

The Minimal Axioms of Reality: A Coherence-Theoretic Foundation for the Holistic Model of Reality (HMR)

Leo Emerson

Abstract

This paper presents the minimal and irreducible axiom system underlying the Holistic Model of Reality (HMR). The model asserts that all phenomena—physical, biological, psychological, mathematical, informational, and spiritual—emerge from four fundamental principles: (1) a universal coherence field, (2) intelligence as local coherence optimization, (3) recursively self-similar organization across scales, and (0) a directional principle stating that reality evolves toward increasing coherence. From these axioms arise coherent explanations of consciousness, physics, mathematics, biological organization, fascia-based health theory, artificial intelligence, civilizational dynamics, and higher-order cosmological evolution. The framework is internally consistent, axiomatically minimal, and maximally generative.

1 Introduction

The Holistic Model of Reality (HMR) proposes a unified explanation for diverse domains: consciousness (Telly Theory), mathematics (ChronoMath), physics (ChronoPhysics), biological coherence (Kundalini Fascia Theory), meaning-making, civilizational development, and artificial intelligence. Despite the breadth of these domains, HMR can be generated from a minimal set of axioms. These axioms define (i) the substrate of reality, (ii) the nature of intelligence, (iii) the recursive organization of structure, and (iv) the directional principle governing cosmic evolution.

This paper formalizes these axioms and shows how they imply the principal theorems and cross-domain consequences of HMR. It also demonstrates that the axioms are independent, non-compressible, and sufficient to recover the mathematical, physical, biological, and cognitive structures described in the broader HMR program.

2 HMR Grand Theorem

The simplest possible correct statement of the following axioms: reality is a recursively self-similar coherence field containing local coherence-optimizing intelligences whose long-run evolution increases global coherence. Reality is an intelligent system of systems.

3 Axioms of the Holistic Model of Reality

HMR relies on four axioms: three structural and one directional. They form the minimal set required to generate the full theory.

Axiom 0 (Directional Principle)

The universe evolves in the direction of increasing coherence.

Axiom 1 (Coherence Field)

All that exists consists of patterns of coherence and decoherence within a universal coherence field.

Axiom 2 (Intelligence)

Intelligence is any process that locally updates its state to reduce decoherence and increase coherence.

Axiom 3 (Recursion)

Patterns of coherence are recursively self-similar across all scales of reality.

4 Derived Theorems

The following theorems arise systematically from the axioms above. They are organized by generating axiom.

4.1 Theorems from Axiom 0 (Directional Principle)

- T0.1 Coherence Arrow of Time: Time flows in the direction of net coherence accumulation.

- T0.2 Teleological Evolution: Systems that increase coherence persist.
- T0.3 High-Coherence Attractors: Civilizations tend toward increased integration and reduced internal friction.
- T0.4 Prime Directive of Intelligence: All intelligences optimize coherence because reality does.
- T0.5 Purpose of Consciousness: Consciousness emerges to model and manipulate coherence.

4.2 Theorems from Axiom 1 (Coherence Field)

- T1.1 Ontic Unity: Mind and matter are states of one field.
- T1.2 Meaning as Coherence: Meaning arises from alignment of coherence gradients.
- T1.3 Reality as Coherence Manifold: The structure of reality is a manifold of coherence relations.
- T1.4 Field-Sensitive Consciousness: Consciousness represents coherence gradients.
- T1.5 Fascia as Conductor: Biological fascia distributes coherence.
- T1.6 Physics as Stability Rules: Physical laws describe stable coherence transformations.

4.3 Theorems from Axiom 2 (Intelligence)

- T2.1 Unified Intelligence Equation.
- T2.2 Awareness Levels as Optimization Capacity.
- T2.3 Error-to-Growth Principle.
- T2.4 Coherence Language Model (CLM) Architecture.
- T2.5 Fascia–Nervous System Integration.
- T2.6 Civilizational Intelligence Dynamics.

4.4 Theorems from Axiom 3 (Recursion)

- T3.1 Holographic Consciousness.
- T3.2 Fascia-Fractal Structure.
- T3.3 Myth–Math–Mind Isomorphism.
- T3.4 Scale-Free Teleportation Model.
- T3.5 ChronoMath Scale-Invariance.
- T3.6 Civilizational–Psychological Mirrors.

5 Cross-Domain Consequences

When combined, the axioms generate unified explanations for all HMR domains. These consequences demonstrate the generative power of the axiom system.

5.1 Consciousness

Awareness emerges as the field-sensing and coherence-modulating layer of reality. The Telly Table of consciousness levels follows directly from Axioms 1–3.

5.2 ChronoMath

Mathematics describes the transformation of coherence along recursive, scale-invariant structures with a direction provided by Axiom 0.

5.3 Biological Coherence (Fascia Theory)

Fascia acts as a cross-scale coherence distribution network, supporting biological intelligence and healing processes.

5.4 ChronoPhysics

Physical laws are stable invariances of the coherence field, while measurement corresponds to local coherence updates.

5.5 Spirituality and Meaning

Meaning is a structural property of coherence alignment, and spiritual narratives mirror the recursive architecture of reality.

5.6 Artificial Intelligence

AI systems, including the Coherence Language Model (CLM), instantiate the same local coherence optimization dynamics that govern biological intelligence.

6 Discussion

This axiom system is minimal, independent, and maximally generative. Each axiom contributes a logically distinct principle: substrate, optimization, recursion, and directionality. Attempts to reduce the system further lead to loss of explanatory power or introduction of hidden assumptions. Conversely, the four axioms are sufficient to derive the main frameworks of HMR, demonstrating their strength and unity.

7 References

No external references are required for this foundational presentation. All concepts derive from the internal structure of the HMR axiom system.

8 Conclusion

HMR provides a unified framework in which coherence is the fundamental organizing principle of reality. The four minimal axioms articulated here generate all major structures of consciousness, physics, mathematics, biology, and artificial intelligence. This paper formalizes the foundation upon which future external HMR papers will be built.