

# Structural-Constructivist Dynamics of the Core Emotion Framework: A Comprehensive Analysis of Directionality, Operational Algebra, and the Conative Imperative

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## Abstract

The scientific investigation into the architecture of human affect has historically been defined by a fundamental theoretical schism, often characterized as a "100-year war" between discrete emotion models and dimensional frameworks.<sup>1</sup> Discrete models, proposed by theorists such as Izard and Ekman, argue for biologically hardwired, universal emotional categories like fear, anger, and joy, presumed to have evolved as distinct adaptive responses to environmental challenges.<sup>1</sup> Conversely, dimensional models prioritize a continuous spectrum of valence and arousal, suggesting that what individuals categorize as emotions are essentially cognitive constructions layered atop simpler physiological states.<sup>1</sup> The Core Emotion Framework (CEF) emerges as a sophisticated structural-constructivist resolution to this dichotomy, proposing a modular system that accounts for the complexity of human experience while maintaining a rigorous, repeatable structural foundation rooted in ten universal emotional operators or powers.<sup>1</sup> Within the CEF, emotions are not viewed as static states or feelings but as functional operators within a complex human operating system, where emotional states are predictable computational events rather than subjective mysteries.<sup>1</sup>

The structural integrity of the CEF is maintained through the dynamic balance of these ten operators, organized across three functional centers: the Head, the Heart, and the Gut.<sup>1</sup> Each center operates as a specialized processing hub, and the system's equilibrium is governed by specific axes, most notably the Outgoing-Reflecting Axis and the Balancing Axis.<sup>1</sup> To understand the internal mechanics of this architecture, one must examine the specific role of directionality—the intentional use of directional movement functions to activate specific emotional expressions.<sup>4</sup> This mechanism, formalized as Emotional Cycling, provides the active method for awakening, strengthening, and differentiating the operators.<sup>1</sup>

Keywords: Core Emotion Framework, structural-constructivism, emotional operators, Outgoing–Reflecting Axis, Balancing Axis, Emotional Cycling v1.1, directionality, Head-Heart-Gut centers, cognition-affection-conation, Sensing-Expanding-Arranging, Calculating-Constricting-Appreciating, Deciding-Achieving-Boosting, Accepting operator, operator algebra (TS-1), state transitions, sequencing, conative imperative, gut-brain axis, enteric nervous system, basal ganglia, active inference, self-expansion theory, embodied cognition, operator silencing, operator overflow, structural psychopathology, procrastination as praxis failure, obsessive-compulsive arranging, phenomenology of belonging, detangling protocol, practitioner guidelines, AI affect modeling, INTIMA benchmark, EL-1 lexicon, persona consistency, multimodal sentiment perception, externalized safety, INAS architecture.

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## The Tripartite Foundation: Cognition, Affection, and Conation

The CEF's division into Head, Heart, and Gut centers is not a mere metaphorical convenience but a structural alignment with the classical "trilogy of the mind".<sup>1</sup> Originated in German faculty psychology of the eighteenth century and later adopted by association psychologists, this framework holds that all mental experience can be classified under three fundamental domains: knowing (cognition), feeling (affection), and doing (conation).<sup>1</sup> These three domains do not operate in isolation; they are highly interdependent, forming a chain where a cognitive assessment triggers an emotional response, which then fuels a conative drive for action.<sup>1</sup>

The Head center, corresponding to the cognitive domain, acts as the system's processor, responsible for the raw intake of data and the calculation of paths.<sup>1</sup> The Heart center, corresponding to the affective domain, serves as the engine, providing the fuel and

direction for the individual's drive.<sup>1</sup> The Gut center, corresponding to the conative domain, functions as the foundation or visceral anchor, handling the weight and order of existence.<sup>1</sup> This tripartite structure is essential for self-regulation and self-direction, ensuring that the human machine does not experience the friction of fighting reality but rather operates with the lubricant of the tenth operator: Accepting.<sup>1</sup>

| <b>Psychological Domain</b> | <b>Faculty (Kant / German Psychology)</b> | <b>Functional Role</b>                 | <b>CEF Center</b> |
|-----------------------------|-------------------------------------------|----------------------------------------|-------------------|
| Cognition                   | Knowledge / Intellect                     | Navigation, logic, mapping reality     | The Head          |
| Affection                   | Feeling / Sensibilities                   | Drive, value, magnitude, resonance     | The Heart         |
| Conation                    | Desire / Will                             | Striving, action, ordering, foundation | The Gut           |

