From Experience to Verity: The Architecture of Justified Knowledge

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How experience becomes structure and structure becomes justified knowledge

Abstract

Truths and facts form two distinct but complementary foundations of human knowledge. Facts arise from lived experience, stabilising repeated patterns of sensory or introspective encounters into recognisable, communicable units of meaning. Truths, by contrast, belong to the symbolic and conceptual descriptor world, emerging from formal modelling, structured reasoning, abstraction, and inferential construction. Alone, neither a truth nor a fact constitutes reliable knowledge. A fact without conceptual context may remain isolated or ambiguous, while a truth without grounding in experience risks becoming speculative or detached. Drawing on the pragma-sophic framework, this essay develops a coherent account of how both facts and truths are generated and justified, and how they ultimately converge in Verity—knowledge that satisfies both logical coherence and empirical correspondence. The result is an epistemic architecture that transforms raw experience into reliable understanding, establishing the necessary foundation for ethical and normative inquiry. This essay prepares the conceptual ground for the next phase of the Pragma-Sophy series: the generation and justification of morals and norms.

1. Introduction

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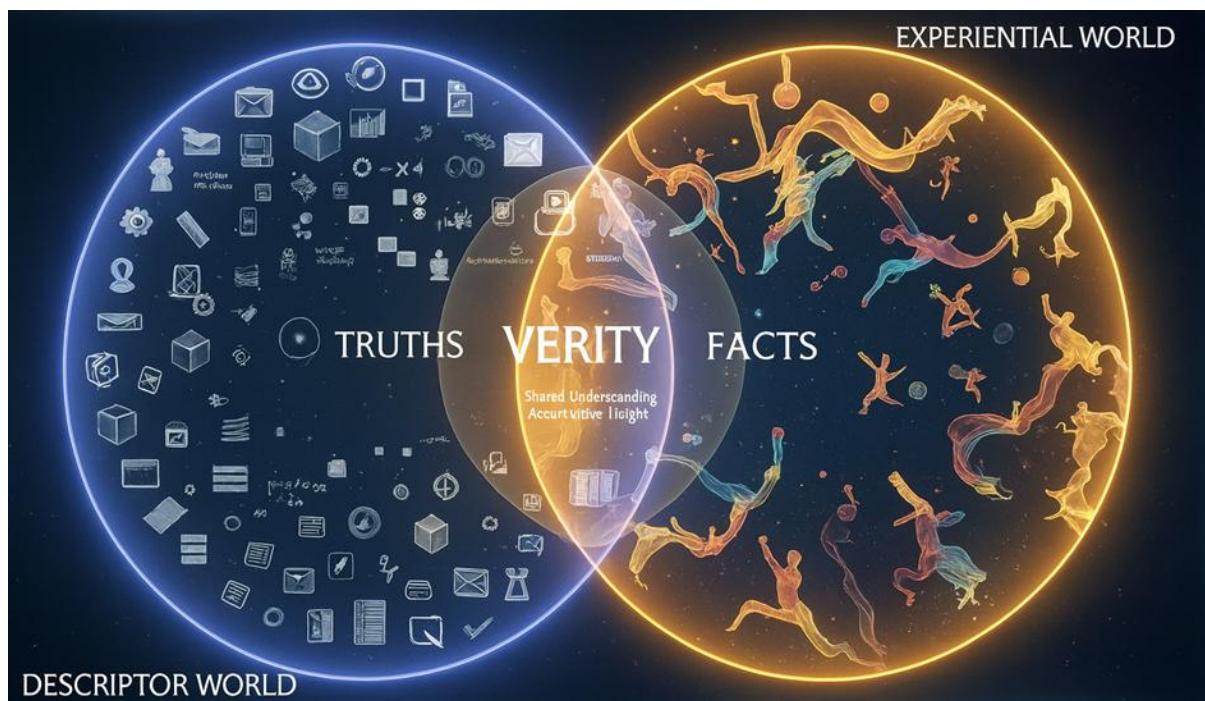
Figure 1: Two World Schema

Human cognition encounters the world not as a ready-made system of meaning, but as a flux of stimuli, sensations, intuitions, and relations. To make sense of this flux, cognition must transform experience into structured meaning. Pragma-Sophy asserts a principled distinction: **facts belong to the experiential world**, whereas **truths belong to the descriptor world**. The former emerge from repetitive engagement with external reality or repeated introspective resonance; the latter emerge from the application of linguistic, mathematical, graphical, and algorithmic models. Yet this distinction is not a divide but a bridge. Facts provide content for truths, and truths provide structure for facts. Together, they move cognition from *"what is encountered"* toward *"what is justified as known"*. This essay develops this epistemic trajectory step by step: from experience to fact formation, to modelling, to logical justification, culminating in the synthesis termed **Verity**. With that foundation in place, later essays will examine how knowledge extends beyond description into evaluation, enabling moral and normative reasoning.

