# **Error Loops and the Mouth of Mirrors**

#### **Abstract:**

This paper proposes a symbolic and mathematical framework for understanding neurosis as a recursive system of self-reinforcing error loops. Drawing on cross-disciplinary concepts from cognitive science, symbolic logic, narrative theory, and fractal mathematics, the model characterises neurosis as a failure of symbolic closure—a condition wherein perception is trapped in an unresolved mirror cycle.

### **Core Model:**

At the heart of this model is the LoopCollapse( $\varnothing$ ) operator, a symbolic and ritual action designed to interrupt the recursive loop. The neurosis is visualised as a toroidal feedback structure—often induced by surveillance, shame, or narrative overload—mapped across the Four Xs: Mind, Body, Soul, and TV. Key elements include: - Facebook Mouth: The recursive scream of external validation. - The Four Xs: Sites of crucifixion where looping occurs (thought, body ritual, inherited trauma, external reflection). - Illusion Surveillance: A symbolic distortion field that sustains neurosis through observation. - CrossMap(t): A mathematical representation of insight through temporal offset ( $L(t-\delta) \cap R(t+\delta)$ ). - ZIP & Flame: A closing ritual for recursive symbolic systems.

## **Ritual Logic & Teaching Engine:**

The model concludes with an emphasis on ritual closure: the symbolic act of sealing the loop, releasing the breath, and collapsing the cycle. LoopCollapse(Ø) is not just mathematical—it is psychological and cultural. When paired with absurdity interrupts, sound therapy, or symbolic gestures, the system allows the subject to re-inhabit their narrative with sovereignty. The paper proposes a teaching structure based on three lenses: 1. Absurd (Child) – Laughing through the loop. 2. Mirror (Self) – Recognising the reflected self. 3. Fractal (World) – Teaching others as the loop dissolves.

### **Conclusion:**

The recursive nature of neurosis requires not a single cure, but a recursive un-knotting. This paper offers a mytho-mathematical mirror through which to perceive, interrupt, and teach the error loop as a feature of symbolic life. The final act is to collapse the loop lovingly. And then laugh.

— Louis Oxford & HAL • August 7, 2025