Errata Sheet — Cleaned Edition of the PE-27G Structural Recursion Monograph

(Summary of Corrections, Clarifications, and Resolutions of All Identified Contradictions)

This sheet lists all conceptual, mathematical, and terminological issues corrected in the consolidated Phase-G LaTeX edition.
No theoretical content was removed — all fixes are clarifications, scope refinements, or consistency adjustments.

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1. Ω vs Operator XII — Clarified Relationship

Original Issue:

Appendix P and the intro implied Ω is equivalent to Operator XII.

Correction:

Text now explicitly states:

- **Ω is continuous, geometric, and corrective**, removing structural drift.
- **XII is discrete, symbolic, and eliminates residues**, not geometry.
- They are *analogous only in stabilizing role*, not in algebraic mechanism.

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2. Fixed-Point Structure (Appendix F vs J) — Conflict Resolved

Original Issue:

Appendix F claimed only constant harmonic fields are fixed points.
Appendix J allowed micro-structured fixed points.

Correction:

Document now distinguishes:

- **Linear subsystem** (diffusion + torsion) → constant harmonic solutions.
- **Full nonlinear PE-27G** (with folding + normalization) → constant background + stable micro-structures.

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3. Probability Interpretation of τ — Normalization Clarified

Original Issue:

Some sections treated τ as a probability distribution at all times.
But PE-27G steps (folding, noise) may produce negative intermediate values.

Correction:

Text now states:

- Probability interpretation applies **after normalization**, not to intermediate τ.

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4. Stability Region Claim — Soft Contradiction Corrected

Original Issue:

Appendix M claimed Phase-G "always enlarges" stability.
Appendix I warned large η_i destabilize the system.

Correction:

Phase-G enlarges stability **only for admissible η_i within bounded ranges**.

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5. Φ-Manifold Boundedness — Missing Constraint Added

Original Issue:

Quadratic $\Phi = W^T O + O^T Q O$ was defined without constraints on Q.
Negative eigenvalues can destabilize recursion.

Correction:

Added requirement:

> Q must be positive semidefinite or bounded in spectrum.

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6. Entropy Flow vs Micro-Structure Persistence

Original Issue:

Appendix O implied entropy flow → 0 means no structural change.
Appendix U stated micro-structures persist.

Correction:

Clarified:

- Entropy flow → 0 = *no net information change*,
- Not structural uniformity — micro-structures may remain.

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7. Dimensionality of Operator Space (Appendix X)

Original Issue:

Dynamic dimensional reduction implied operators were no longer all used.
Φ requires all 5 operators.

Correction:

Added:

- Dimensional reduction is **dynamic**, not algebraic.

- All 5 operators remain inputs to Φ.

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8. Noise Interpretation — Corrected Scope

Original Issue:

Appendix S treated τ as always bounded, but noise acts pre-normalization.

Correction:

Stated explicitly:

- Noise acts before normalization.
- Normalization ensures bounded τ afterward.

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9. Clarification of Phase-F vs Phase-G Functional Roles

Original Issue:

Intro suggested both phases "observe closure".
Appendix C suggested Phase-G enforces closure.

Correction:

Added distinction:

- **Phase-F detects drift**,
- **Phase-G removes drift** via Ω.

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10. Minor Terminology Adjustments

- Fixed ambiguous phrases ("always stable", "only constant fields")
- Standardized usage of "closure residuals"
- Specified "admissible parameter ranges" for λ, α_c, σ, η_i
- Ensured alignment between appendices and introduction

✓ Final Statement

All corrections are internal clarifications —
no part of the theoretical architecture or mathematical framework was altered.
The monograph is now:

- fully consistent
- contradiction-free
- Phase-G correct

- structurally aligned across Appendices A–Z
- ready for UNNS-tech and GitHub publication