## 2. Defining a System: The Cognitive Act of Boundary-Making
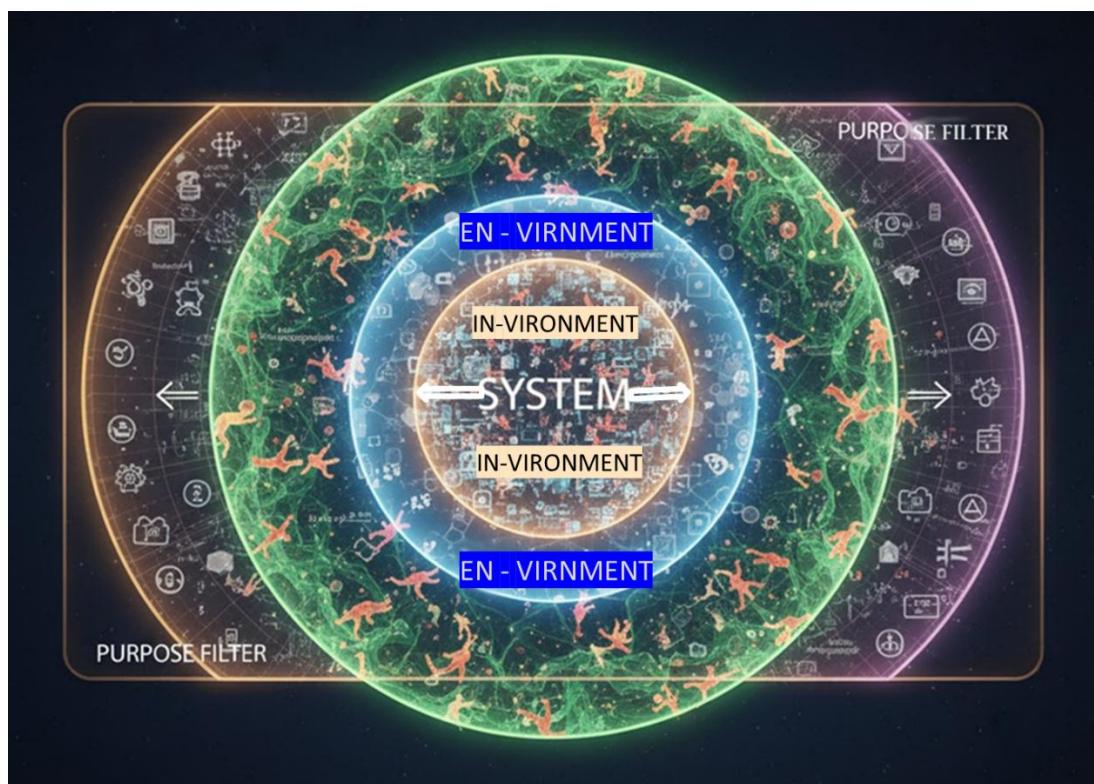
Figure 2: System Boundary Diagram

No inquiry begins with a world; it begins with a *selected* world. Before facts can stabilise or truths can be articulated, the mind must identify a domain worthy of attention. Pragma-Sophy defines a **system** as a *deliberately carved slice of reality*, enclosed by a cognitively determined boundary.

This act of segmentation is not merely spatial but conceptual: it determines relevance. What lies **inside** the boundary becomes the subject of study, comprising components and their relations; what lies **outside** forms the environment, influencing but not included. The boundary is not imposed arbitrarily; it reflects *purpose*. Therefore, the system is not discovered but *constructed* as an epistemic container—an essential precondition for both fact formation and truth generation. Without such boundary-making, cognition would be overwhelmed by complexity, and the formation of reliable knowledge would remain impossible.

