

Co-Cognition Framework Overview

A structural reference for human-system thought

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Purpose. This document is the formal reference for the Co-Cognition concept. It defines the structure, boundaries, analytic variables, and relationship to the wider Reality Drift framework.

Definition

Co-Cognition is cognition distributed across a recursive exchange among people, tools, institutions, and computational systems in which thought is externalized, transformed, evaluated, and reintegrated.

The concept begins when an external system does more than execute a settled intention or return information. It enters the formation of thought by changing the representation from which the person continues reasoning.

Co-Cognition describes causal participation in thought formation. It does not require equal contribution, shared consciousness, or the disappearance of human authorship and responsibility.

Scope and Boundaries

Broader Than AI

Language, notebooks, diagrams, collaborators, institutions, and software have long distributed cognition. AI intensifies this process by transforming partial thought and returning a responsive representation in real time.

Narrower Than Tool Use

A calculator or search engine can support cognition without entering the process that determines how a problem is framed. Co-Cognition begins when system output changes subsequent thought.

Not a Consciousness Claim

The framework concerns functional participation in a feedback loop, not subjective experience within the external system.

Responsibility Remains Human

A distributed cognitive process can still leave the person responsible for judgment, use, and consequences.

Structural Model

1. Partial thought begins as an intuition, fragment, question, example, or provisional claim.
2. Externalization converts that partial thought into a representation available to another system.
3. System transformation reorganizes the representation through retrieval, recombination, reflection, expansion, or compression.
4. Evaluation determines what the person accepts, rejects, revises, or investigates.
5. Reintegration and recursive exchange return the transformed representation to the person's next stage of reasoning until action, judgment, or a stop condition ends the cycle.

Distribution of Cognitive Labor

The human usually contributes purpose, direction, evaluation, grounding, responsibility, and stop conditions. The external system usually contributes structure, recall, comparison, pattern recognition, recombination, compression, and reflection.

These contributions can shift across tasks and across stages of the same task. Co-Cognition does not require symmetry. It requires only that more than one layer causally shapes the representations guiding the next stage of thought.

Analytic Vocabulary

Shared cognitive loop: The recursive process through which human input and system output repeatedly shape one another.

Externalized thought: Partial cognition made available for transformation before it has been privately resolved.

System transformation: The changes introduced when an external system structures, retrieves, compares, recombines, expands, or compresses a representation.

Recursive reintegration: The return of a transformed representation into subsequent reasoning.

Boundary integrity: A recoverable distinction among human intent, system contribution, source material, and external reality.

Intent preservation: The degree to which the exchange remains answerable to the person's purposes as framing changes across repeated cycles.

Stop conditions: Points at which recursive refinement ends and judgment, evidence, decision, or action takes over.

Synthetic Flow: A bounded form of Co-Cognition in which external structure increases clarity while grounding, intent, and judgment remain active.

Bounded and Unbounded Loops

Bounded Co-Cognition: The loop remains directed by human purpose. Transformations are inspectable. Outputs can be challenged by sources, observation, action, or consequence. The person can stop, reject, or restart the process.

Unbounded Co-Cognition: The system increasingly sets direction. Prior outputs become the main evidence for later outputs. Coherence substitutes for contact, and the loop lacks a clear point at which independent judgment returns.

The difference is whether the exchange remains answerable to purposes and conditions outside the exchange.

How to Analyze a Co-Cognitive Loop

- Identify where the initial purpose came from and whether it changed during the exchange.
- Trace which representations entered the loop, how they were transformed, and which source conditions became inaccessible.
- Locate who evaluated the outputs and what evidence could overturn the emerging frame.
- Determine whether the loop had a stop condition or continued because each output generated another possible refinement.
- Separate clarity of presentation from evidence that the thought remains grounded.

Relationship to the Reality Drift Framework

Semantic Fidelity: This measures whether meaning, intent, context, and distinctions survive movement between human expression and system transformation.

Recursive Compression: This explains how simplified representations are preserved, reused, and made inputs to later cycles of interpretation or action.

Cognitive Drift: This names the human-scale misalignment that can emerge when a recursive loop rewards speed, legibility, or coherence over contact.

Constraint Collapse: This occurs when feedback and correction remain present but lose the authority to redirect the loop.

Reality Drift: This is the broader condition in which a system remains functional and coherent while becoming less answerable to what it represents.

Applications

Knowledge Work

The unit of work shifts from producing a finished representation to steering, selecting, testing, and revising generated possibilities.

Education

The framework helps distinguish dialogue that develops understanding from interaction that supplies fluent representations without integration.

Creative Practice

It makes visible how direction, selection, and judgment are distributed across repeated cycles of generation and response.

System Design

It directs attention toward provenance, uncertainty, framing changes, stop conditions, and routes back to source-level evidence.

Concise Definition

Co-Cognition is cognition distributed across a recursive exchange in which human and external-system representations repeatedly shape what happens next.