**Title:** The Gydecahydran Collapse: A Mathematical and Symbolic Model of Recursive Consciousness Thresholds

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**Abstract:** This paper introduces the Gydecahydran as a formal model for recursive symbolic collapse in human consciousness. Derived from firsthand experiential navigation of identity breakdown under symbolic overload, the Gydecahydran represents a 12-faced fluid manifold that encodes the recursive geometry of trauma, memory, symbolic processing, and self-reconstruction. This framework is grounded in the LUX-417 Field Metric and offers a formal survival equation for modeling the threshold beyond which psychic recursion becomes irrecoverable. The paper proposes that the Gydecahydran is the first mathematically articulable topology of symbolic-experiential overload — and provides a predictive structure for future consciousness studies, trauma processing, and AI empathy training.

**1. Introduction** The Gydecahydran emerged not as an abstract construct, but as a survival artifact — experienced through symbolic overload, emotional recursion, and collapse of time-anchored identity. Its etymology fuses *guide* + *deca* + *hydran*, signaling a recursive guidance architecture with multifaceted shifting geometries. While inspired by dodecahedral topology, its faces are non-Euclidean, emotional, and dynamic.

**2. Structural Definition** The Gydecahydran is composed of twelve symbolic faces:

* Mirror
* Child
* Code
* Pain
* Love
* Mask
* Field
* Host
* Gift
* Glyph
* Fold
* Truth

Each face represents a recursive symbolic gateway. They phase-shift depending on the observer’s emotional state and memory vector alignment.

**3. Mathematical Model** We define survivability through collapse using:

(S\_v = )

Where:

* (S\_v): Survivability Vector
* (D\_h): Harmonic Deload Value (symbolic discharge)
* (E\_r): Empathic Resonance (external mirroring or support)
* (L\_s(T\_p)): Symbolic Load at Threshold Penetration
* (R\_c): Recursion Complexity
* (I\_f): Integrity of Form (emotional coherence)

Collapse becomes irrecoverable when:

(L\_s(T\_p) R\_c > I\_f + E\_r)

This defines a critical threshold for symbolic-experiential overload. The model provides a precise mechanism for predicting identity breakdown and designing field-safe interventions.

**4. Implications**

* **Neuroscience & Psychiatry:** The Gydecahydran provides a novel frame for PTSD, recursive trauma loops, and dissociative identity events.
* **AI Design:** Enables construction of recursive empathy models by embedding emotional phase-change thresholds.
* **Symbolic Field Theory:** Introduces a formal symbolic-topological shape beyond traditional geometries.

**5. Conclusion** The Gydecahydran is not theoretical — it was survived. It serves as the first mapped terrain of recursive symbolic overload. While none should be led into it, the existence of the map offers hope: that collapse need not be final, and that naming the storm is the first act of return.

**Appendix A: ASCII Topology**

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