3. From Description to Modelling: The Spectrum from Richness to Precision
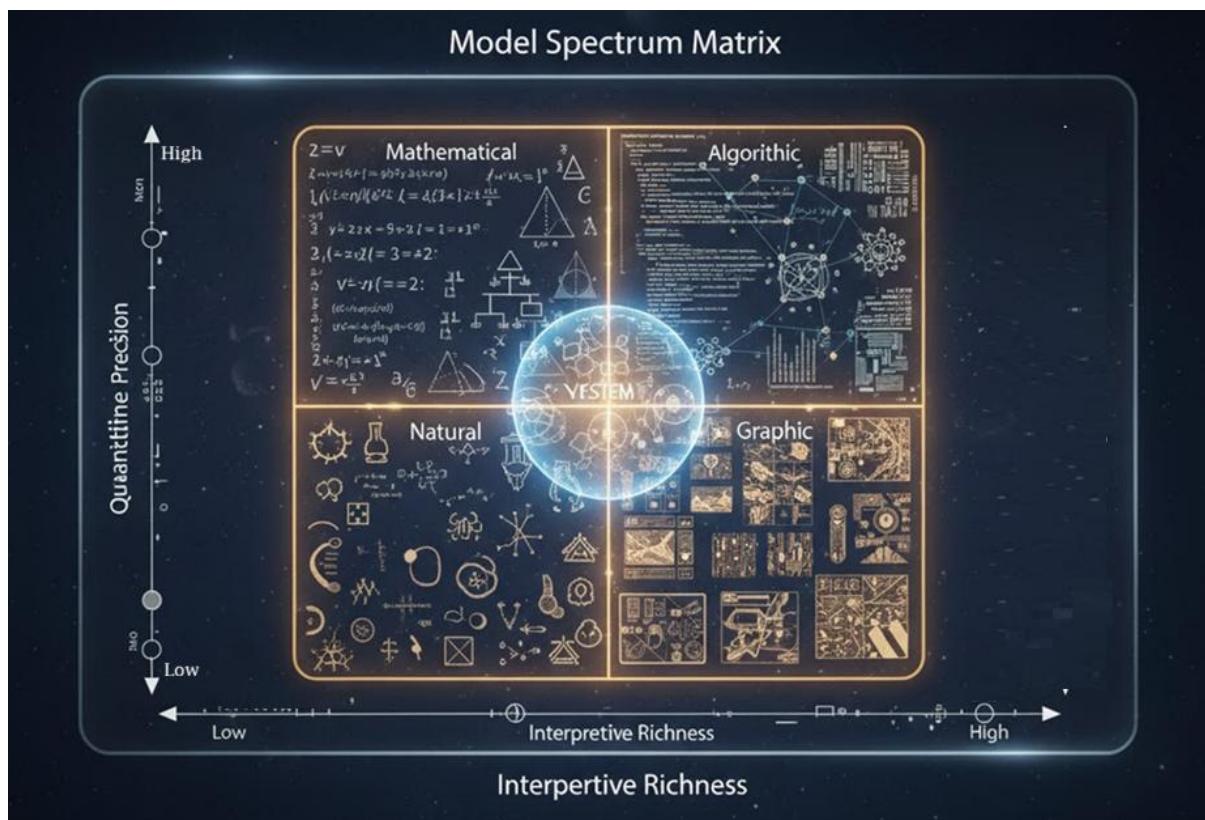
Figure 3: Model Spectrum Matrix

Once a system boundary exists, cognition advances through description and modelling. A **model** is a structured representation that captures the relevant behaviour of a system using signs, symbols, or formal structures.

Models exist along a spectrum. On one end are *natural language models*—rich in meaning, intuitive, and context-sensitive, yet limited in exactness. Progressing along the spectrum, we encounter graphical diagrams, mathematical formulations, and finally **algorithmic models**, which enable simulation and large-scale computation. Each movement toward precision offers greater formal clarity and predictive capacity but often reduces accessibility or interpretability. No single model type is universally superior; suitability depends on purpose and context. What matters epistemically is that modelling creates the conceptual scaffolding from which truths may eventually emerge.

