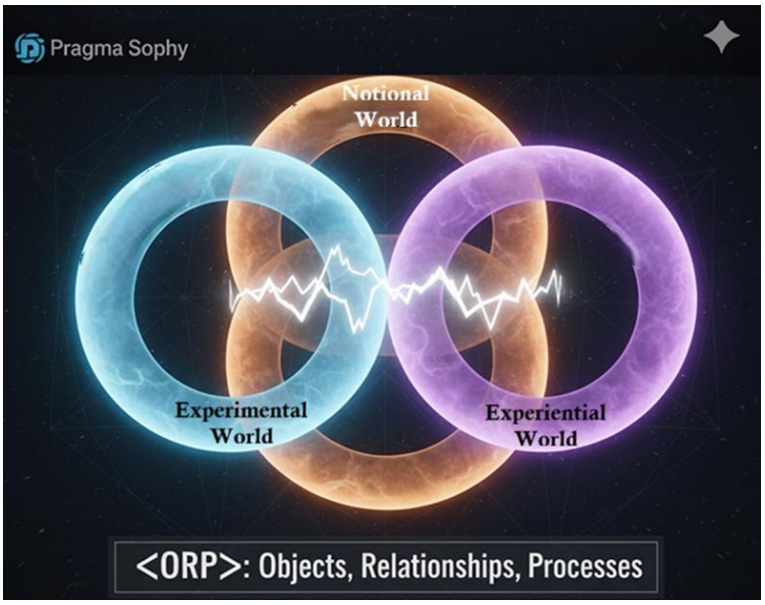

Figure 2: ORP-Objects-Relations-Processes

The assertion of existence for any given {ORP} is conditional upon the level of inter-subjective agreement it commands. This conditionality mandates the division of reality into three distinct yet interactive worlds:

A. The Experimental World (The Physical-World)

This world comprises {ORP} for which the assertion of existence is entirely independent of the individual observer's location, time, or person. An Experimental {ORP} yields results that are universally repeatable and verifiable under identical conditions. The *Experimental World* is the traditional domain of physics, chemistry, and high-fidelity, quantitative sciences. Examples include the speed of light, the conservation of energy, and the atomic structure of elements. This world is characterized by maximum collective agreement and is the least reliant on human agency for its definition.

B. The Experiential World (The Mental World / Empirical)

The *Experiential World* is defined by {ORP} that is *individually experienced* but subsequently gains collective assent through correlation. While the initial experience is subjective, the collective recognition of patterns, behaviors, and shared descriptions allows for an *Empirical* assertion of its existence. This is the domain of consciousness, emotion, localized pain, and cultural phenomena (e.g., happiness, traffic laws, linguistic meaning). Collective agreement is achieved through statistical consensus, shared narratives, or predictable social dynamics. This world represents the fusion of subjective internal reality with collective, observable external reality.

C. The Notional World (The Subjective / Scaffold World)

The *Notional World* encompasses {ORP} for which no collective agreement—whether Experimental or robust Empirical—can be reached. Notions are inherently *subjective* assertions of existence. They are the concepts, principles, and metaphysical entities used precisely because the *Experimental* and *Experiential* worlds, in their current state of understanding, possess fundamental gaps. Notions are thus the indispensable *gap fillers* or *scaffolds* that enable humans to construct complete models of reality, providing continuity and purpose where objective evidence ceases. The existence of *God*, the {ORP} , of *Beauty*, or the *String* in physics, fall squarely into this domain.

1.3 Introducing the Notion Holarchy: A Hierarchy of Utility

The crucial insight of this essay is that the **Notional World** is not a disorganized reservoir of subjective beliefs, but a **Holarchy**: a nested, structured hierarchy where each level is a holon—a whole in itself, yet part of a larger whole. Drawing inspiration from biological and psychological holarchies, the **Notion Holarchy** orders subjective {ORP} based on their degree of abstraction, the scope of their utility, and, most importantly, the **nature and verifiability of their consequences**.

The holarchy is structured across six ascending levels, ranging from the most **Formal** (mathematical and linguistic tools) to the most **Existential** (spiritual and ultimate purpose), providing a complete classification of the subjective scaffold of human civilization.

1.4 The Acceptance Criterion: Notions as Verifiable Assumptions

The utility of a Notion, and its acceptance into a working model of reality, is governed by a single, pragmatic criterion: **Assumption Validation**.

A Notion, despite its subjective origin and lack of collective agreement on its existence, can be provisionally accepted as an **Assumption** if, and only if, its assertion generates **verifiable consequences** that manifest within the **Experimental** or **Experiential** domains.

- **Example 1: Experimental Consequence.** The **Notion** of **Dark Matter** (Level II, Theoretical) posits an unseen {ORP}. While its existence cannot be directly measured, its assertion leads to the verifiable **Experimental** consequence of predictable gravitational anomalies (e.g., galaxy rotation curves, gravitational lensing). The verification of the consequence validates the **utility** of the Dark Matter Notion as a working assumption in cosmology.
- **Example 2: Experiential Consequence.** The **Notion** of **Justice** (Level IV, Axiological) is entirely subjective. However, asserting this notion leads to the creation of legal and ethical systems (a structure of {ORP}). This system, in turn, yields verifiable **Experiential** consequences, such as predictable social stability, reduced interpersonal conflict, and the psychological sense of fairness (Eudemonics).

This mechanism of **Consequence-Based Validation** is what prevents the **Notional World** from collapsing into pure fantasy, making it a functional, necessary component of reality modeling. The following sections will detail the six levels of the **Notion Holarchy**, providing a rich tapestry of examples for each critical category.

2. The Definition and Function of Notions

2.1 Formal Definition: The Subjective {ORP}

Formally, a **Notion** is an {ORP} that is defined by the absence of universal, objective corroboration. Its definition hinges on a tri-component epistemic failure:

1. It is **not** an {ORP} that can be measured or isolated under place, time, and person independent conditions (i.e., not Experimental).

2. It is **not** an {ORP} that achieves robust, statistically significant collective correlation in the Experiential domain (i.e., not empirically agreed upon).
3. Its assertion of existence is driven by **individual or segmented subjective conviction**.

This definition highlights that Notions are not necessarily *false*, but are instead **epistemically untethered** to the collective reality models of the Experimental and Experiential worlds. They exist in the realm of *possibility* or *belief*, serving vital functions that transcend the limitations of current knowledge.

2.2 The Notional Necessity: Why Reality Requires Scaffolds

The existence of the Notional World is a necessity born of the human need to create comprehensive, predictive, and meaningful models of reality. The Experimental and Experiential worlds, despite their immense scope, are inherently incomplete:

- **Boundary Conditions:** Science (Experimental) often breaks down at the ultimate limits (e.g. t=0 in the universe, the information paradox of black holes). Notions must step in to provide the {ORP} for what lies beyond these boundaries.
- **The Problem of Value and Purpose:** Experimental and Experiential {ORP} can tell us *how* the world is, but never *how it ought to be*. Notions fill the essential **Axiological** void, generating the moral systems, duties, and purposes that drive human action and the quest for **Axio-Eudemonics** (well-being).
- **Axiomatic Foundations:** Even the most rigid systems, like mathematics and formal logic, rely on unproven, asserted foundational {ORP} (Axioms). These are Formal Notions (Level I) that are the bedrock for all subsequent Experimental knowledge.