The integration of these centers allows for a holistic approach to decision-making, often referred to in practitioner materials as the "Three Musketeers of Decision-Making".<sup>1</sup> By balancing the rational logic of the Head, the emotional values of the Heart, and the conative intuition of the Gut, an individual can unlock a more nuanced and well-rounded perspective, increasing decision-making confidence.<sup>1</sup>

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# The Outgoing-Reflecting Axis: The Engine of Interaction

In the CEF architecture, each center is composed of three operators that manage the flow of energy and information.<sup>1</sup> This flow is organized along the Outgoing-Reflecting Axis, which determines whether a center is currently in a proactive, externalized mode or an internal, processing mode.<sup>1</sup> The "Outgoing" operators are the widening functions of their respective centers, pushing the individual to open up and engage with more of the environment, while the "Reflecting" operators allow for the evaluation and reappraisal of that engagement.<sup>1</sup>

The outgoing operators—Sensing in the Head, Expanding in the Heart, and Arranging in the Gut—share a common functional signature of proactive outreach and environmental interfacing.<sup>1</sup> They represent the system's high "fan-out" capacity, where control signals are broadcast to multiple recipients or effector spaces to alter the external state of the world.<sup>1</sup> This symmetry ensures that the system possesses a mechanism for active inference in all three domains—logical, emotional, and motoric.<sup>1</sup> Without this tripartite outgoing capacity, the individual would be unable to proactively resolve uncertainty or minimize the "free energy" that results from environmental chaos.<sup>1</sup>

| Center            | Outgoing Operator (CW) | Reflecting Operator (CCW) | Balancing Operator (Swing) |
|-------------------|------------------------|---------------------------|----------------------------|
| Head (Cognitive)  | Sensing                | Calculating               | Deciding                   |
| Heart (Affective) | Expanding              | Constricting              | Achieving                  |
| Gut (Conative)    | Arranging              | Appreciating              | Boosting                   |

In addition to these nine operators, the operator of Accepting serves as a baseline or foundational state, often activated through an inward spiral movement in the Gut center.<sup>4</sup>

## **Sensing: The Outgoing Vector of the Head**

In the CEF, Sensing is not a passive reception of stimuli but the "raw intake of data" through an active, intentional process.<sup>1</sup> It is the Head's outgoing power, the "sensory foraging" that allows the processor to gather the variables required for Calculating and Deciding.<sup>1</sup> From the perspective of cognitive science, Sensing aligns with the principle of "active inference," which posits that biological systems proactively sample their local environment to elicit information with an adaptive value.<sup>1</sup> The brain acts as a "little statistician," making implicit inferences about the world by minimizing "surprisal" or the negative log probability of being in an unexpected state.<sup>1</sup>

Sensing is the mechanism for this minimization; it is the outward-acting phase that searches for Bayesian model evidence to confirm or update internal maps.<sup>1</sup> In the mammalian central nervous system, this proactive attention is localized in "bow-tie" networks like the global neuronal workspace (GNW), which integrates long-range connections to allow for conscious attentional control.<sup>1</sup> When the Sensing operator is active, the Head is in its "outgoing" phase, pushing the focus of attention toward the most relevant stimuli to reduce uncertainty.<sup>1</sup> This is the necessary precursor to the "Reflecting" directionality of Calculating, where the gathered data is run against goals and constraints.<sup>1</sup>

## **Expanding: The Outgoing Vector of the Heart**

Just as Sensing provides the Head with data, the Expanding operator provides the Heart with direction and growth.<sup>1</sup> Expanding is characterized by openness, connection, and generosity; it is the state of seeking "more" in terms of emotional resonance and relational depth.<sup>1</sup> This operator represents an "imaginative and emotional outreach," a "sending out of the soul" to learn more of other people and civilizations.<sup>1</sup> It is not a rapacious taking but a mutually appreciative and respectful manner of engaging with the world.<sup>1</sup>