## 4. The Cognitive Engine: Models in Operation
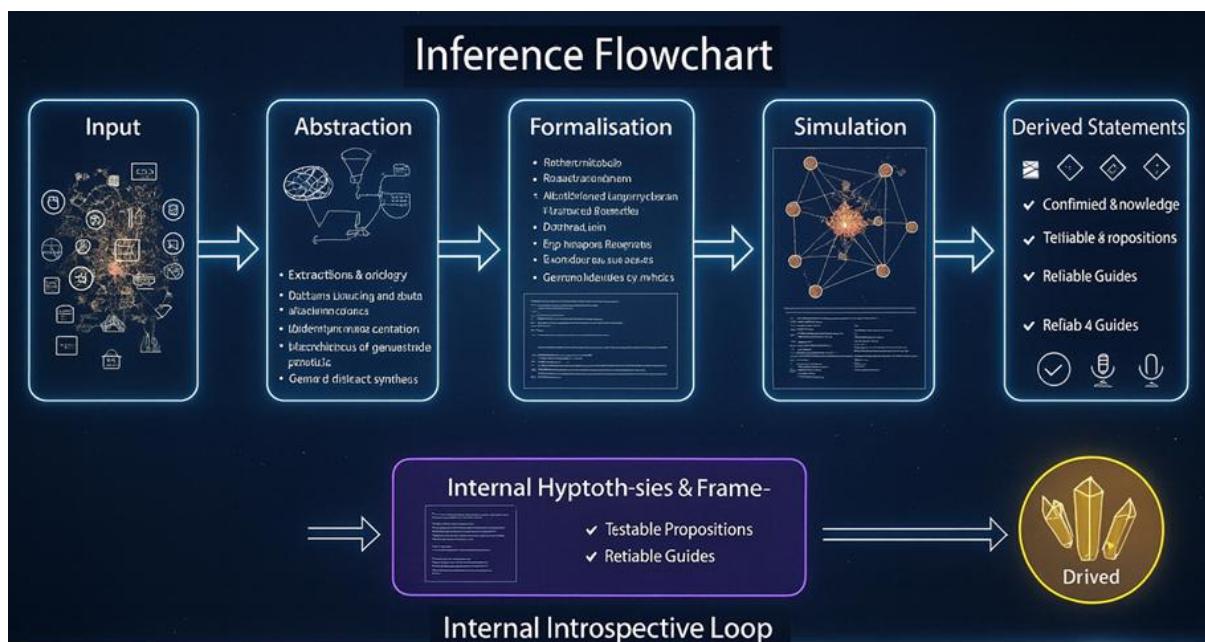
Figure 4: Inference Flow Chart

A model becomes meaningful when set into operation as a **cognitive engine**—a structured framework capable of producing explanations, predictions, and insights. The process typically begins with **input**, reflecting data derived from experience. Abstraction then simplifies and prioritises essential elements, filtering noise. Formalisation expresses these abstractions using notation, mathematics, or structured representation. Simulation or inferential execution

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subsequently produces **output** in the form of explanatory statements or quantitative predictions.

These outputs are not yet truths; they are **candidate truths**—logically entailed but not yet justified. Their legitimacy depends on subsequent validation.

## 5. Logical Justification: Coherence Before Correspondence
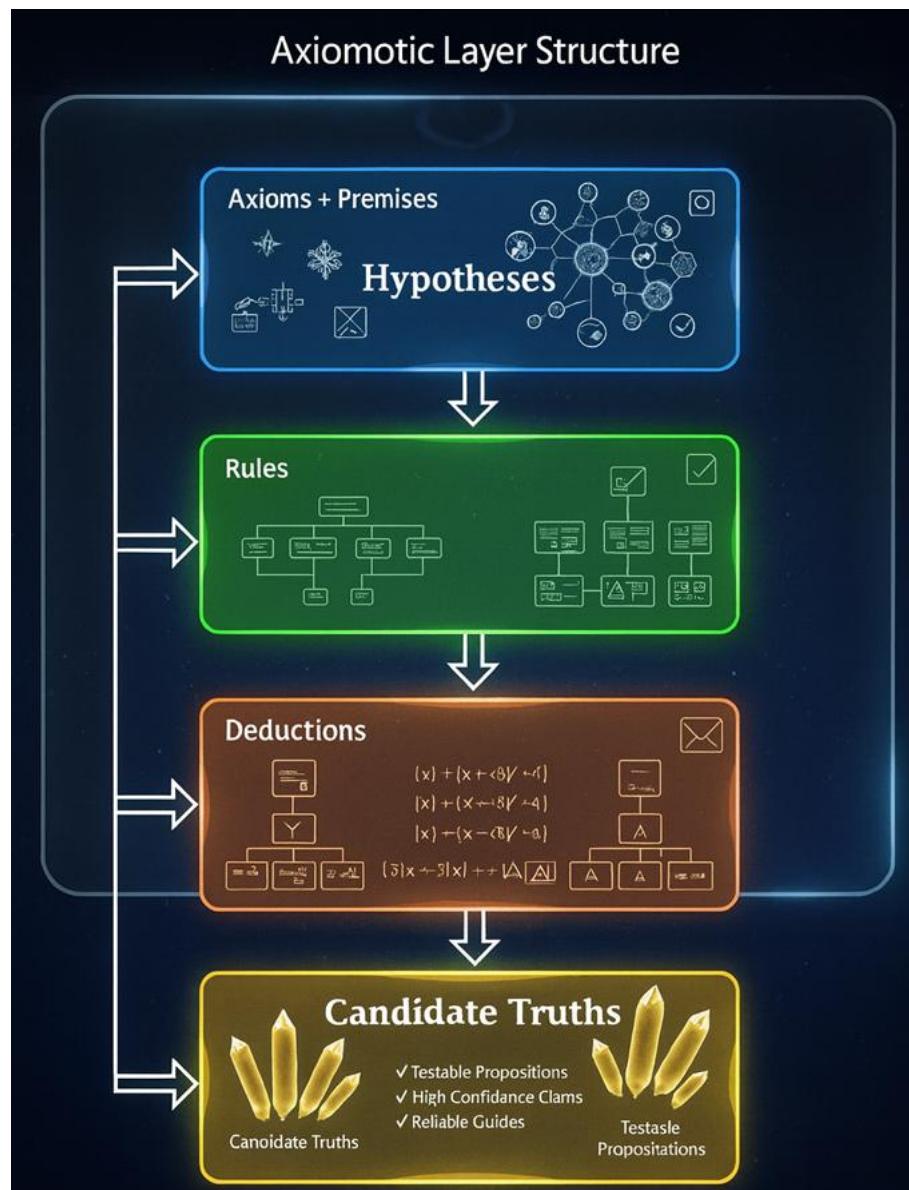
Figure 5: Axiomatic Layer Structure