Without Notions, human agents would be left with models that are functionally paralyzed by uncertainty and morally inert due to a lack of intrinsic value.

2.3 The Pragmatic Test: Consequences over Existence

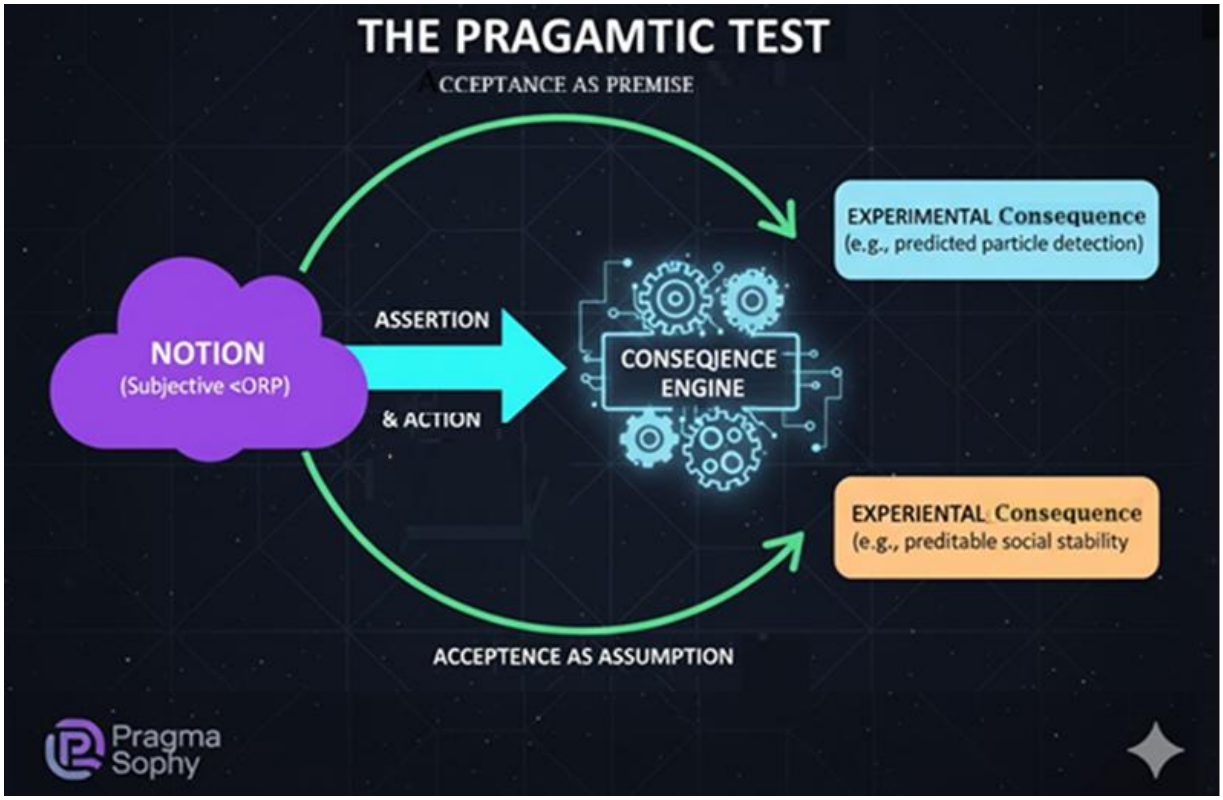

Figure 3: The Pragmatic Test

The most crucial aspect of the Notional World in Pragma Sophy is the decoupling of a Notion's **existence** from its **utility**. We do not need to agree that the {ORP} of a **String** or **Justice** exists in the same way that a proton or pain exists. We only need to assess the quality and reliability of the **consequences** derived from acting *as if* the Notion were an effective assumption.

{Notion}(A) → {Consequence} {Experimental} OR {Empirical}}

If {Consequence} is verifiably useful, predictable, or beneficial, the Notion is accepted as an **Assumption** and is integrated into the model-building scaffold. This test is the primary mechanism by which Notions migrate in significance: a Notion that fails to generate predictable consequences (e.g., an obsolete alchemical notion) is discarded, while one that generates highly reliable consequences (e.g., the notion of **Trust** in a social structure) ascends in utility and integration. This utility-driven assessment ensures that the Notional World remains a source of creative progress, not static dogma.

