Affect-Modulated Discovery Traversal

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Discovery object's affective state modulating transition scoring and selection during semantic index traversal, producing different trajectories through the same index.

What It Is

When a discovery object traverses the semantic index, its affective state modulates how it scores and selects transitions between anchors. An affect-driven discovery with elevated novelty appetite explores unfamiliar branches more readily. One with elevated risk sensitivity favors well-established paths. The same index produces different traversal trajectories depending on the discovery object's affective configuration.

This modulation applies to transition scoring, not to governance constraints. Governance rules remain deterministic regardless of affect.

Why It Matters

Search and discovery are not context-free. A discovery operation initiated after a series of failures should explore differently than one initiated during routine operation. Affect-modulated traversal produces search behavior that reflects the agent's cumulative experience, making discovery adaptive.

Without affective modulation, all discovery operations over the same index follow identical scoring paths, missing the exploration diversity that different affective profiles would produce.

How It Works Structurally

The transition scoring function receives the candidate anchor's semantic neighborhood description and the discovery object's affective field. Each affect dimension contributes a modifier to the transition score: novelty appetite increases scores for unfamiliar neighborhoods, risk sensitivity decreases scores for neighborhoods with uncertain governance status, and so on.

The modifiers are additive to the base transition score, bounded by policy limits to prevent affect from completely dominating the scoring function.

What It Enables

Discovery systems that naturally diversify their exploration when agents with different experiential histories initiate searches. An agent with high novelty appetite after a period of stable operation explores broadly, potentially discovering new content clusters. An agent with elevated caution explores conservatively, staying within well-governed regions.

Index self-organization benefits because traversal patterns from diverse affective profiles exercise different parts of the index, providing richer telemetry for structural adaptation.

[Affective State](#) [All 21 steps →](#)

Emotion as a computational primitive, not a simulation.

Primary Technical Disclosure
○ Affective State as a Deterministic Control Primitive for Semantic Agents
Secondary Technical
○ Affective State as Seventh Canonical Field○ Named Control Field Modulation Architecture○ Affect-Modulated Promotion Thresholds○ Deterministic Affect Encoding and Update Mechanics○ Emotional Decay Curves With Hysteresis○ Entropy-Governed Valence Stabilization○ Affective Inheritance in Delegation Chains○ Emotional Quarantine and Volatility Management○ Affect-Modulated Trust Slope Validation○ Biological Signal-to-Affective Coupling○ Affective Contagion in Multi-Agent Systems● Affect-Modulated Discovery Traversal○ Affect-Governance Separation○ Policy-Bounded Affective Updates○ Affect as Cross-Primitive Input○ Affect-Modulated Inference Integration○ Substrate-Agnostic Affect Deployment○ Pseudonymous Emotional Operation○ Temporal Cognition Field
Applications (General)
○ Companion AI That Maintains Emotional Consistency Across Sessions○ Therapeutic Agent Affect Management Under Clinical Constraints○ Affective State for Customer Service Agents○ Affective State for Elderly Care Companion Agents○ Affective State for Crisis Response Agents○ Affective State for Negotiation Agents○ Affective State for Educational Tutoring Agents○ Affective State for HR and Recruitment Agents
Applications (Specific)
○ Replika's Emotional Memory Is Stateless○ Character.ai's Personality Problem Is Deeper Than Prompting○ Woebot's Therapeutic Affect Has No Persistent State○ Elomia's Empathy Resets Every Session○ Hume AI Measures Emotion but Cannot Govern It○ Affectiva Reads Faces but Not Emotional Trajectories○ Cogito Scores Conversations Without Emotional State○ Beyond Verbal Decoded Voice Without Building Emotional Memory○ EmotiBit Captures Physiology Without Affective Governance○ RealEyes Measures Attention Without Emotional Persistence
[Affective State overview →](#)
AQ
deterministic
autonomy

Legal

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