

M-CORE — Prior Art & Method Disclosure (High-Level)

Status: Public Method Disclosure (Prior Art)

Version: 1.0

Date: 22 May 2024

Author: Yuri S. Timofeev

Associated Deposits: n'RIS / RCIS (IDs referenced separately)

1. Purpose and Scope

This document provides a **high-level public disclosure** of the methodological principles underlying **M-CORE**, an external cognitive control architecture designed to operate alongside large language models (LLMs).

The purpose of this disclosure is to:

- establish **authorship and development priority**,
- define the **conceptual scope** of the M-CORE approach,
- and document an independent line of research into externally governed, human-directed AI systems.

This disclosure is **non-exhaustive** and intentionally omits implementation-specific details.

2. Terminology and Definitions

- **External Evaluation Core (EEC):**

A modular control layer operating outside the neural weights of an LLM, responsible for evaluation, filtering, and long-term behavioral regulation.

- **Behavioral Valuation Ledger (BVL):**

A persistent system of evaluative signals (+/-) used to record outcomes of interactions and construct a long-term preference and constraint structure. This ledger replaces transient conversational history with consequence-based memory.

- **Human-Defined Objective Layer (HDOL):**

An interface through which human-defined goals, constraints, and priorities are translated into operational evaluation criteria for the system.

- **Multi-Agent Collision Protocol (MAC):**

A structured interaction framework in which multiple specialized AI instances operate toward a shared objective under expert human oversight, enabling cross-validation and reduction of systemic errors.

3. Core Methodological Claims

This disclosure asserts the following high-level methodological principles:

1. Separation of Model and Governance:

The behavioral regulation, long-term objectives, and evaluative logic of an AI system can be maintained independently from the underlying language model.

2. Consequence-Based Memory:

System behavior is shaped by persistent evaluative records of outcomes rather than by raw conversational transcripts.

3. Domain-Specific External Cores:

Specialized professional behaviors can be instantiated by modifying the external evaluation core without retraining the underlying model.

4. Structured Sensor Pre-Processing (Conceptual):

Non-textual inputs (e.g., visual or acoustic signals) may be transformed into structured symbolic representations prior to interaction with an LLM.

4. Non-Disclosure and Limitations

This document intentionally excludes:

- implementation details,
- data schemas,
- cryptographic methods,
- internal evaluation logic,
- and integration specifics.

Such elements constitute unpublished research and are not disclosed in this public statement.

5. Intellectual Property Notice

This disclosure does not grant any license or right to use, reproduce, or commercialize the described methodology.

All rights are reserved by the author.

This document serves solely as a public record of conceptual development and prior art.

This disclosure is provided for documentation and research transparency purposes.