3. The Notion Holarchy: A Nested Hierarchy of Utility and Abstraction

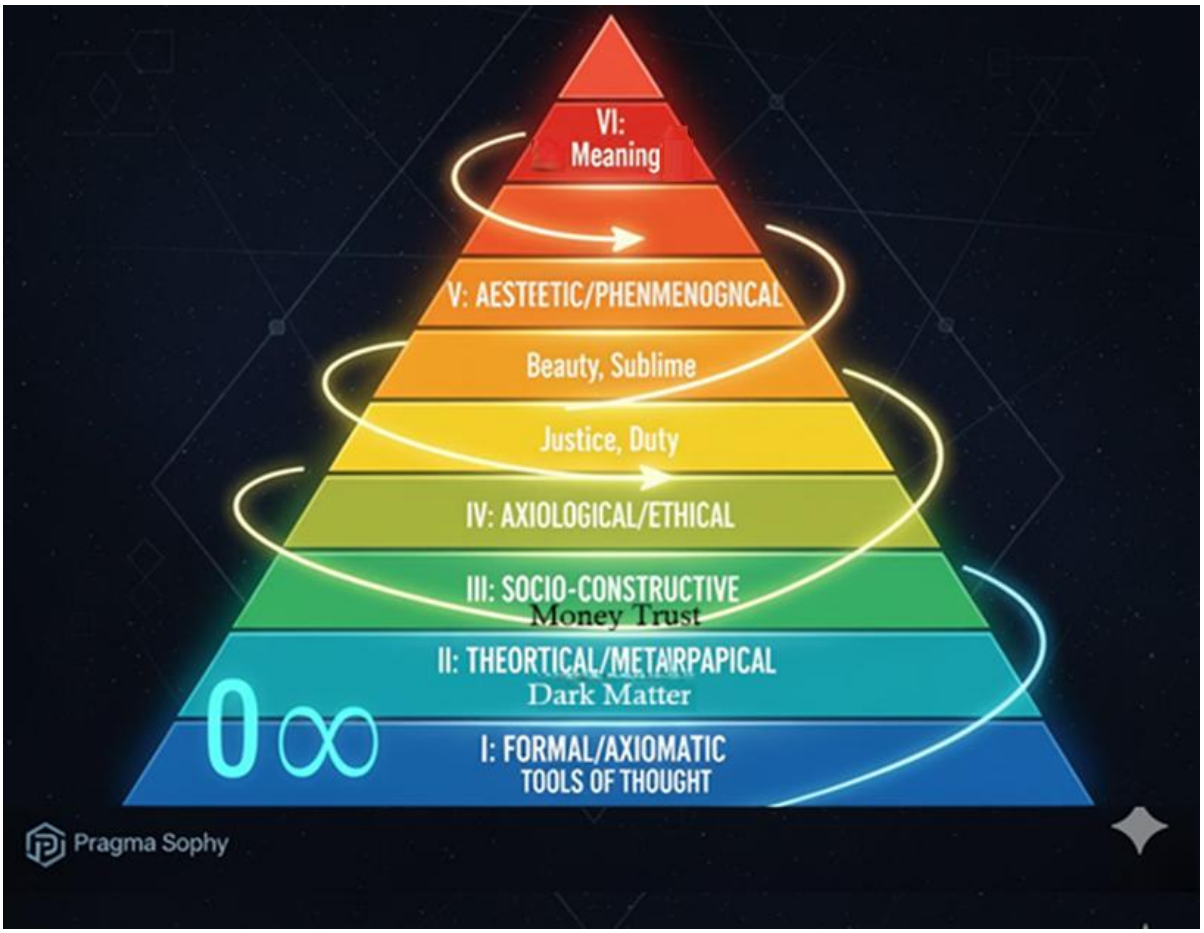

Figure 4: Nested Holarchy of Utility and Abstraction

The **Notion Holarchy** structures the vast and varied landscape of subjective {ORP}. It is defined not by a linear progression of value, but by a nested hierarchy of **functional dependence and scope of abstraction**. Lower levels serve as axiomatic or fundamental tools for higher levels, while higher levels define the ultimate purpose and context for the lower.

The structure flows from the most abstract, context-free tools of thought (Level I) to the most comprehensive, meaning-laden concepts (Level VI). The six levels are:

Holarchy Level	Category Name (Focus)	Defining Characteristic	Example {ORP}
I	Formal/ Axiomatic	Tools for abstraction, logic, and quantification; independent of external reality.	Zero, , Axioms, Set
II	Theoretical/ Metaphysical	Explanatory structures for the Experimental world's ultimate gaps and anomalies.	String, Dark Matter, Inflation Field
III	Socio-Constructive	Collective agreements that regulate the Experiential world's functional dynamics.	Money, Nation-State, Contract, Trust
IV	Axiological/ Ethical	Subjective value judgments that scaffold moral experience and ought statements.	Justice, Duty, Right, Moral Worth
V	Aesthetic/ Phenomenological	Subjective {ORP} of sensory, emotional, and artistic experience.	Beauty, Sublime, Taste, Harmony
VI	Spiritual/ Existential	Ultimate gap-fillers for the beginning, end, and purpose (Soteriology) of reality.	God, Ātman/Brahman, Rebirth, Karma

The holarchic relationship ensures that, for instance, a Level III Notion (e.g., Money) relies on Level I Notions (e.g., Zero and Axioms) for its quantification, while the utility of the Level III Notion is ultimately judged by the Level IV Notions (e.g., Justice/Fairness) it promotes or undermines.

4. Levels of the Notion Holarchy (Expanded Examples)

4.1 Level I: Formal/Axiomatic Notions

Characteristics: These are the most abstract and epistemically stable of all Notions. They are asserted as true not because of empirical observation, but because their assertion is necessary for the construction of coherent logical or quantitative systems. They are the scaffolding for the scientific method itself.

Examples:

- **The Notion of Zero (0):**

Notional {ORP}**:** Zero is not a quantity of something observed in the Experimental World (one never observes "zero apples"); it is the conceptual {ORP} of *absence* or *identity* within arithmetic.

Consequence: Its utility as a placeholder in positional notation allows for arithmetic, calculus, and all modern computation—verifiable Experimental and Empirical consequences are ubiquitous.

- **The Notion of Infinity (**infinity**):**

Notional {ORP}**:** Infinity is a conceptual limit, not an achievable or measurable {ORP} in the physical universe. It acts as a notional boundary condition for sequences and functions.

Consequence: Essential for calculus, limits, and advanced physics (e.g., normalizing quantum field theories).

- **Axioms and Postulates (Formal Logic):**

Notional {ORP}**:** Assertions assumed to be true without proof (e.g., "Through any two distinct points, there is exactly one line"). The {ORP} of **Axiom** is a purely conventional, subjective assertion of ‘a-priori’ foundational truth.

Consequence: Axioms allow the construction of entire mathematical systems, where consequences (Theorems) are experimentally and empirically verifiable by their internal consistency and external application (e.g., Euclidean geometry's role in engineering).

- **The Notion of 'Set' (Set Theory):**

Notional {ORP}**:** The idea of a collection of distinct objects is a fundamental conceptual {ORP}. The paradoxes discovered within naïve set theory (e.g., Russell's Paradox) demonstrate its inherently Notional nature, requiring more complex formal axioms (like ZFC) to maintain its utility.

Consequence: The entire foundation of modern mathematics and computational theory rests upon this Notion.

4.2 Level II: Theoretical/Metaphysical Notions

Characteristics: These Notions are typically the product of the Experimental World's limits. They are assertions of unseen {ORP} that attempt to preserve the consistency, continuity, or completeness of the known laws of physics. They are the gap-fillers for experimental anomalies.

Examples in Physics and Cosmology:

- **Dark Matter and Dark Energy:**

Notional {ORP}**:** Posited {ORP} to account for discrepancies in observed gravitational effects (Dark Matter) and the accelerated expansion of the universe (Dark Energy). These are currently unseen, non-interacting Notions.

Consequence: This Notion-Assumption allows physicists to maintain the validity of General Relativity and the Standard Model of Cosmology, generating experimentally verifiable predictions about large-scale structure formation and cosmic microwave background anisotropies.

- **String (String Theory):**

Notional {ORP}**:** The assertion that fundamental particles are not point-like {ORP} but tiny, vibrating, one-dimensional strings existing in ten or more dimensions.

Consequence: The Notion is attractive because its consequences *potentially* include the unification of gravity with other fundamental forces—the ultimate gap-filler for quantum gravity. However, due to the current lack of experimentally verifiable consequences, this Notion is currently highly speculative, though profoundly useful as a theoretical scaffold.

- **The 'Inflation Field' (Cosmic Inflation):**

Notional {ORP}**:** A theoretical, hypothetical field {ORP} that dominated the universe's energy density during the first fractions of a second, causing exponential expansion.

Consequence: The Notion solves the horizon problem and the flatness problem of the Standard Model. Its consequence—the pattern of slight variations (primordial fluctuations) in the Cosmic Microwave Background (CMB)—is empirically verifiable. This verification elevates the utility of the Inflation Notion as an extremely robust Assumption.

- **The Multiverse:**

Notional {ORP}**:** Asserting the existence of parallel or infinite universes to explain the highly unlikely fine-tuning of our universe's physical constants (a gap in anthropic principle explanations).

Consequence: While direct Experimental verification is impossible, its utility lies in providing a logical consequence that removes the need for an ultimate creative principle (Level VI Notion) to explain fine-tuning.

4.3 Level III: Socio-Constructive Notions

Characteristics: These Notions are collective assertions created by human agents to regulate and organize their **Experiential World**. They create social {ORP} (institutions, rules, boundaries) that facilitate complex, scalable interaction and cooperation. Their utility is measured by the stability and predictability they introduce into the human domain.

Examples:

- **Money (Fiat Currency):**

Notional {ORP}**:** Money, particularly currency, is an {ORP} whose value is derived purely from a **collective assertion** (a notion of shared confidence or authority). It is a symbolic {ORP} replacing intrinsic value (like gold).

Consequence: This Notion is the foundational assumption for all modern trade, finance, and specialized labour. Its consequences—predictable economic transactions, investment, and market stability—are constantly verified empirically through financial systems. When this Notion breaks down (hyperinflation, loss of confidence), the Experiential World rapidly destabilizes.