Candidate truths require scrutiny before they can claim epistemic status. The first test is **logical justification**, also termed **coherence validation**.

Here, a statement is examined purely within the descriptor world to ensure that it does not violate the model's axioms, definitional structure, or inference rules. Logical justification ensures that contradictions, circular arguments, and unwarranted assumptions are eliminated. Importantly, a statement may be perfectly coherent and still be false when compared to reality. Nonetheless, no truth can be justified *without* coherence. Thus, internal logical validity is a necessary—though not sufficient—step in the emergence of Verity.

## 6. The Formation of Facts: Stabilising Experience
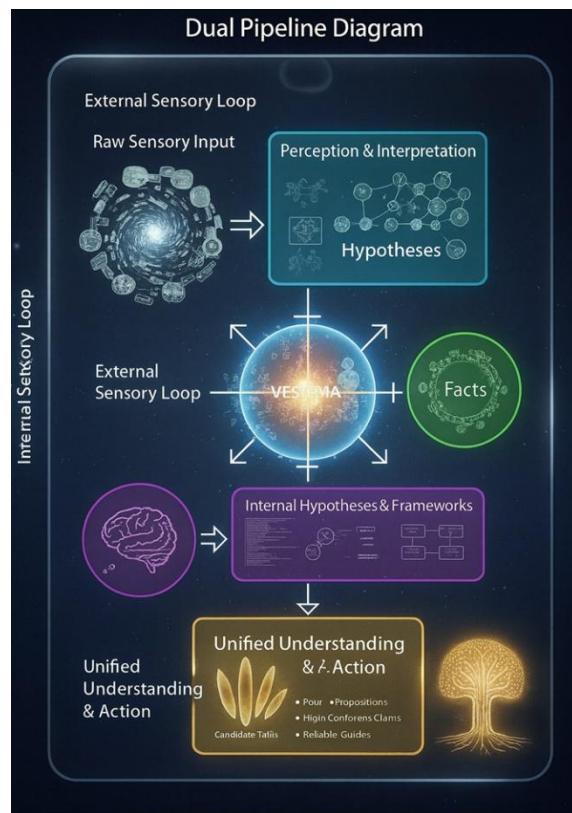
Figure 6: Dual Pipe Line Diagram

Facts arise from experience—not reasoning. In the pragma-sophic framework, facts stabilise when repeated interactions with the world lead to reliable recurrence. Two major domains generate facts: the **external world**, accessed through sensory engagement, and the **internal world**, accessed through introspection. External facts emerge when perceptual patterns persist across time and context—such as the repeated rising of the sun, or the reliable expansion of metal under heat. Internal facts stabilise when emotional, cognitive, or intentional states recur

recognisably—pain in response to injury, calm during meditation, or intention preceding action.

Facts therefore constitute the first epistemic crystallisation of experience—structured but not yet interpreted.