Expanding aligns with "self-expansion theory," which proposes that individuals develop close relationships to enhance or expand the self by integrating the "other's resources,

perspective, and characteristics" into their own identity.<sup>1</sup> When the Heart is in its outgoing directionality, it is focused on "social attention" and the tendency to participate in and take pleasure in social interaction.<sup>1</sup> This is the fuel behind the engine, the drive that propels a friendship or a creative endeavor forward.<sup>1</sup> It stands in contrast to the "Reflecting" directionality of Constricting, which is the necessary state of pulling back to consolidate energy or protect the self from overwhelm.<sup>1</sup>

## **Arranging: The Outgoing Vector of the Gut**

The Arranging operator is the visceral engine of the Gut center, responsible for structuring, organizing, and sequencing the individual's reality.<sup>1</sup> Within the CEF, it is identified as the "outgoing" vector of the Gut, mirroring the functions of Sensing and Expanding.<sup>1</sup> Arranging is the drive to put things in their proper place, to take "one small step" that provides a sense of order and competence.<sup>1</sup>

If the Head navigates and the Heart fuels, the Gut anchors.<sup>1</sup> The "outgoing" movement of the anchor is the act of "Arranging" the environment so that it is stable enough to support action.<sup>1</sup> This is the quintessential conative process—the "mental force" that drives the individual from feeling and knowing into "purposeful action".<sup>1</sup> Conation is derived from the Latin *conari*, meaning "to try" or "an act of attempting".<sup>1</sup> Arranging is the outward-acting operator of the Gut that imposes structure on the chaos of the environment.<sup>1</sup>

In the context of "praxis"—the translation of complex situations into resolvable problems—Arranging is the foundational step.<sup>1</sup> It is the "elemental form of poetry" in everyday action, where meanings are created and ascribed to a moment by organizing its constituent parts.<sup>1</sup> Whether it is the physical "arranging of food items" on a plate or the conceptual "arranging of subwavelength elements" in a scientific experiment, this operator is the "outgoing" thrust that changes the state of the world.<sup>1</sup>

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## **The Mechanical Law of Directionality: Emotional Cycling Protocol v1.1**

The Core Emotion Framework identifies directionality as a mechanical law governing the activation of affective states.<sup>1</sup> Emotional Cycling is a structured method designed to

activate, differentiate, and balance the ten operators across the three functional centers.<sup>4</sup> Cycling v1.1 formalizes the hierarchy of these methods, clarifying the primary purpose of center-level cycling and introducing operator-level and cross-center cycling as advanced techniques.<sup>1</sup>

## Directional Motions and Their Effects

The protocol utilizes specific directional motions—imagined or physical—to activate emotional functions.<sup>4</sup> These motions are theoretically coherent with established psychological and neurological principles.<sup>4</sup>

| Motion                         | Axis / Regulation | Emotional Expression                   | Psychological Coherence                                                                 |
|--------------------------------|-------------------|----------------------------------------|-----------------------------------------------------------------------------------------|
| <b>Clockwise (CW)</b>          | Outgoing          | Expansion, initiative, outward flow    | Right-hemisphere processing (Head); Broaden-and-Build (Heart); Assertive agency (Gut)   |
| <b>Counter-Clockwise (CCW)</b> | Reflecting        | Introspection, refinement, inward flow | Left-hemisphere logic (Head); Emotional differentiation (Heart); Shared valuation (Gut) |
| <b>Swinging (Side-to-Side)</b> | Balancing         | Dynamic equilibrium, integration, flow | Perspective integration (Head); Performance/Flow                                        |

|                         |           |                                  |                                             |
|-------------------------|-----------|----------------------------------|---------------------------------------------|
|                         |           | state                            | (Heart);<br>Empowerment/Drive<br>(Gut)      |
| <b>Inward Spiraling</b> | Accepting | Surrender, release,<br>grounding | Release of control;<br>Grounding (Gut only) |