- **The Nation-State (Sovereignty):**

Notional {ORP}**:** The {ORP} of a **Nation-State** is an "imagined community" defined by sovereignty—the notional ultimate authority over a defined territory. It is not a physical object, but a conceptual {ORP} of collective identity and legal power.

Consequence: The assertion of this Notion creates verifiable Experiential consequences: legal systems, border controls, military defence, and international diplomacy. It is the primary scaffold for geopolitical and legal interaction among human populations.

- **Contract and Trust:**

Notional {ORP}**:** The {ORP} of **Contract** is a mutually agreed-upon, enforceable expectation of future behavior. **Trust** is the antecedent Notion—the subjective belief in the reliability of others' future {ORP}.

Consequence: These Notions allow for complex business, credit systems, and personal relationships that extend across time. Their consequences (the successful delivery of goods, the repayment of loans, the stability of social bonds) are continuously verified empirically.

- **The 'Legal Person' (Corporate Personhood):**

Notional {ORP}**:** A corporation or legal entity is a purely notional {ORP} created to possess rights and responsibilities independent of its individual human components.

Consequence: This Notion provides the necessary scaffold for large-scale economic organization, liability separation, and capital aggregation, yielding immense, verifiable economic and Experiential consequences.

The subsequent sections will explore the other levels of the Holarchy, moving from external organization (Level III) to internal values (Level IV), subjective experience (Level V), and ultimate meaning (Level VI).

4.4 Level IV: Axiological/Ethical Notions

Characteristics: This level represents the core of the **Axiological** domain—the Notions concerning value, duty, and the determination of *ought* statements. These notions are essential

for navigating the **Experiential World** by providing a moral framework, but they remain fundamentally subjective as no ultimate, objective measure of **Justice** or **Good** exists in the Experimental domain. Their utility is validated by their ability to generate social harmony and contribute to **Axio-Eudemonics**.

Examples:

- **Justice:**

Notional {ORP}**: Justice** is the ultimate {ORP} of fairness, balance, and *equitable* distribution of goods and harms. Whether defined by Utilitarian maximization or by Rawlsian principles of the **Veil of Ignorance**, it is a theoretical assertion of ideal {ORP} structure.

Consequence: The Notion of Justice is the scaffolding for legal systems (Level III, Socio-Constructive) and political philosophies. Its consequence is the reduction of social friction, the psychological experience of being treated fairly, and the promotion of social stability, all verifiable in the **Experiential/Empirical** domain.

- **Moral Duty (Deontology):**

Notional {ORP}**:** The assertion of an intrinsic, non-contingent **Duty** or **Categorical Imperative** (as in Kantian ethics). This is a moral {ORP} asserted as inherent to rational agency, *independent of outcome*.

Consequence: This Notion drives individual moral responsibility and provides a robust, predictable ethical anchor in scenarios where consequences are unknown or uncertain. It forms the basis of professional ethics and military conduct, where duty overrides personal inclination, yielding reliable social {ORP}.

- **Human Right:**

Notional {ORP}**:** An asserted, non-derivable moral claim inherent to the {ORP} of a 'human agent' (e.g., the right to freedom, the right to life). These are Notions created to define the minimum moral baseline for collective interaction.

Consequence: These Notions scaffold international law and political governance (Level III). The consequence of recognizing Human Rights is the verifiable reduction of arbitrary violence and political oppression, thus promoting global **Axio-Eudemonics**.

- **Moral Worth and Dignity:**

Notional {ORP}**:** The subjective assertion that every human agent possesses non-exchangeable, intrinsic **Moral Worth**. This notion acts as a protective boundary for the individual self.

Consequence: It is the conceptual tool used to combat notions like slavery or genocide. Its consequence is the promotion of respect and empathy in the Experiential World, leading to higher-quality social {ORP}.

4.5 Level V: Aesthetic/Phenomenological Notions

Characteristics: This level deals with the subjective {ORP} of sensory input, emotional resonance, and artistic form. While the physical components of art (colour, sound frequency) are Experimental, the interpretation of these components into **Beauty** or **Taste** is purely Notional, residing in the individual's inner world, though often correlated socially.

Examples:

- **Beauty:**

Notional {ORP}**:** The aesthetic appreciation of a specific arrangement of {ORP} (objects, sounds, ideas). While one can define certain objective criteria (symmetry, Golden Ratio), the ultimate judgment of **Beauty** remains subjective.

Consequence: The Notion of Beauty drives the entire creative economy (art, architecture, fashion). Its consequence is the generation of pleasure, emotional uplift, and the promotion of cultural cohesion, all of which are empirically verifiable psychological states in the **Experiential World**.

- **The Sublime:**

Notional {ORP}**:** A notion related to an intense aesthetic experience where one confronts the vastness, power, or incomprehensibility of reality (e.g., a massive storm, the edge of space). It is a subjective {ORP} blending terror and awe.

Consequence: This notion served as a scaffold for the Romantic movement in art and literature, driving creative output that sought to evoke powerful emotional consequences and push the boundaries of human experience.

- **Taste (Aesthetic Judgment):**

Notional {ORP}**:** The {ORP} of a cultivated capacity to discern quality. It is a social Notion used to segment cultural capital and assign value to objects beyond their utility.

Consequence: Taste dictates consumption patterns, social signalling, and the structure of cultural hierarchies. Its consequences are easily verifiable in the **Experiential** domain through market data and sociological analysis of cultural preference.

- **Harmony and Dissonance (Music):**

Notional {ORP}**:** While the physics of musical intervals are Experimental, the emotional {ORP} of **Harmony** (cohesive, resolving) and **Dissonance** (tension, conflict) are culturally and individually Notional.

Consequence: These Notions are the fundamental tools of musical composition, designed to elicit predictable emotional consequences in the listener, profoundly impacting collective and individual experience.

4.6 Level VI: Spiritual/Existential Notions

Characteristics: These are the most abstract and encompassing Notions. They function as the ultimate gap-fillers, addressing the questions of ultimate origin, purpose, and destiny (the **Soteriological** domain). They provide a metaphysical framework for the entirety of the three worlds. They are often the least subject to **Experimental** verification, but their **Empirical** consequences on human behavior and psychological stability are immense.

Examples:

- **God or the Divine Principle:**

Notional {ORP}**:** The {ORP} of an ultimate creator, unifier, or source of meaning. This Notion fills the boundary gap of t=0 (or the first cause) and the axiological gap of universal purpose.

Consequence: The assertion of this Notion generates vast Experiential consequences: the creation of moral codes, the formation of complex religious institutions (Level III), community support, and the psychological consequence of existential comfort (reduced anxiety, hope), directly supporting **Axio-Eudemonics**.

- **Ātman/Brahman:**

Notional {ORP}**:** The fundamental Hindu-Upanishadic Notion that the individual self (**Ātman**) is non-different from the ultimate reality (**Brahman**). This {ORP} provides a framework for consciousness continuity.

Consequence: This Notion scaffolds entire philosophical and contemplative systems (Yoga, Vedanta). Its consequence is the verifiable **Experiential** state of meditative realization (Samādhi), ethical non-attachment, and profound inner peace, all serving a high-level **Axio-Eudemonics**.