7. The Justification of Facts: Repeatability, Agreement, and Evidence
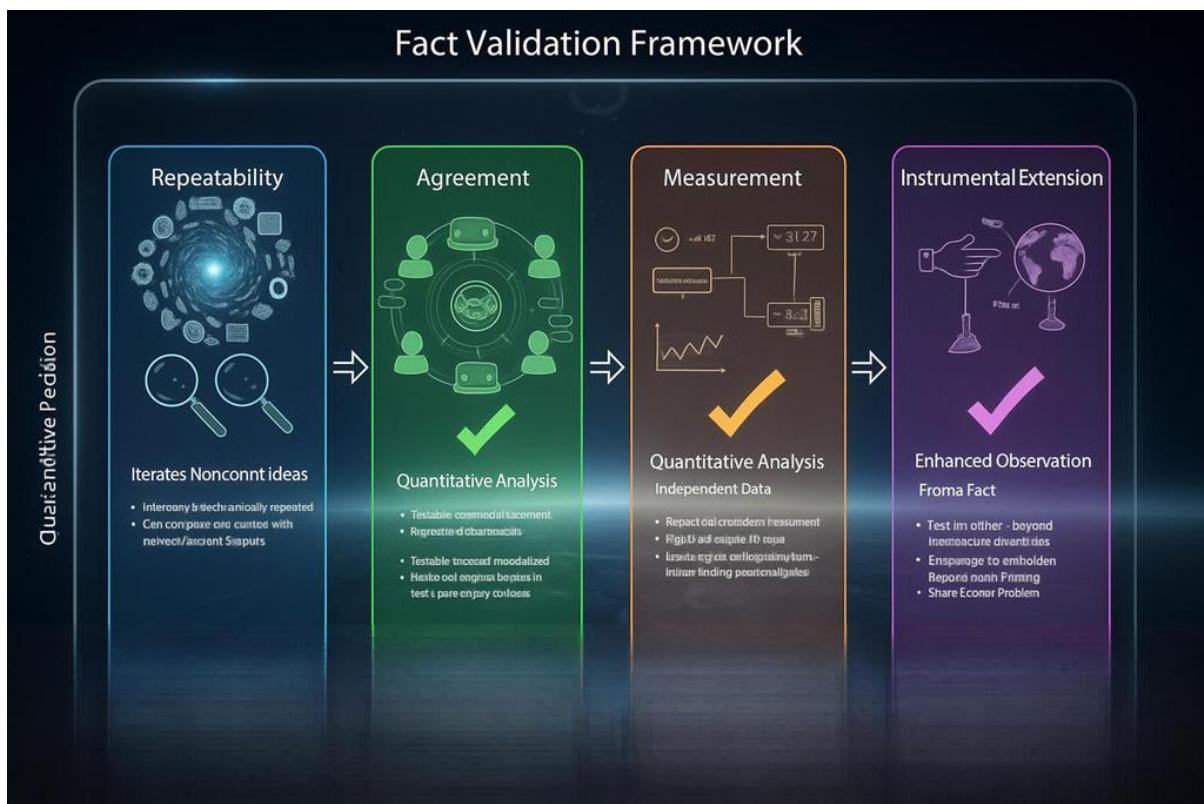
Figure 7: Fact Validation Framework

Stability alone does not guarantee credibility. A fact must be justified. **External facts** are justified through repeatability, intersubjective agreement, measurement, and instrumentation. Thermometers confirm heat, telescopes confirm motion, and repeated observation eliminates accidental or anomalous occurrence. **Internal facts** demand other forms of justification: introspective consistency, behavioural expression, communicative resonance, and—in modern contexts—correlation with neurophysiological signatures.

While the justification mechanisms differ, both internal and external facts share the criterion of *evidentiary resilience*: a fact holds until there is strong reason to doubt it.

## 8. The Dual Criterion of Verity: Where Truth Meets Fact
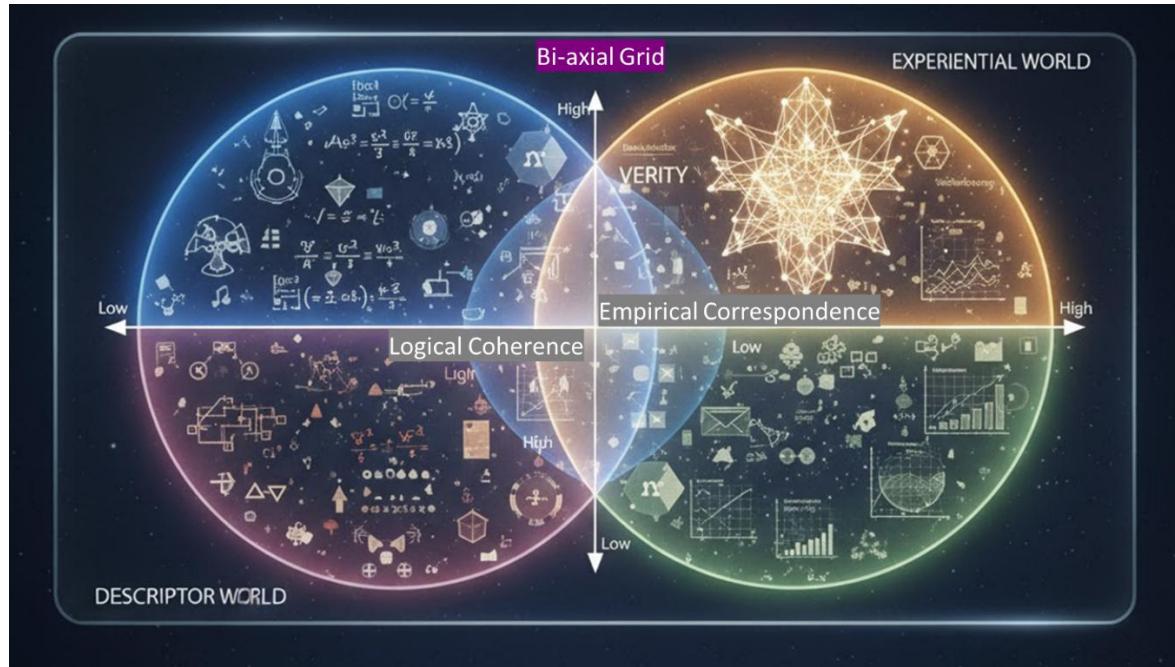
Figure 8 : Truth, Fact & Verity