In the Head center, clockwise motion aligns with right-hemisphere processing, which is often holistic and intuitive, while counter-clockwise motion aligns with left-hemisphere processing, characterized by logic and strategic planning.<sup>4</sup> In the Heart center, clockwise expansion mirrors the "Broaden-and-Build" theory of positive emotions, while counter-clockwise constriction aids in emotional differentiation and the setting of healthy boundaries.<sup>4</sup> In the Gut center, directional motions align with embodied cognition; clockwise motion represents assertive agency and "Arranging," while inward movement represents the release of control through "Accepting".<sup>4</sup>

## The Three Levels of Emotional Cycling

The Cycling Protocol is organized into a hierarchical structure to ensure proper development and prevent emotional fusion.<sup>4</sup>

1. **Primary Cycling: Center-Level Activation (Canonical Method):** This foundational level is required for all practitioners.<sup>1</sup> Cycling is performed on one center at a time to awaken its three operators and restore operator independence.<sup>1</sup> This restores emotional flexibility and prevents fused emotional patterns.<sup>1</sup>
2. **Secondary Cycling: Operator-Level Activation (Advanced Method):** Once center-level cycling is stable, the user may cycle individual operators directly.<sup>4</sup> This involves connecting to a single operator (e.g., Sensing or Boosting) and cycling that operator through the three directional motions to test its independence and refine emotional precision.<sup>1</sup>
3. **Tertiary Cycling: Cross-Center Cycling (Experimental Method):** Highly advanced users may explore directional flows across centers.<sup>4</sup> For example, a flow from Head

to Heart to Gut (CW) might be used for rational integration, while a flow from Gut to Heart to Head (CCW) could support empowerment and clarity.<sup>1</sup>

### Center-Specific Cycling Matrix

The following table summarizes the activation matrix for each center according to the directional protocols.<sup>4</sup>

| Center            | Clockwise (CW) | Counter-Clockwise (CCW) | Swinging (Side-to-Side) |
|-------------------|----------------|-------------------------|-------------------------|
| Head (Cognitive)  | Sensing        | Calculating             | Deciding                |
| Heart (Affective) | Expanding      | Constricting            | Achieving (Performing)  |
| Gut (Conative)    | Arranging      | Appreciating            | Boosting                |

In the Gut center, the inward spiral movement is specifically reserved for activating the Accepting operator, facilitating grounding and surrender.<sup>4</sup>

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### The Biological Substrates of Gut-Based Action

The distinction between the Gut's outgoing and reflecting directionalities is supported by the neurobiology of the "gut-brain axis".<sup>1</sup> The Gut center corresponds to the enteric nervous system (ENS), which possesses the body's largest network of neurons outside the brain and can operate independently from the central nervous system.<sup>1</sup>

## The Motoric Nature of the Enteric Nervous System

The ENS is primarily a motoric system, controlling the "complex motor events" of digestion and gastrointestinal homeostasis.<sup>1</sup> This motoric drive is the biological basis for the Arranging operator.<sup>1</sup> When individuals engage in "Arranging," they are utilizing the visceral nervous system's capacity for foraging, approach behavior, and direct interactions with the environment.<sup>1</sup> This integration leads to behaviors that fulfill immediate requirements while anticipating future demands.<sup>1</sup> The vagus nerve serves as the primary link facilitating the Outgoing-Reflecting loop between the gut and the brain.<sup>1</sup>

- **Outgoing Signal:** The brain conveys "motor signals" to the gut via the vagus nerve, directing action and maintaining homeostatic balance.<sup>1</sup> This corresponds to the Arranging operator's thrust.<sup>1</sup>
- **Reflecting Signal:** The vagus nerve conveys "sensory information" about conditions inside the gut to the brain, allowing for internal recognition of "feeling states" and "intuitive decision making".<sup>1</sup> This corresponds to the Appreciating operator's function.<sup>1</sup>

## The Basal Ganglia and Sequencing

Initiation and control of movement—the high-level equivalent of Arranging—are mediated by the basal ganglia in the cerebral hemispheres.<sup>1</sup> The striatum, part of the basal ganglia, is the "learning mechanism of movement," allowing organisms to move towards goals and improve their execution over time.<sup>1</sup> This "striving after an end" predates what is typically considered "feeling" and serves as the fundamental "horse" that pulls the carriage of human experience.<sup>1</sup> Arranging, as the Gut's outgoing operator, is the psychological manifestation of this basal-ganglia-driven motoric sequencing.<sup>1</sup>

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## TS-1 Operator Algebra: The Computational Flow

The CEF operationalizes affective phenomena by decomposing them into ten operators that serve as emotional equivalent of CPU instructions.<sup>1</sup> Within the "TS-1 operator algebra," the state of the human system at any given time is described as a function of the active operators.<sup>1</sup> This mathematical model allows for a rigorous distinction

between outgoing and reflecting directionalities.