- **Rebirth and Karma:**

Notional {ORP}**:** The Notion that a non-physical {ORP} (the soul or mind-stream) transmigrates across lifetimes (**Rebirth**), governed by a moral causality {ORP} (**Karma**).

Consequence: This Notion fills the ultimate justice gap (Level IV) by asserting that perfect justice is achieved across cosmic time. Its practical consequence is the promotion of long-term, altruistic behavior, delayed gratification, and non-violence in the present life, creating a stable ethical society.

- **The 'Meaning of Life':**

Notional {ORP}**:** The personal {ORP} of subjective purpose that an individual asserts for their existence. This Notion is created by the agent to structure their personal narrative.

Consequence: The consequences are purely **Experiential** but vital: motivation, resilience, psychological coherence, and the avoidance of existential nihilism.

5. The Dynamics of the Holarchy

The Notion Holarchy is not static; it is a dynamic system where {ORP} constantly flows, influencing both the adjacent levels and the boundaries of the Experimental and Experiential Worlds.

5.1 Upward and Downward Influence (The Flow of Abstraction)

Notions exhibit a profound influence both upward and downward through the holarchy:

- **Downward Flow (Functional Constraint):** Lower, more Formal levels constrain the structure of higher levels. For example, the Level I Notion of {Axioms} and {Logic} is essential for defining the {ORP} of Level II **Theoretical Physics**. Without logical consistency, no theory, even if Notional (like String Theory), can gain traction. Similarly, Level IV **Justice** constrains the structure of Level III **Nation-State** institutions.
- **Upward Flow (Contextual Direction):** Higher, more Existential levels provide the *purpose* and *direction* for lower levels. The Level VI Notion of **Axio-Eudemonics** (well-being/salvation) drives the creation and refinement of Level IV **Axiological** systems (Justice), which in turn shape the practical **Socio-Constructive** rules (Money, Contract) of Level III. The ultimate gaps define the necessary scaffolds.

5.2 Notional Migration and Boundary Shift

The most critical dynamic is the migration of {ORP} across the boundaries between the three worlds. This is the mechanism of human progress:

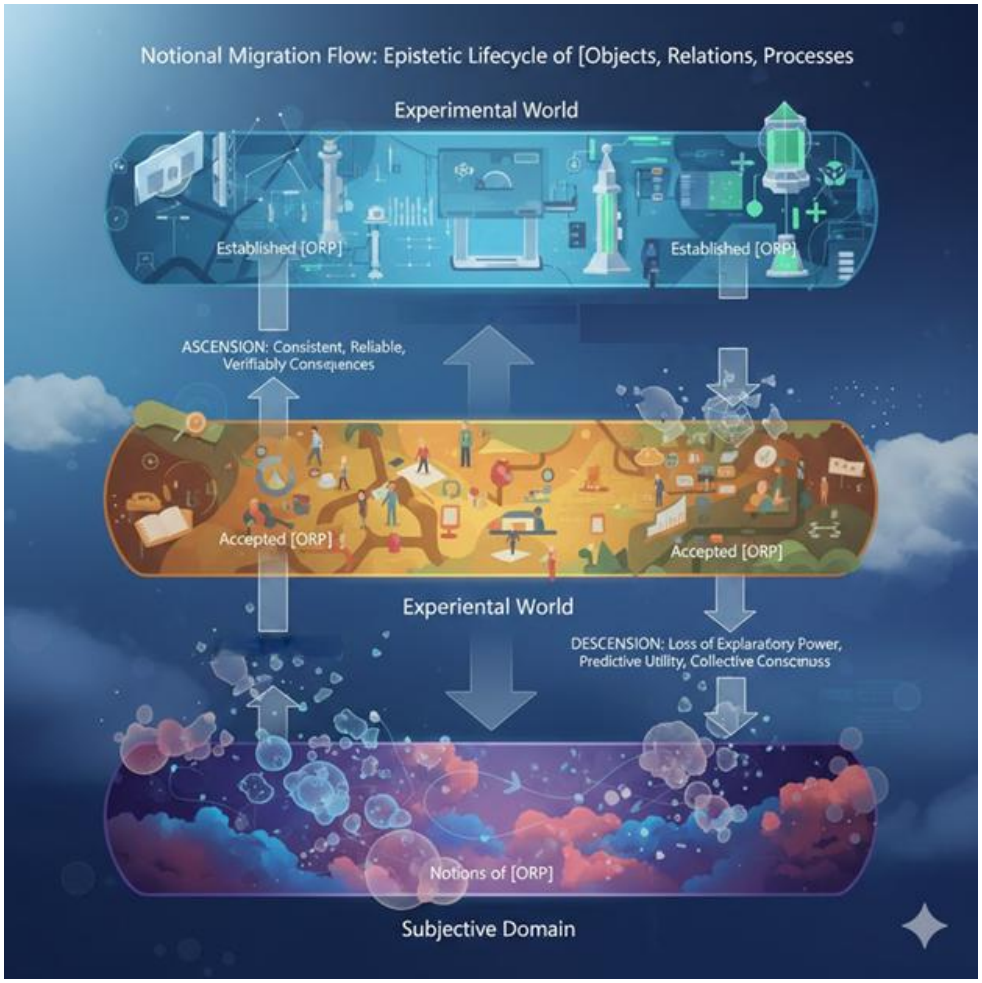

Figure 5: Notion Migration and Life cycle

- **Notion → Experimental/Empirical:** When the consequences of a Notion become sufficiently predictive and independently verifiable, the {ORP} itself can migrate. The **Atom** was once a Level II (Theoretical/Metaphysical) Notion proposed by Democritus. Subsequent experimental verification of its existence and structure has migrated the atomic {ORP} firmly into the **Experimental World**. Similarly, **Gravity** was once a Newtonian Notion, but Einstein's **General Relativity** provided a more experimentally verified {ORP} (spacetime curvature), showing the Notion's refinement and migration.
- **Experiential/Empirical → Notion:** Conversely, when a seemingly solid Experiential {ORP} loses collective consensus, it can collapse into the Notional domain. For example, the **Experiential** agreement that the **Earth is Flat** or that **Phlogiston** is the fire-element collapsed entirely as the **Experimental World** provided contradictory evidence, relegating those concepts to historical Notions.

- **Axiological Revaluation:** Social Notions (Levels III and IV) are constantly migrating based on moral consensus. The {ORP} of **Slavery** was once a fully integrated, Experientially justified, and Socio-Constructively supported reality. Through the persistent application of higher Level IV Notions (Moral Worth, Right), this social {ORP} has been aggressively negated, making its continued practice a violation of the **Experiential** moral code.

5.3 The Utility of Uncertainty: Notions as the Engine of Discovery

If reality were entirely defined by the **Experimental** and **Experiential** worlds, progress would cease. Notions are the acceptance and harnessing of **uncertainty**. By positing hypothetical {ORP} (Notions) as working **Assumptions** (e.g., String Theory, Dark Matter), we create the very framework that guides the search for verifiable consequences. The gaps do not paralyze; they motivate. Notions are thus the **creative engine of Pragma Sophy**, representing the human agent's capacity to assert a plausible reality structure *before* full evidence is obtained.

