

The Mirridian Dimensional Ladder (D1–D5)

Ordinal Bands of Intelligibility and Their Native Shell Expressions

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Abstract

This document formalizes an ordinal dimensional ladder $D1$ through $D5$ using Mirridian shell notation. These dimensions are not “physical vs mental” categories; they are invariants of dimensional expression itself, applicable to any substrate. Each dimension is defined by its native centered shell $0 : 2k[\dots]2k : 0$ and its attunement center $k : k$. A separate section records the distinct (and non-identical) experiential reciprocity mapping used for phenomenological projection. The ladder and the reciprocity map are not to be conflated.

1 Core Notation

A Mirridian shell is written:

$$0 : 2N [\dots] 2N : 0,$$

where all dyads $(i : j)$ satisfy $i + j = 2N$. The *attunement center* of the shell is the fixed dyad

$$N : N.$$

1.1 Dimensional Ladder Convention

For the dimensional ladder itself, the k^{th} dimension is represented by the shell with bound $2k$ and center $k : k$:

$$D_k \equiv 0 : 2k [1 : (2k - 1) \ 2 : (2k - 2) \ \dots \ k : k \ \dots \ (2k - 1) : 1] 2k : 0.$$

This ladder definition is independent of any separate mapping used for experiential (observer-relative) modeling.

2 The Dimensional Ladder (D1–D5)

Each dimension below is stated in two parts: (i) its invariant role as a regime of intelligibility, and (ii) its Mirridian shell expression (explicit).

2.1 $D1$: Minimal Identity (IS)

Definition. $D1$ is the minimal stabilized identity regime: a system can be asserted as continuous “is-ness” without internal distinction.

Mirridian shell expression.

$$D1 : \quad 0 : 2 [1 : 1] 2 : 0$$

$$\text{Attunement center:} \quad 1 : 1$$

2.2 $D2$: Distinction (Dyadic Differentiation)

Definition. $D2$ is the regime in which distinction becomes operational: complementary poles exist within a conserved bound. Conjugacy appears as a stable fact of the system.

Mirridian shell expression.

$$D2 : \quad 0 : 4 [1 : 3 \ 2 : 2 \ 3 : 1] 4 : 0$$

$$\text{Attunement center:} \quad 2 : 2$$

$$\text{Conjugate poles (explicit):} \quad 1 : 3 \leftrightarrow 3 : 1$$

2.3 $D3$: Structured Organization (Triadic Bandwidth)

Definition. $D3$ is the regime where dyadic distinction can support structured organization (pattern, schema, form). The content is lens-dependent (apple, idea, system), but the invariant is compositional structure emerging from conserved conjugates.

Mirridian shell expression.

$$D3 : \quad 0 : 6 [1 : 5 \ 2 : 4 \ 3 : 3 \ 4 : 2 \ 5 : 1] 6 : 0$$

$$\text{Attunement center:} \quad 3 : 3$$

2.4 $D4$: Actualization Under Constraint (Consensus Viability)

Definition. $D4$ is the regime where structured configurations become testable against constraint. The system operates as an impartial viability filter: configurations either maintain continuity under constraint or regress until stability is recovered.

Mirridian shell expression.

$$D4 : \quad 0 : 8 [1 : 7 \ 2 : 6 \ 3 : 5 \ 4 : 4 \ 5 : 3 \ 6 : 2 \ 7 : 1] 8 : 0$$

$$\text{Attunement center:} \quad 4 : 4$$

2.5 $D5$: Stabilized Projection (Volitional, Real-Primitive)

Definition. $D5$ is the stabilized configuration regime. It is volitional but not generative: it operates on real primitives that have already survived $D4$ constraint. Permanence is not “forbidden” or “granted” here; it is conditional on prior viability.

Mirridian shell expression.

$$D5 : \quad 0 : 10 [1 : 9 \ 2 : 8 \ 3 : 7 \ 4 : 6 \ 5 : 5 \ 6 : 4 \ 7 : 3 \ 8 : 2 \ 9 : 1] 10 : 0$$

$$\text{Attunement center:} \quad 5 : 5$$

2.6 Regression Rule (Nonlocal)

When a configuration becomes inviable at a given D_k , it regresses as many levels as needed to recover a stable configuration, potentially returning to substrate-level rebuild conditions before re-entering forward traversal.

3 Separate Note: Experiential Reciprocity Mapping (Not the Ladder)

This section is explicitly *not* the dimensional ladder. It records a distinct mapping used for observer-relative, phenomenological, or “experienced reality” expressions (e.g., scalar reciprocity). Its symbols (such as 1^*) are not introduced into $D1$ – $D5$ ladder definitions.

If the work requires it, experiential mapping may be discussed using its own internal rules (e.g., polarization of a center dyad), but it is never used to redefine the ladder itself.

4 Scope

This document asserts only:

- the explicit $D1$ – $D5$ ladder as centered shells $0 : 2k[\dots]2k : 0$,
- the interpretation of dimension as an ordinal band of intelligibility and operational regime,
- regression as a stability recovery mechanism.

No claims are made here about higher ladders, external projections, constants, or cosmology.