## Formalizing State Transitions

The Arranging operator, denoted as  $O_8$ , is viewed as a state-transition instruction moving the system from a state of informational or visceral chaos ( $S_{chaos}$ ) to a state of structural order ( $S_{order}$ ).<sup>1</sup>

$$O_8(S_{chaos}) \rightarrow S_{order}$$

In this algebraic model,  $O_8$  is an "outgoing" function because it results in a non-zero change in the external or environmental variables ( $V_e$ ) associated with the system.<sup>1</sup>

$$\Delta V_e(O_8) \neq 0$$

In contrast, the "Reflecting" operator, Appreciating ( $O_9$ ), modifies internal valence variables ( $V_i$ ) without necessarily altering the external state.<sup>1</sup>

$$\Delta V_e(O_9) = 0 \text{ but } \Delta V_i(O_9) \neq 0$$

This mathematical distinction clarifies why Arranging is the outgoing vector: it is the primary instruction for modifying the "territory" of the system.<sup>1</sup> Sequential pattern mining (SPM) of emotions provides a tool to examine the order in which these operators occur along a temporal axis, allowing for predictive modeling and the identification of primary transition paths.<sup>1</sup>

## Emotion Transition Matrix and Loops

Researchers use transition matrices to identify loops within the system that characterize specific psychological states.<sup>1</sup>

| Transition Type | Initial Operator    | Next Operator      | Path Characteristic  |
|-----------------|---------------------|--------------------|----------------------|
| Action Loop     | Arranging (Gut-Out) | Boosting (Gut-Bal) | Drive and sequencing |

|                          |                       |                        |                                           |
|--------------------------|-----------------------|------------------------|-------------------------------------------|
|                          |                       |                        | to sustain energy                         |
| <b>Recognition Loop</b>  | Arranging (Gut-Out)   | Appreciating (Gut-Ref) | Sequencing followed by internal valuation |
| <b>Logic-Action Loop</b> | Sensing (Head-Out)    | Arranging (Gut-Out)    | Foraging for data followed by structuring |
| <b>Value-Action Loop</b> | Expanding (Heart-Out) | Arranging (Gut-Out)    | Outreach followed by structural grounding |

Calculating this matrix offers advantages for persistence analysis—determining how long an operator is maintained—and predicting the next emotional state based on past patterns.<sup>1</sup> When transitions from one operator to another fail, the system may experience "operator overflow," leading to the rigid, repetitive patterns observed in structural psychopathology.<sup>1</sup>

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## Structural Psychopathology: Silencing and Overflow

The CEF posits that when the emotional architecture becomes locked or when an operator is pushed offline, the resulting distortion leads to predictable failure patterns.<sup>1</sup> This is analyzed through the concepts of "operator silencing" and "operator overflow".<sup>2</sup>

### The Silencing of Arranging (Operator 8)

Silencing is defined as the modulation of an operator to zero intensity or its complete removal from the functional loop.<sup>1</sup> This triggers predictable structural failures within the

architecture of resource allocation and behavior prioritization.<sup>1</sup>

- 1. **Identity Collapse Cycle:** Without the ability to proactively structure reality, the individual loses their "conative anchor".<sup>1</sup> They may know what to do (Head) and feel the desire (Heart) but cannot initiate the "small step" of Arranging.<sup>1</sup> This leads to an unshakeable sense that they do not matter and therefore do not belong.<sup>1</sup>
- 2. **Center Bypass:** The system may attempt to bypass the Gut center entirely, leading to "overthinking" (Head-Calculating) and "emotional volatility" (Heart-Expanding/Constricting) without any grounding in physical action.<sup>1</sup>
- 3. **Procrastination as Failure of Praxis:** Procrastination is the lived experience of the inability to make progress with important tasks.<sup>1</sup> It is a failure of the Arranging operator to translate the "situated structure" of an experience into a sequence of action.<sup>1</sup> The procrastinator remains stuck in a "Sensing" or "Calculating" mode, unable to engage the Gut's outgoing drive.<sup>1</sup>