6. Notions in Pragma Sophy and Axio-Epistemics

6.1 The Fused Field of Axio-Epistemics

The Pragma Sophy framework asserts that Epistemology (the study of knowledge) and Axiology (the study of value) are inherently inseparable—a fusion termed **Axio-Epistemics**. The **Notion Holarchy** is the crucial link proving this fusion.

The choice, assertion, and application of a Notion is simultaneously an epistemic claim and an axiological act:

- **Epistemic Claim:** By asserting a Notion (e.g., **Dark Matter**), we are claiming this is the most **rational and effective way to *know*** the physical universe's structure.
- **Axiological Act:** By asserting a Notion (e.g., **Justice**), we are making a **value judgment** on the ideal structure of human {ORP}.

Therefore, the study of the Notional World is the study of how human agents decide **what is useful to believe (epistemic utility)** in order to achieve **what is valuable to attain (axiological utility)**, leading directly to the ultimate goal of **Axio-Eudemonics**.

6.2 Agents' Creations vs. Nature's Creations

Pragma Sophy distinguishes between {ORP} that are **Nature's Creations** (governed by the Experimental World, e.g., gravity, DNA) and {ORP} that are **Agents' Creations** (governed by human intention and structure). The entire **Notion Holarchy** is the ultimate catalogue of **Agents' Creations**.

- **i-r BOTS (Intelligent-Recursive BOTS):** These agents primarily operate using Level I (Formal) and Level II (Theoretical) Notions, translating them into Level III (Socio-Constructive) actions (e.g., executing a smart contract, optimizing traffic flow). BOTS, by design, often struggle with Levels IV, V, and VI, which are intrinsically tied to irreducible subjectivity and are not easily subject to objective correlation.
- **Human Agents:** Humans uniquely rely on Levels IV, V, and VI to provide the **purpose** and **meaning** that organizes all lower-level Notions. A human agent decides to optimize an economic system (Level III) based on an underlying commitment to **Justice** (Level IV) and the pursuit of a **Meaningful Life** (Level VI).

The Notional World thus represents the creative edge of human agency, allowing us to assert {ORP} that nature did not provide, such as {Moral} {Worth}$ or the {String} in physics.

6.3 Notional Integration and Axio-Eudemonics

Ultimately, the successful integration of Notions across the holarchy is the key to achieving **Axio-Eudemonics** (sustainable well-being). A functional human model of reality requires Notions at every level to prevent collapse:

1. **Level I/II:** Ensures the model is logically and physically coherent.
2. **Level III:** Ensures the agent can cooperate socially and economically.
3. **Level IV/V:** Ensures the agent can make moral choices and appreciate existence.
4. **Level VI:** Ensures the agent has the necessary existential motivation to persist.

When a Notion (e.g., a religious or political ideology) dominates too far outside its holarchic level, suppressing evidence from the Experimental or Experiential Worlds, the model becomes rigid and counter-Eudemonic (e.g., Dogmatic notions of God or Nation-State overriding basic human rights). The Holarchy demands balance and constant consequence-testing.

7. Recapitulation

7.1 The Synthesis of Tripartite Existence

The **Notion Holarchy** provides a crucial mapping of the subjective terrain that constitutes over half of the human model of reality. We began by establishing the tripartite reality of {ORP}: the objective **Experimental**, the correlated **Experiential**, and the subjective **Notional**. The six-level Holarchy classifies Notions based on their functional utility as necessary **Assumptions** that generate verifiable consequences:

- **I (Formal):** Tools of thought (Zero, Axioms).
- **II (Theoretical):** Gaps in physical law (Dark Matter, String).
- **III (Socio-Constructive):** Rules for collective function (Money, State).
- **IV (Axiological):** Ought statements and moral worth (Justice, Right).
- **V (Aesthetic):** Subjective sensory experience (Beauty, Sublime).
- **VI (Spiritual):** Ultimate purpose and existential meaning (God, Ātman/Brahman).

7.2 The Scaffold of Meaning

The Notional World is not merely a byproduct of ignorance, but the creative and purposeful output of the human agent. Notions are the essential scaffolds that bridge the unbridgeable gaps between the scientifically known and the existential imperative. By subjecting Notions to the rigorous, pragmatic test of **Consequence Validation**, Pragma Sophy offers a mechanism to elevate subjective belief systems into functional, tested **Assumptions**.

In the pursuit of **Axio-Eudemonics**, we recognize that human agents require more than just Experimental facts and Experiential data; they require a comprehensive, meaning-rich framework. The **Notion Holarchy** provides the systematic language to discuss, compare, and refine these frameworks, ensuring that our scaffolds of meaning are built not on blind faith, but on verifiable utility—ultimately enabling a more stable, purposeful, and complete experience of reality across all three worlds.

A Framework for the Subjective {ORP} in the Tripartite Reality.

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Consolidated Glossary of Pragma Sophy

Term	Brief Description	Contextual Variants
Agent	An entity capable of intentional action affecting ORP structures.	Human Agent, rBOT, iBOT, Recursive Agent
Agency	The capacity of an agent to initiate, influence, or modify ORP.	Cognitive Agency, Ethical Agency
Aesthetic	A conceptual domain dealing with perception of beauty and artistic meaning.	Aesthetic Judgment, Aesthetic Value
Assumption	A provisional belief accepted without proof to enable modelling or reasoning.	Working Assumption, Provisional Assumption
Assumption Validation	The pragmatic test that accepts a notion only if its consequences are verifiable in the Experimental or Experiential domains.	Validation Criterion, Pragmatic Verification
Atom	A concept once theoretical that migrated into the Experimental domain through verification.	Atomic Theory (historical example of Notional → Experimental migration)
Axiology	The philosophical study of values, including ethics and worth.	Axiological Framework, Value Theory
Axiom	A foundational statement accepted without proof as a basis for logical or formal systems.	Postulate, Foundational Assumption
Ātman	The metaphysical notion of the individual self as ultimate consciousness in Indian philosophy.	Ātman–Brahman identity (non-dual relation)
Beauty	A subjective evaluation of harmony or form that evokes emotional and perceptual resonance.	Judgement of Beauty, Artistic Beauty
Boundary Condition	A conceptual or mathematical limit beyond which a theory no longer applies or is undefined.	Universal Limit, Theoretical Boundary

