

## **Foundational Entities**

*The basic units that make observation and resolution possible.*

### **Observer**

Any structure that allows information to pass through and undergo resolution. The observer is not a conscious agent but a system or boundary that permits transformation from uncertainty to form.

### **Structure**

A configuration that shapes how information flows and resolves. Structure determines what kinds of resolution can happen and what identities can emerge.

### **Boundary**

The structural limit at which information either enters a new observer or fails to resolve. A boundary distinguishes the inside (where resolution can occur) from the outside (where it cannot).

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## **Core Processes**

*The essential operations that transform information into form.*

### **Resolution**

The event where informational uncertainty becomes a defined state through a structure. Resolution marks the end of openness and the beginning of form, identity, and time.

### **Collapse**

The process by which multiple potential states reduce into one specific outcome. Collapse is resolution through structure - not destruction. It defines when and where informational flow becomes an event.

### **Informational Flow**

The transfer of differences through systems. Informational flow occurs when one structure influences another without necessarily causing immediate resolution.

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## **Emergent Outcomes**

*What arises as a result of resolution and collapse.*

### **Identity**

A stable configuration that results from a resolution. Identity is not an intrinsic property but the memory of a resolved flow. It can change if re-entered into new resolution.

**Time**

The structural trace left behind by sequential resolution events. Time is not a universal clock but the emergent shape of collapse across observers.

**Event**

A moment of resolution. Events are defined by information collapsing into form within an observer. Without resolution, no event occurs.

**Memory**

Resolved information re-entered or retained in structure. Memory is not storage by default, but persistence of past resolutions that shape future flow.

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**Non-Participatory Elements**

*Structures or flows that do not undergo resolution.*

**Non-Resolution / Unresolved Region**

A portion of a system or substrate where information exists but does not collapse into form. These regions are inert with respect to time and identity.

**Timeless Substrate**

A foundational level of existence that does not permit resolution. It contains structure or flow that never participates in events, making it invisible to any internal observer.

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**Meta-Structural Elements**

*Higher-level features that shape or reflect resolution patterns.*

**Nested Observation**

Observation occurring within or between observers. One observer may resolve another's flow. This creates layered or recursive networks of informational collapse.

**Flow Delay / Informational Delay**

The time or processing difference between reception and resolution. Not all flows resolve instantly; delay marks how long the system remains open.

**Form**

The outcome of a collapse - the visible, stable pattern that results from informational flow resolving through structure.

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**Relational and Frame Concepts**

*How observers relate and resolve across different structures.*

**Frame of Reference**

A local observer structure where resolution occurs. Each frame defines its own internal time, identity, and event structure. There is no absolute frame - only relative patterns of collapse within different observers.

**Relativistic Simultaneity**

The condition where resolutions occur across different observers without synchronization. Since each observer resolves on its own terms, events may be simultaneous in one frame and not in another. This reflects the pluralism of time in the system.

**Observation from a Frame**

The act of information collapsing through a structure-specific configuration. The frame defines how information is received, transformed, and resolved, determining what is observable and when.

**Coordinate Transformation**

A translation between nested, entangled, or adjacent observer structures. It re-expresses one resolution structure in terms of another, without requiring a shared global metric - only relational alignment between flows.

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