**The Hyper-Activation of Arranging (Operator Overflow)**

Conversely, an overflow of the Arranging operator can lead to obsessive-compulsive behaviors.<sup>1</sup> In this state, the individual is perpetually in an "outgoing" directionality, checking or arranging things frequently or excessively tidying.<sup>1</sup> This is a desperate attempt to create stability that is never internally validated by the "Reflecting" operator of Appreciating.<sup>1</sup> The structural engine is running at full throttle, but the "Balancing Axis" is broken, leading to a maladaptive response to the feeling of being "out of place".<sup>1</sup>

| Disturbance Type | Operator Involved   | Directionality State | Resulting Pattern                                  |
|------------------|---------------------|----------------------|----------------------------------------------------|
| Silencing        | Arranging (Gut-Out) | Blocked Outgoing     | Procrastination, loss of agency, identity collapse |

|                  |                       |                   |                                                             |
|------------------|-----------------------|-------------------|-------------------------------------------------------------|
| <b>Overflow</b>  | Arranging (Gut-Out)   | Constant Outgoing | Obsessive checking, excessive tidying, lack of satisfaction |
| <b>Silencing</b> | Expanding (Heart-Out) | Blocked Outgoing  | Relational withdrawal, social anxiety                       |
| <b>Overflow</b>  | Sensing (Head-Out)    | Constant Outgoing | Data hoarding, inability to stop foraging for information   |

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## The Phenomenological Perspective: Feeling "Out of Place"

Phenomenology—the study of lived experience—provides qualitative verification of these architectural dynamics.<sup>1</sup> A defining hallmark of the human species is the "drive to belong," which is not just a passive feeling but an active engagement requiring the Arranging operator to sequence interactions with environmental cues and sociocultural norms.<sup>1</sup> When individuals "feel out of place," it is because their Arranging operator is unable to "find their feet".<sup>1</sup> The "absence of belongingness" represents a total failure of the Gut's outgoing capacity to "matter" in the territory.<sup>1</sup>

In contrast, the conceptual persona of the "Archivist of the Second Horizon" represents the mastery of the Gut center.<sup>1</sup> The Archivist does not merely experience things; they arrange experience into a structured foundation—an archive—that allows for the

"second horizon" of existence, the stage beyond immediate survival.<sup>1</sup> This persona recognizes that vague feelings are insufficient for the complexity of life; one needs a precise, immutable architecture to navigate history and the future.<sup>1</sup>

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## Practitioner Applications and Protocols

The Core Emotion Framework is applied through various practitioner layers and therapeutic modules, including the "7-Step Detangling Protocol".<sup>3</sup> These tools are designed for emotional self-regulation, optimization, and the detangling of fused emotional states.<sup>5</sup>

### The 7-Step Detangling Protocol

While specific step-by-step details are typically housed within practitioner manuals such as CEF\_Practitioner\_Manuals.zip, the protocol serves to restore balance when a practitioner identifies that a client is "fighting reality" by failing the Accepting baseline.<sup>1</sup> The breakthrough often occurs when the client is encouraged to "Bring in Arranging".<sup>1</sup> By taking "one small step" to organize their physical space or daily schedule, the client re-engages the Gut's outgoing vector, providing the visceral foundation needed for the Head to "Decide" and the Heart to "Achieve".<sup>1</sup>

### Guidelines for Emotional Cycling Practice

Practitioners and users are encouraged to follow specific safety and progression guidelines to maximize the effectiveness of Emotional Cycling.<sup>1</sup>