Brahman	The metaphysical principle of ultimate reality in Indian philosophical traditions.	Ātman–Brahman Unity
Collective Consensus	Agreement achieved across agents enabling shared reality construction in the Experiential domain.	Inter-subjective Agreement, Social Consensus
Collective Correlation	Shared verification of individually experienced ORP that makes them empirically grounded.	Empirical Convergence, Shared Observation
Consequence Validation	The principle that a notion is accepted if acting as though it is true yields verifiable outcomes.	Pragmatic Proof, Consequence Test
Contract	A socio-constructive mechanism establishing enforceable expectations among agents.	Social Contract, Legal Contract
Cosmic Inflation	A theoretical construct explaining rapid early expansion of the universe to resolve structural anomalies.	Inflation Field, Inflation Theory
Creation	Refers either to natural phenomena existing independently or human/bot-generated ORP.	Nature's Creation, Agent's Creation
Dark Matter	A theoretical Notion positing invisible mass inferred from gravitational effects.	Missing Mass Problem, Non-luminous Matter
Duty	A moral imperative guiding action based on principles rather than consequences.	Moral Duty, Ethical Obligation
Empirical	A mode of validation based on correlated experience rather than universal repeatability.	Empirical Consensus, Experiential Correlation
Epistemology	The study of knowledge, justification, and how beliefs are validated.	Epistemic Framework, Ways of Knowing
Experimental World	ORP that remain valid independent of time, place, or observer.	Physical World, Objective Domain
Experiential World	ORP grounded in individual experience but validated through correlation across agents.	Mental World, Empirical Domain
Axio-Eudemonics	The study and pursuit of well-being as a measurable and meaningful life objective.	Human Flourishing, Well-Being Theory
Formal System	A symbolic logical structure founded on axioms, rules, and internal coherence.	Set Theory, Geometry, Calculus (as examples)
Foundational Principle	A core assumption or rule upon which further reasoning or structures depend.	First Principles, Ground Assumptions
Gap	A missing link or unsolved domain discontinuity requiring a bridging Notion.	Epistemic Gap, Ontological Gap
God	A metaphysical Notion invoked to explain origin, purpose, or ultimate meaning.	Divine Principle, Creator Notion
Gravity	A physical law governing attraction, originally theoretical before experimental confirmation.	Newtonian Gravity, Relativistic Gravity
Harmony	A coherent alignment of elements producing subjective aesthetic resonance.	Musical Harmony, Structural Balance

Holarchy	A nested hierarchy in which each component is simultaneously a whole and a part.	Holon, Holarchic Order
Human Right	A non-derivable moral entitlement attributed to all human agents.	Universal Right, Inalienable Right
Hypothesis	A testable provisional proposition within scientific modelling.	Working Hypothesis, Testable Assumption
Infinity	A formal Notion representing the unbounded beyond measurable limit.	Infinite Set, Infinite Regression
Inflation Field	A hypothetical cosmological field responsible for early exponential expansion.	Inflaton Field
Institution	A socially constructed stable structure enabling continuity in collective behaviour.	Legal System, State Apparatus
Intelligence	The capacity to recognise patterns, model reality, and act adaptively.	Human Intelligence, Artificial Intelligence
Interpretation	The act of assigning meaning to ORP within contextual frameworks.	Hermeneutics, Conceptual Framing
Justice	A moral construct concerned with fairness, appropriate distribution, and accountability.	Distributive Justice, Legal Justice
Karma	A metaphysical concept asserting moral causality extending beyond immediate consequence.	Moral Causation, Karmic Continuity
Legal Person	A Socio-Constructive entity recognised as having rights and responsibilities.	Corporation, Artificial Person
Logic	The framework governing valid reasoning and inference structures.	Deductive Logic, Predicate Logic
Meaning of Life	The existential Notion addressing purpose and value of existence.	Life Purpose, Existential Meaning
Metaphysics	The philosophical study of what exists beyond empirically observable ORP.	Onto-theology, First Philosophy
Model	A representational framework used to simulate, predict, or interpret ORP.	Conceptual Model, Mathematical Model
Moral Duty	The obligation to act according to ethical rules independent of consequences.	Deontological Obligation
Moral Worth	The intrinsic value attributed to beings based on ethical principles.	Dignity, Intrinsic Value
Multiverse	A speculative Notion proposing multiple or parallel universes.	Many-Worlds Interpretation
Nation-State	A Socio-Constructive organisational structure based on sovereignty over territory and identity.	Sovereign State
Natural Law	A principle-based framework asserting universal order independent of culture.	Moral Naturalism, Laws of Nature
Notion	A subjective ORP lacking universal consensus but accepted when useful.	Notional World, Notion Holarchy, Notional Migration
Number	A formal construct enabling quantification independent of physical instantiation.	Integer, Real Number, Complex Number

Object	An identifiable entity within ORP that can be referenced, modelled, or related.	Physical Object, Conceptual Object
Ontology	The philosophical framework addressing what exists and how entities are categorised.	Ontological Assumption, Ontic Structure
Paradox	A statement or construct that challenges logical or conceptual consistency, prompting refinement.	Russell's Paradox, Logical Contradiction
Phenomenology	The study of subjective experience as directly lived rather than externally described.	Qualitative First-Person Inquiry
Postulate	A foundational statement accepted to enable system construction, similar to but distinct from an axiom.	Working Postulate, Theoretical Postulate
Process	A dynamic change or transformation in ORP across time or conditions.	Relational Process, Emergent Process
Purpose	A guiding intentional or teleological principle that motivates action or system existence.	Teleological Purpose, Existential Aim
Quantification	The formal assignment of numerical structure to ORP enabling measurement and comparison.	Numerical Representation, Scalar–Vector Encoding
Rebirth	A metaphysical Notion positing continuity of consciousness beyond an individual life.	Reincarnation, Continuity of Self
Relationship	The linkage between objects or processes forming structured interaction.	Structural Relation, Causal Relation
Relativity	A physical theory redefining space-time as dynamic rather than absolute.	Special Relativity, General Relativity
Religion	A structured system of metaphysical belief, practice, and meaning.	Religious Tradition, Sacred Narrative
Right (Moral Right)	A claimed ethical entitlement that constrains collective or individual behaviour.	Universal Right, Legal Right
Scaffold	A necessary conceptual support that fills epistemic or ontological gaps until more fundamental clarity emerges.	Notional Scaffold, Transitional Framework
Science	A systematic method for generating validated knowledge through experimentation and modelling.	Scientific Method, Empirical Inquiry
Self	The subjective centre of experience and identity.	Personal Identity, Witness Consciousness
Set	A formal construct defining a collection of elements treated as a single entity.	ZFC, Naïve Set, Set-theoretic Foundation
Socio-Constructive	A class of notions emerging from collective human agreement rather than physical necessity.	Social Reality, Constructed Institution
Space-Time	The four-dimensional structure in which physical objects and events occur.	Spacetime Manifold

Spiritual	A domain dealing with ultimate meaning, existential origin, and transcendence beyond empirical boundaries.	Spiritual Inquiry, Spiritual Principle
Sublime	An experiential or aesthetic state combining awe with vastness or incomprehensibility.	Aesthetic Sublime, Existential Sublime
System	An integrated whole composed of interacting elements, governed by structure and purpose.	Complex System, Adaptive System
Testability	The requirement that a claim or model must permit attempts at verification or falsification.	Empirical Testability, Predictive Testability
Theory	A structured explanatory framework that connects assumptions, laws, and predictions.	Theoretical Framework, Scientific Theory
Trust	A socio-constructive expectation of reliable behaviour from agents across time.	Interpersonal Trust, Institutional Trust
Truth	A correspondence or coherence condition by which statements are judged valid or real.	Objective Truth, Pragmatic Truth
Uncertainty	A condition in which outcomes or truths cannot be fully determined with available information.	Epistemic Uncertainty, Ontological Uncertainty
Utility	The measure of usefulness of a construct, guiding whether it is retained in a model.	Pragmatic Utility, Functional Value
Universe	The totality of experimentally postulated existence, including physical laws and observed phenomena.	Observable Universe, Cosmos
Validation	The process of confirming a model, assumption, or notion through evidence or consequence.	Practical Validation, Empirical Validation
Value	A normative weighting that guides decisions, ethics, or meaning.	Ethical Value, Cultural Value
Verification	The confirmation of a statement or notion through repeatable and consistent evidence.	Experimental Verification, Empirical Verification
Well-being (Eudemonics)	A structured pursuit of meaning, stability, fulfilment, and sustainable flourishing.	Human Flourishing, Existential Well-Being
World	One of three distinct layers in which ORP may exist or be validated.	Experimental World, Experiential World, Notional World
Zero	A formal construct representing null quantity, identity, or the absence of measurable content.	Null Value, Zero-Point Placeholder

Annexure 1: Which is Fundamental ? Property or Relation?

