Philosophy of Discrete Being: Manifesto

Executive Overview

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Preface (Author's Note)

The full *Philosophy of Discrete Being: Manifesto* is currently written in Russian. This document is not a translation but a concise Executive Overview intended to introduce the core conceptual foundations of the FDB framework to an international audience. A complete English translation of the full Manifesto will be prepared when sufficient community interest emerges and the FDB program enters active scholarly adoption.

This overview provides a structured entry point to the ontological architecture underlying the Philosophy of Discrete Being.

Abstract

The Philosophy of Discrete Being (FDB) presents a foundational ontology where reality consists of localities—self-contained units governed by internal metamodels and preserved through discrete interactions. FDB replaces geometric continuity with the dynamics of ontic distance, acts of coherence, synchronization, and coherence-rate fields. The deepest layer of FDB is the Global Tick Generator (GTG)—a meta-ontological tick source enabling all transitions.

This Executive Overview outlines the core of Part I (Manifesto), establishing the basis for later developments of the FDB program: the metamodel of discrete being, the emergence of temporal order, and the coherence-field interpretation of physical phenomena. of Part I (Manifesto), forming the basis for later developments including the metamodel of

discrete being, emergent temporal structure, and coherence-field interpretations of physical phenomena.

1 Introduction: Beyond Continuous Ontologies

Traditional metaphysics assumes continuity. FDB reverses this assumption, proposing that discreteness is fundamental while continuity is emergent. Identity, structure, and interaction arise from discrete localities, GTG-driven updates, coherence operations, ontic distance constraints, and synchronization structures.

2 Localities: Units of Discrete Being Governed by Their Own Metamodels

A locality L_i is a minimal self-sustaining unit of discrete being, defined by: internal state, coherence boundary, GTG-driven discrete updates, and its own metamodel. Each locality embodies rules that govern identity, transitions, invariants, and interactions.

A locality is viable when its drift satisfies:

$$D(L_i) = \|I_{L_i} - I\|_P \leq D_{cr}.$$

Localities are thus metamodel-governed, identity-preserving structures.

3 Global Tick Generator (GTG): Meta-Ontological Tick Source

GTG is the universal, non-physical source of discrete progression. It provides the basic transition:

$$L_i(t) \to L_i(t+1).$$

Localities do not generate ticks; they respond to them. GTG precedes time, space, and interaction. Time emerges only as synchronization patterns among local tick sequences.

4 Ontic Distance: Structure Without Geometry

Ontic distance $D_{ont}(i, j)$ measures compatibility and interaction potential between localities. It evolves as:

$$\Delta D_{ont}(t+\delta) = (1-\lambda)\Delta D_{ont}(t) + \xi(t).$$

Ontic distance provides structure without geometric assumptions.

5 Acts of Coherence

Localities interact through acts of coherence—discrete synchronization events aligning update rhythms:

$$\nu_i : \nu_j = m : n.$$

Coherence reduces ontic distance, aligns invariants, and enables multi-local structures.

6 Synchronization and the Emergence of Time

A locality remains coherent when:

$$t_{sync}^{(i)} - t_{last}^{(i)} \leq \tau_i.$$

Global time emerges from synchronization, while proper time is a locality's coherence rate relative to GTG.

7 Coherence Fields and Interaction Dynamics

Influence is described by:

$$F_{inter}^{(j \to i)} = k_{ij} \cdot \Delta D_{ont}^{(j,i)}.$$

Stability demands small fluctuations and bounded ontic-distance deviations.

8 Emergence of Structure and Global Invariants

Structures arise via repeated coherence operations. The R-invariant quantifies multi-local coherence, distinguishing minimal from global structures.

9 The Metamodel of Discrete Being

FDB defines a layered metamodel: ontological, structural, temporal-synchronization, interaction-dynamical, coherence-field-physics, and representational layers. This metamodel ensures consistent representation of discrete ontological dynamics across mathematical, computational, and physical formulations.

10 Toward Physics: Coherence-Rate Fields

Physical behavior emerges from coherence-rate fields $\omega(x)$. Proper-time gradients and effective gravitational phenomena arise not from geometric curvature but from coherence-

rate differentials.

11 Broader Implications

FDB applies to physics, information systems, biological networks, cognition, social structures, simulations, and IT architectures. Observation becomes an act of coherence; causality becomes an emergent reconstruction.

12 Conclusion

FDB establishes a universal discrete ontology grounded in metamodel-governed localities, GTG, ontic distance, coherence, synchronization, coherence fields, and coherence-rate physics.

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Keywords

discrete ontology; locality; GTG; coherence; ontic distance; FDB; meta-ontology; emergent time.