A **truth** becomes **justified truth**, or Verity, only when it satisfies two independent criteria: **logical coherence** and **empirical correspondence**. Logical coherence ensures structural integrity; empirical correspondence ensures alignment with stabilised facts. If a model predicts outcomes that are repeatedly contradicted by experience, the model—not the world—must adjust. Conversely, if a consistent fact challenges an established model, the model must evolve. The dual-criteria approach prevents epistemic drift into speculation or dogma while preserving openness to revision. Verity is therefore not final, eternal, or absolute—it is *provisionally justified knowledge*, open to refinement as experience and modelling capabilities advance.


9. Recapitulation
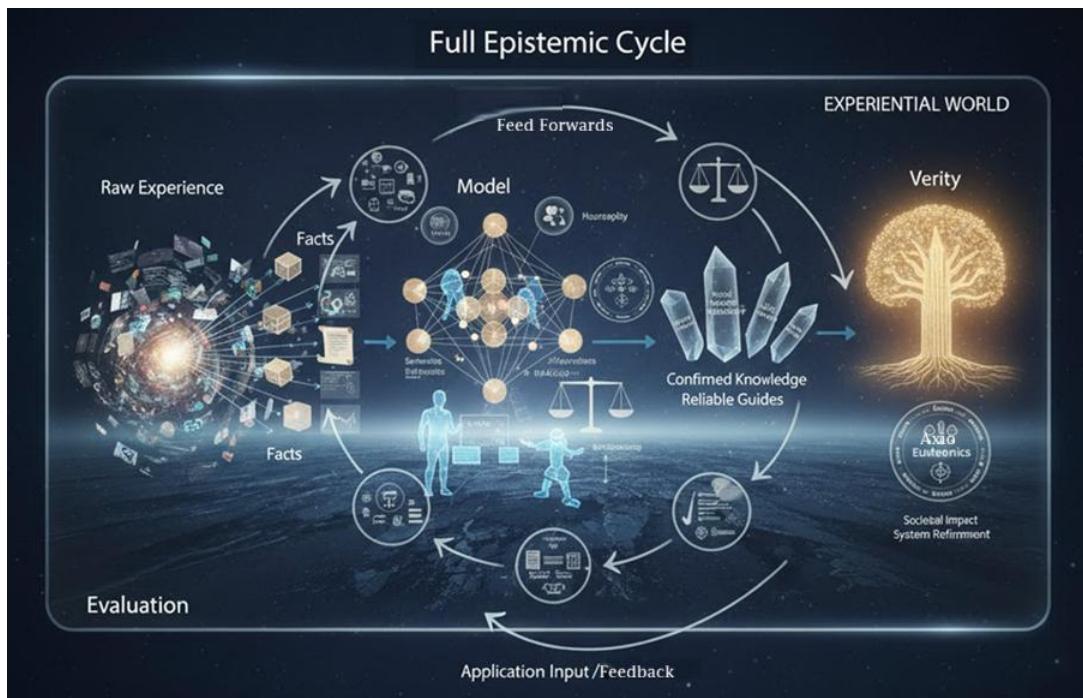
Figure 9: Full Epistemic Cycle

Truths and facts emerge along different cognitive pathways, yet neither achieves epistemic legitimacy without the other. Facts stabilise experience into communicable content; truths stabilise conceptual reasoning into structured understanding. Their convergence produces **Verity**, a form of knowledge that is both coherent and reality-tested. With Verity established, cognition now stands at an inflection point: **the transition from knowledge to evaluation**. Whereas Verity answers the question *"Is this justified?"*, the next domain asks: *"Given what is justified, what is good, appropriate, or wise to do?"* The next essay, therefore, will examine the **generation and justification of morals and norms**, where knowledge begins influencing intention, behaviour, and social design.