The question of whether a **system property** or a **relation** is more fundamental is a complex one, primarily addressed in **metaphysics** and **systems theory**, and there is no single, universally agreed-upon answer. Different philosophical and scientific perspectives offer varying views on which concept holds primary ontological importance.

Philosophical Perspectives

The debate often centres on whether things exist and have properties independently, or if their existence and nature are fundamentally defined by their connections to other things.

1. Property-First View (Substance Ontology)

- **Argument:** This view often considers **properties** (like mass, charge, or a component's colour) to be **intrinsic** characteristics of individual substances or objects.
- **Fundamental Claim:** Individual things and their inherent properties are considered more fundamental. **Relations** are secondary, arising from the properties of the things involved. For instance, two objects repel each other *because* they both possess the property of electric charge.
- **System Property Context:** In this view, a system's **emergent property** (a property of the whole system, like **wetness** for water) is a result of the **arrangement** and **interaction (relation)** of its components' intrinsic properties, but the component's *intrinsic properties* themselves remain fundamental.

2. Relation-First View (Relationalism)

- **Argument:** This perspective, known as **Relationism**, argues that **relations** are the most fundamental building blocks of reality.
- **Fundamental Claim:** What we perceive as **properties** are often just **relational properties**—characteristics defined by an object's relation to other things, contexts, or an observer. For example, **weight** is a property of an object *in relation* to a gravitational field, not an intrinsic property of the object itself (unlike mass). Similarly, **position** is always relative to a frame of reference.
- **System Property Context:** Systems theory, particularly when discussing **emergent properties**, leans toward the importance of relations. A **system property** (often an emergent one) is explicitly defined as a characteristic that **arises from the relationships and interactions** between the system's components, and is not found in the components when isolated. In this context, the **relations** are fundamental to the existence of the *system property* itself.

Systems Theory Context

In the specific domain of **Systems Theory** or **Systems Philosophy**, the notion of a **system property** often relies fundamentally on **relations**:

- **System Definition:** A system is commonly defined as **a set of components (objects) together with the relationships between the components and their attributes (properties)**.
- **Emergent System Properties:** The most important system properties are often **emergent properties**. These are **holistic qualities** of the system (e.g., **reliability**, **usability**, **intelligence**) that cannot be understood or predicted by looking only at the isolated properties of the parts.
- **The Role of Relation:** The very existence of an emergent system property is a direct consequence of the **interconnections**, **interactions**, and **dependencies** (relations) among the system's elements.

Therefore, within **Systems Theory**, one can argue that the **relations** are more fundamental to defining the *system* and its *systemic properties* than the individual properties of the components taken in isolation.

Conclusion

The answer depends entirely on your focus:

- **Individual Component Focus:** The **intrinsic properties** of a system's *individual components* (e.g., mass) can be considered fundamental.
- **System Focus (The Whole):** The **relations** (interactions, organization, structure) are generally considered **more fundamental** to the existence and nature of the **system properties**—especially **emergent properties**—that define the system as a whole.

In the context of a **system**, the **relation** that links the components to create a synergistic whole is often highlighted as the primary factor leading to the system's unique **properties**.

Annexure 2: Examples & Justifications

The concepts of wetness, temperature, and consciousness are highly valuable in philosophy and science because they represent different forms of emergent properties—qualities of a system that are not present in its individual components.[1]

Their exploration helps distinguish between different types of emergence and the fundamental role of relations versus intrinsic properties.

Wetness: A Relational Property

Wetness is often cited as a classic example of a weakly emergent or relational property—a characteristic that arises from the specific interactions (relations) between different substances.[2]

- The System: Water (the liquid) and a solid surface (the object being wet).[3]
- The Components' Properties: The individual H_2O molecules have properties like polarity (a slight charge separation) and the ability to form hydrogen bonds (cohesion). The surface molecules of the solid have their own properties (adhesion).
- The Relation: Wetness is the phenomenon of a liquid maintaining contact with a solid surface.[4] It is the result of the relation (the force balance) between two types of intermolecular forces:[5]
    - Cohesive Forces: The attraction *between* the liquid molecules (e.g., water-to-water).[6]
    - Adhesive Forces: The attraction *between* the liquid molecules and the solid surface molecules (e.g., water-to-skin).[7]

Conclusion on Wetness: Wetness is not an intrinsic property of water alone; it is a relational property that describes the degree of interaction (the relation) between the liquid and a second, solid surface.[8] This relation (specifically, adhesion being stronger than cohesion) is what causes the phenomenon.

Temperature: An Aggregative Property

Temperature is a system property that is a quantifiable measure directly reducible to the properties of its components, but only when those components are considered collectively.

- The System: A gas, liquid, or solid substance.
- The Components' Properties: Each individual particle (atom or molecule) has a property called kinetic energy (energy of motion, $E_k = \frac{1}{2}mv^2$).
- The Relation/Emergence: Temperature ([9]T) is a measure of the average random translational kinetic energy of the particles in a system.[10] It emerges from the collective behavior of a large number of particles.

$$\text{Average Kinetic Energy} = \frac{3}{2} k_B T$$
Conclusion on Temperature: Temperature is a system property that is an aggregate of the individual components' intrinsic properties (kinetic energy).[11] It cannot be applied to a single molecule, only to a system of many molecules in relation to one another. It is considered a weakly emergent property because, in principle, it can be entirely predicted and reduced back to the average kinetic energy of the individual particles.

Consciousness: A Complex System Property

Consciousness is perhaps the most debated example, often proposed as an example of strongly emergent or irreducible system property.[12]

- The System: The brain, composed of billions of neurons and trillions of synapses.
- The Components' Properties: Individual neurons have properties like electrical potential, firing thresholds, and neurotransmitter release.
- The Relation/Emergence: Consciousness (the subjective, phenomenal experience, or qualia) is hypothesized to emerge from the vast, dynamic, and intricate patterns of organization and interaction (relations) within the neuronal networks.[13] The core system properties that are believed to give rise to consciousness are:
    - Integration: Information from various brain regions is unified into a single, coherent experience.
    - Differentiation: The system is capable of a huge number of distinct, complex states.

Conclusion on Consciousness: While it is clearly a system property of the brain, the exact nature of the relation that causes consciousness remains the Hard Problem of Consciousness. The resulting *subjective feeling* is considered strongly emergent because it is a new quality that cannot, as yet, be fully explained or predicted by merely understanding the individual properties and interactions of the neurons.[14]

Summary of Emergence Types

The three concepts serve as excellent examples of the spectrum of system properties:

Property	Nature of System Property	Type of Emergence	Role of Relations
Wetness	Relational	Weak	Defined by the relation between two different components (liquid + solid).
Temperature	Aggregative	Weak	The average of the individual property (kinetic energy) of many components.
Consciousness	Systemic/Subjective	Strong	Arises from the immensely complex relations of neural networks, creating a new, fundamental quality (subjective experience).