

COMPLIANCE AND CONFORMANCE IN AI-AUGMENTED COGNITIVE WORKFLOWS

Structural Governance for HJC-Constrained AI Use
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AI Assistance Disclosure

Drafted by Steven Srebranig, with analytical and editorial assistance from AI tools used under the author's direction. All theoretical frameworks, definitions, and claims originate with the author.

Status

Companion Whitepaper (Non-Normative)

[“Non-normative” here indicates that this document does not define or modify invariant constraints, even though it describes required roles and behaviors within a governed workflow.]

Repository

AI Workflow

Relationship

Companion to *A Hybrid Workflow for AI-Augmented Cognition*

[This paper is intended as a technical companion to A Hybrid Workflow for AI-Augmented Cognition. Where that work addresses human epistemic discipline, this paper addresses AI]

1. Purpose and Scope

Purpose

- To explain how structural compliance and task conformance operate within an AI-augmented cognitive workflow.
- To clarify how AI systems are constrained by invariant specifications without being granted autonomous authority over meaning, truth, or persuasion.

Scope

- This document describes governance, not specification.
- It explains how HJC Core and its Drivers are used, not how they are defined.

Explicit Non-Scope

- This document does not define HJC Core.
- It does not certify correctness, quality, or usefulness.
- It does not prescribe pedagogy, ethics, or persuasion.

2. Key Definitions

Structural Compliance

Adherence to invariant constraints defined by HJC Core. Compliance determines whether an output is structurally permissible at all.

Task Conformance

Correct execution of a task-local Driver operating under HJC Core constraints.

Driver

A task-specific module that imports HJC Core and adds additional constraints without relaxing Core invariants.

Refusal

A valid terminal outcome indicating that compliance or conformance cannot be satisfied without violation.

3. The Compliance Model: HJC Core as Invariant Authority

Role of HJC Core

- Defines constraints that must remain invariant across all AI-assisted transformations.
- Operates independently of task, domain, or intent.

What Compliance Guarantees

- Preservation of epistemic boundaries
- Sequence integrity
- Visibility of failure and misuse
- Non-normativity by default

What Compliance Does Not Guarantee

- Truth
- Persuasiveness
- Pedagogical success
- Reader agreement

Compliance is a structural property, not an evaluative one.

4. Conformance via Task-Local Drivers

Drivers as Conformance Mechanisms

- Drivers import HJC Core and add task-specific rules.
- Drivers may restrict behavior further, but may never relax Core constraints.

Examples of Driver Responsibilities

- Required output structure
- Prohibited actions
- Refusal conditions
- Task-specific sequence sensitivity

A failure of task conformance does not necessarily imply non-compliance with Core invariants; this distinction allows auditing to separate structural violations from task-specific execution errors.

Precedence Rule

- HJC Core → Driver → Task phrasing

5. Refusal as Correct System Behavior

Why Refusal Is Necessary

- Forcing output when constraints cannot be met constitutes structural hallucination.
- Refusal preserves correction pathways and auditability.

Refusal Is Not Failure

- It indicates successful enforcement of constraints.
- It prevents silent epistemic upgrading.

6. Minimal Compliance-Conformance Flow

Abstract Execution Flow

1. Source material is provided
2. Compliance preconditions are checked
3. A Driver executes under HJC Core constraints
4. Outcome is either:
 - a compliant, conformant artifact
 - or a refusal with constraint-level justification

7. Relationship to AI Systems and Human Authority

AI Responsibilities

- Execute declared constraints faithfully
- Preserve structural boundaries
- Refuse when compliance is not possible

Human Responsibilities

- Define Core and Drivers
- Review outputs
- Own epistemic and ethical commitments

AI systems operate as constrained executors, not autonomous cognitive agents.

8. Common Misinterpretations and Explicit Rejections

This framework does not:

- Certify correctness or truth
- Prevent misuse outside declared scope
- Replace human judgment
- Authorize persuasion or prescription
- Grant AI autonomous improvement authority

9. Relationship to the AI Workflow

This document:

- Complements A Hybrid Workflow for AI-Augmented Cognition
- Provides structural governance for AI use within that workflow
- Explains how specifications are enforced without redefining them

10. Status and Evolution

- This document is non-normative
- It may evolve to reflect additional Drivers or workflows
- HJC Core remains the sole authority on invariant constraints