

# Coherence Field Theory

## Paper 1: Coherence vs. Incoherence

### Abstract

This paper defines coherence and incoherence as structural states arising from the interaction between an internal architecture and the external field conditions acting upon it. Coherence is a state of alignment in which perception remains accurate, action is non-compensatory, and drift is minimal. Incoherence is misalignment expressed through distortion, compensatory behavior, and the accumulation of drift. These states are mechanical, not psychological. The paper introduces the primitives of architecture and field, outlines the basic mechanics of drift, and establishes the conceptual membrane for Coherence Field Theory. Subsequent papers will formalize drift propagation, field compatibility, and coherence-preserving environments.

### 1. Introduction

Coherence is widely referenced yet poorly defined, often reduced to emotional stability, personality traits, or behavioral consistency. These interpretations obscure a structural phenomenon: coherence as a state of alignment between an internal architecture and the external field conditions acting upon it. When alignment is present, perception remains stable and action is efficient. When it is absent, distortion accumulates and drift emerges. This paper establishes coherence and incoherence as structural states arising from architecture-field interaction. It introduces the primitives required to analyze these states and defines the conceptual membrane for Coherence Field Theory, a discipline concerned with alignment, drift, and field dynamics.

### 2. Architecture and Fields

Coherence depends on the interaction between two primitives: architecture and field.

Architecture is the stable internal configuration of a system, including its perceptual structures, cognitive invariants, processing constraints, and structural tolerances.

Field refers to the external conditions and pressures acting on an architecture, including environmental structure, relational dynamics, task demands, temporal rhythms, and informational density.

Coherence is not a property of architecture alone or field alone. It is a relational state produced by their alignment.

### 3. Definition of Coherence

Coherence is a structural state in which architecture and field are aligned. In coherence, perception remains accurate, action is non-compensatory, and drift is minimal. The system maintains stability without excess effort. Coherence is not an emotional or psychological condition. It is a mechanical fit between architectural requirements and field conditions.

### 4. Definition of Incoherence

Incoherence is misalignment between architecture and field. It is expressed through distortion, compensatory behavior, and the accumulation of drift. The system expends energy to maintain basic function, and signal quality degrades. Incoherence is not a personal failure or deficit. It is a structural mismatch.

## **5. Drift Mechanics**

Drift is the propagation of misalignment over time. It arises when architectural constraints and field pressures diverge, forcing compensatory strategies that introduce distortion. Drift is a mechanical process, not an emotional or motivational one. If drift exceeds architectural tolerance, collapse occurs. This paper introduces drift at a high level; subsequent papers will formalize its propagation and thresholds.

## **6. Field Effects on Architecture**

Fields exert structural pressure on architecture. Compatible fields support architectural invariants and produce stable coherence. Incompatible fields impose demands that violate architectural constraints, accelerating drift and degrading signal quality. Transitions between fields can generate temporary incoherence even when both fields are individually compatible.

## **7. Restoring Coherence**

Coherence is restored through structural realignment, not through motivation or psychological intervention. Realignment may involve adjusting the field, adjusting the architecture, reducing noise, or reestablishing invariants. The mechanics of coherence restoration will be developed in later papers.

## **8. Implications for a New Discipline**

Treating coherence as a structural state requires a distinct discipline. Existing fields address components of coherence but do not treat architecture-field alignment as the primary analytic unit. Coherence Field Theory centers this interaction, defines drift as a mechanical process, and establishes coherence as a structural invariant. This paper sets the membrane for the discipline; subsequent papers elaborate its mechanics.

## **9. Conclusion**

Coherence is alignment between architecture and field. Incoherence is misalignment expressed through drift. These are structural states with mechanical consequences. By defining these primitives and their interaction, this paper establishes the foundation for Coherence Field Theory. Future papers will expand on drift, field compatibility, and coherence-preserving environments.