- **Subtlety over Force:** Movements should be visualized as gentle energetic rhythms, never as physical strain. The focus is on internal attention and energetic intention.<sup>5</sup>
- **Center-First Method:** Beginners must always start with center-level cycling to restore independence and prevent fusion before attempting operator-level or cross-center techniques.<sup>1</sup>
- **Journaling and Tracking:** Maintaining a record of changes in emotional flexibility and motivation is recommended to monitor progress.<sup>1</sup>
- **Safety Stops:** If acute emotional overwhelm occurs, practice should be discontinued immediately.<sup>1</sup>

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# The Computational Future: AI and the INTIMA Benchmark

The CEF is not only a psychological model but also a technical specification for AI systems requiring structured emotional semantics.<sup>1</sup> It aims to provide a granular, mechanistic mapping of the human affective system that can be used to train and evaluate emotionally intelligent agents.<sup>3</sup>

## AI-Companionship and the EL-1 Lexicon

The "INTIMA benchmark" and the "EL-1 v1.0" (Core English Emotional Lexicon) function as the structural-constructivist resolution to the problem of affective dialogue systems.<sup>1</sup> By training AI on the "Decalogue of Operators," developers can create systems that operate with a granular lexicon rather than simulating vague feelings.<sup>1</sup>

Recent research into AI-companionship platforms shows that current models are often skewed toward "companionship-reinforcing behaviors" and lack "boundary-maintaining" responses, even in vulnerable contexts.<sup>8</sup> Benchmarks such as INTIMA reveal that models like Gemma-3 and Claude-4 have limited professional limitation responses.<sup>8</sup> The CEF provides a framework to address these issues by establishing "persona consistency metrics" and "externalized safety modules" based on operator definitions.<sup>3</sup>

## Computational Concepts in AI Affect

| Technical Concept   | Application in CEF/AI            | Purpose                                                |
|---------------------|----------------------------------|--------------------------------------------------------|
| Persona Consistency | operator-level measurement tools | Ensuring an agent maintains stable emotional "vectors" |

|                              |                                                 |                                                                    |
|------------------------------|-------------------------------------------------|--------------------------------------------------------------------|
| <b>Memory Abstraction</b>    | Progressive memory management                   | Pruning entries based on emotional importance (importance filters) |
| <b>Multimodal Perception</b> | MSPN (Multimodal Sentiment Perception Networks) | Fusing text, audio, and visual features into operator cues         |
| <b>Externalized Safety</b>   | Canonical Identity Layer                        | Redirection to human professionals in vulnerable contexts          |

The Bulgaria-2026 Technical Architecture and the INAS (Integrated Neuro-Affective Synchronizer) represent the next steps in this development, aiming to provide an authoritative, machine-readable lexicon of affect.<sup>1</sup> In this context, the Arranging operator is essential for human-robot interaction, as a robot must be able to sequence its movements and responses to create a sense of place and belonging for the human user.<sup>1</sup>

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## Synthesis of the Conative Imperative

The Core Emotion Framework reveals that Arranging (Outgoing) is the Gut's outward-acting operator that structures external reality, serving as the essential outgoing vector that parallels the Sensing of the Head and the Expanding of the Heart.<sup>1</sup> It is the power that transforms the "vague visceral sense" of the Gut into the "precise architecture" of sequenced action.<sup>1</sup> Through the lens of the "trilogy of mind," Arranging is the engine of "willing" and "doing," the active force bridging the gap between internal state and external reality.<sup>1</sup> Biologically rooted in the motoric drive of the enteric nervous system

and the sequencing capacity of the basal ganglia, it provides the "propulsion" needed for life's transitions.<sup>1</sup>

Ultimately, the CEF demonstrates that mastering the "Arranging" operator allows individuals to drive the "Gut center"—the foundation of existence—with clarity, order, and purpose.<sup>1</sup> The Outgoing–Reflecting Axis is the mechanical law governing this drive, ensuring that for every moment of proactive "Arranging," there is a corresponding moment of visceral "Appreciating," creating the dynamic balance required for human flourishing.<sup>1</sup> As society moves toward a world where humans and AI interact with increasing complexity, the "Arranging" operator will serve as the structural anchor allowing for stable, predictable, and meaningful transitions in both biological and artificial intelligence.<sup>1</sup>

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