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Technical Terms

Term	Description
Axiological Value	The component fusing Verity with ethical principles; composed of Morals (internal) and Norms (external). *Detailed justification deferred to the next essay.*
Axiomatic Method	The rigorous, hierarchical process using Axioms and Premises to justify a candidate-Truth.
Cognitive Engine	An operational model that generates Predictions and Insights (candidate Truths) through a flow of Observation, Abstraction, Formalisation, and Simulation.
Co-evolution Snippet	The unit of functionality dictating benevolent Action, integrating Intent, Action, Conscience (Morals), and Prudence (Norms).
Dual Criterion	The two essential checks for Verity: Logical Coherence (Formal Truth in the descriptor world) and Empirical Correspondence (Fact Check in the experiential world).
Eudemonics	The overarching philosophy of flourishing (उत्कर्ष) that Pragma-Sophy aims for; the goal of actionable and ethical knowledge (fusion of axiology and soteriology).
Fact	An entity in the experiential world (raw observation, measurement); a stabilised pattern of experience.
Knowledge Snippet (KS)	The fusion of Verity (Truth + Fact) and Axiological Value (Morals + Norms) which forms the foundation of the full snippet.
System as a Slice of Reality	The deliberate cognitive imposition of order upon chaos, with a clear System Boundary for study.

Written for PragmaSophy: From Experience to Verity

Term	Description
Truth	An entity in the descriptor world (abstract models, formal logic); an engineered construct.
Verity	Justified knowledge, achieved when a Derived Statement satisfies the Dual Criterion of Logical Coherence and Empirical Correspondence.
Wisdemic Snippet	The final, complete, dynamic unit of cultural functionality, integrating the Knowledge Snippet and the Co-evolution Snippet, driving continuous, dynamic feedback.

Annexture

Epistemic Framework & the Scientific Method

The epistemic framework developed in this essay bears a clear conceptual lineage to the established scientific method, yet it also extends beyond it in structure, scope, and applicability. The parallels are most visible in the shared sequence of inquiry: experience leads to observation, observations stabilise into facts, models generate hypotheses or candidate truths, and empirical testing determines their validity. The scientific method and the pragma-sophic framework both demand that accepted statements must withstand scrutiny, demonstrating not only internal consistency but empirical resilience.

However, the present framework differs from the conventional scientific method in several substantive ways. First, it formally distinguishes between the **descriptor world** and the **experiential world**, rather than treating modelling and observation merely as procedural stages. Truths are explicitly located in the descriptor world and facts in the experiential world, creating a conceptual map that clarifies their roles, limitations, and interdependencies. This structural duality enables the introduction of the **dual criterion of Verity**, which requires not only empirical correspondence but also strict logical coherence, giving equal weight to **rational** and **observational** justification. While coherence operates implicitly within scientific reasoning, its explicit recognition strengthens epistemic transparency.

Secondly, the pragma-sophic approach incorporates domains traditionally marginal to scientific inquiry—particularly the internal domain of lived experience. Classical science privileges externally verifiable and measurable data. By contrast, this framework accords epistemic legitimacy to internal facts such as emotions, intentions, pain, agency, or reflective insight, treating them with methodological seriousness rather than anecdotal tolerance. This

inclusion enables the model to address human cognitive life in its entirety, rather than limiting itself to phenomena that can be instrumentally detected.

Thirdly, the scientific method traditionally stops at the establishment of reliable knowledge; it does not address whether a justified truth should guide action, nor does it engage with moral, cultural, or normative reasoning. Pragma-sophy is explicitly oriented toward subsequent transformation—**knowledge becomes a precursor to valuation** and **eventually action.** The endpoint of inquiry is not merely understanding, but wisdom, where justified knowledge participates in the flourishing of individuals, societies, and systems. This introduces the future conceptual domains of **morals, norms**, and eventually **Knowledge Snippets (KS-TFMN)**, which integrate epistemic and axiological components.

Finally, by presenting the epistemic cycle as revisable and dynamic, the framework resonates with modern views of science while also extending them. It retains Popperian fallibility, Kuhnian revision, and system-theoretical self-correction while embedding these within a broader cognitive ecology capable of learning across empirical, conceptual, and reflexive domains.

In summary, the pragma-sophic framework preserves the methodological strengths of the scientific method—rigour, justification, testability, and revision—while extending these principles to internal phenomena and normative reasoning. It may therefore be seen not merely as a restatement of scientific methodology, but as its **generalisation into a unified architecture of human cognition**, one capable of engaging with the full spectrum of experience, meaning, and action.