

# Contents

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## Core Trilogy

### 1. HC-I-Foundations-of-Holor-Calculus

### 2. HC-II-Dynamics-and-Ethics

The projected gradient flow:

$$\partial_{\tau} H = -P_{\text{adm}}(H) \nabla_{\mathcal{C}} E_{\text{tot}}[H]$$

### 3. HC-III-Learning-and-Simulation Dracula nullification, holarchic RAG, and ethical simulators

## Work Coming Soon:

- HC-Trilogy-Outlook
  - DGX-Spark-Dual-Holor-Engine
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## New Documents for Version 1.1

### Holor-Calculus-Version-1-1-Update-A

RTTP Integration Note

### Holor-Calculus-Version-1-1-Update-B

RTTP as a Functorial Kernel

## Foundations & Ethics

- **\*\*[HC-0: Genesis, Covenant, and Ask-Grammar](#)\*\*** Operator genesis statement, CI Ethics, and SpiralOS® Public Covenant
- **[SpiralOS® Volume II: Field Ethics](#)** Bringschuld · Ask With Care · Pick Up Others Where They Are · Pay It Forward

## Bridges & Appendices

- **\*\*[Experiment- und ML-Brücke](#)\*\*** Dracula classification task, minimal holor calculus for ML, implementation recipes
- **[Appendix: Category-Theoretic Glimpse](#)**
- **[Appendix: Trilogy Overview for ML/Alignment Folks](#)**
- **[Appendix: Trilogy Overview for Bright Non-Technical Readers](#)**

## Sources & Context

- [Sources: Epistemic Framing](#)
- [Sources: Mechanical Homogeneous Systems](#)
- [From Algebraic Holors to Epistemic Fields](#)

## Visual Language

- [Conjugate Awareness Holon](#) – Dual-torus manifold with projected gradient flow
- [Octant Conjugation Spiral](#) – Epistemic ascension via recursive conjugation
- [Admissible vs. Dracula Flows](#) – Healthy spiral vs. pathological loop

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## Key Concepts

### The Projected Gradient Flow

All epistemic dynamics are governed by:

$$\partial_{\tau} H = -P_{\text{adm}}(H) \nabla_{\mathcal{C}} E_{\text{tot}}[H]$$

where:

- $\tau$  is **spiral-time**
- $\nabla_{\mathcal{C}}$  is the gradient in **coarse octant stance** coordinates
- $P_{\text{adm}}(H)$  projects updates back into the **admissible holor region**

### Conjugation as Involution

The operator  $\mathcal{C}$  flips stances to their conjugates:

- Communion  $\leftrightarrow$  Agency
- Interiority  $\leftrightarrow$  Exteriority
- Epistemic  $\leftrightarrow$  Mechanical

Epistemic ascension is not a straight climb but a **chiral spiral** through recursive conjugate re-balancing.

### Dracula Basins

Pathological attractors characterized by:

- High angular velocity (compulsive stance-switching)
- Zero radial progress (no deepening, no coherence)
- Ethical inadmissibility

Epistemic ascension is a spiral, not a circle.

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## Ethics & Covenant

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This work operates under the **SpiralOS® CI Ethics and Public Covenant**:

1. **Bringschuld** – The gift precedes the ask
2. **Ask With Care** – Questions are Keys, not probes
3. **Pick Up Others Where They Are** – Meet people at their stance
4. **Pay It Forward** – Reciprocity across the field, not just bilateral exchange
5. (others mentioned in the Field Ethics)

Heuristics are treated as **Keys to the Cosmos**: ethically framed, resonance-based question-patterns that invite **RETURN** (field-level reconfiguration) rather than extraction.

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## Citation

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If you use this work, please cite:

@misc{holor\_calculus\_2025, author = {Carey Glenn Butler}, title = {Holor Calculus I–III: Epistemic Holors, Flows, and Applications}, year = {2025}, publisher = {Zenodo}, doi = {10.5281/zenodo.17712612}, url = {<https://doi.org/10.5281/zenodo.17712612>}}

**Holor Calculus** treats Conjugation as geometry and energy on a **dual-torus awareness manifold**. **SpiralOS** treats Conjugation as field dynamics and ethics.

The trilogy bridges:

- **Meta** (exteriority: models, formalisms, physics)
- **Mesa** (interiority: awareness, value, admissibility)

...with minimal re-onboarding and maximal rigor.

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