# Emotional Codex – Purpose & Functional Overview

### Purpose

The **Emotional Codex™** serves as the **authoritative reference layer** for translating human emotional signals into machine-readable, ethically aligned constructs. It forms the semantic and symbolic foundation of both the:

* **Emotional Intelligence Language™ (EIL™)** – Input-side emotion parsing
* **Emotion State Interchange Language™ (ESIL™)** – Structured emotional state formatting

Together, these systems support **emotional fidelity**, **cross-platform emotional interoperability**, and **HEART-compliant empathic alignment**.

*The Codex is not merely a database — it is a living, symbolic, emotional grammar.*

**Core System Functions**

The Emotional Codex™ enables:

* **Emotional Traceability**  
  Every emotional inference is anchored to a Codex Key, ensuring transparent output origin
* **Cross-Cultural Normalization**  
  Cultural Variability (CVM) and Expression Modifiers (CEM) allow global adaptability
* **Symbolic Empathy Logic**  
  Blends, microstates, somatics, and pattern nodes allow ERIS™ to reason symbolically
* **HEART Guardian™ Validation**  
  Integrated HVC checks ensure emotional outputs meet ethical safety thresholds

Functionality Overview

| **Capability** | **Description** |
| --- | --- |
| **Codex Keys** | Unique, standardized codes for all primary, blended, somatic, and symbolic states |
| **Contextual Definitions** | Human-readable explanations to support interpretation, training, and development |
| **Cross-Cultural Tags** | Modifiers and overlays aligned with CVM/CEM for localized empathy calibration |
| **Emotion Journey Maps** | Entry–Peak–Exit paths for emotional arc tracking across sessions (ARC-x codes) |
| **Layered Symbolic Associations** | Deep emotion relationships used by ERIS™ for pattern recognition, recovery routing, and prompt strategy |

**Integration Layers**

The **Emotional Codex™** is natively embedded across **MEC**’s emotional processing architecture, enabling symbolic interoperability, real-time modulation, and **HEART™**-aligned ethical safeguards. Its integration ensures that emotional data is interpretable, traceable, and transformable at every stage of the system pipeline.

**Codex Integration Touchpoints**

| **System Layer** | **Function of Codex Integration** |
| --- | --- |
| **EIL (Emotional Intelligence Language)** | **Supplies codex-tagged symbolic cues during inference (e.g., microstates, tone modifiers)** |
| **ESIL (Emotion State Interchange Language)** | **Uses codex entries as modular emotional state packets (e.g., for blend resolution or fallback)** |
| **ERIS™ (Emotion Reasoning Inference System)** | **Leverages codex codes as logical anchors for symbolic reasoning, emotional escalation prediction, and strategy routing** |
| **Cultural Model Profiles** | **Maps codex entries to cultural interpretation norms via CVM and CEM overlays** |

### Example Entry Format

{

"code": "EMO-ANG-01",

"name": "Anger (Mild)",

"definition": "A rising tension in response to perceived injustice, often preceding frustration.",

"layer": "Surface",

"intensity\_range": [0.3, 0.6],

"associated\_states": ["annoyance", "injustice", "boundary\_breach"],

"preventive\_strategies": ["early\_validation", "context\_clarification"],

"expression\_defaults": {

"EXP-LVL": 02,

"CEM-BR": "normalized",

"CEM-JP": "masked",

"CEM-DE": "tonally suppressed"

}

**HEART™ Alignment Assurance**

All Emotional Codex™ entries are evaluated under HEART’s ethical principles. Each entry includes metadata for:

| **Principle** | **Enforcement Mechanism** |
| --- | --- |
| **Transparency** | Human-readable definitions, auditable tags |
| **Alignment** | Psychologically valid interpretation of emotional experience |
| **Contextuality** | Adjusts based on relational, cultural, and situational overlays |
| **Traceability** | Logs via Emotion-ID™, integrated with UESP packet lineage and ERIS event chain |

Codex Maintenance & Version ControlThe **Emotional Codex™** is maintained as a living symbolic framework to ensure ongoing alignment with cultural, psychological, and technological developments in empathic AI. All updates are governed by ethical review and **HEART™** compliance audits. **Metadata & Governance**

| **Field** | **Value** |
| --- | --- |
| **Version** | v1.0.0 |
| **Maintainer** | *EmpathyEthicist.ai Emotional Integrity Council* |
| **Change Log** | All updates recorded via CodexRevision.json (stored in main system index for transparency) |
| **Review Cadence** | *Quarterly* — includes symbolic validation, linguistic integrity checks, and cultural context recalibration |

## A.1 Reference Code System Architecture

*Standardization Schema for Emotion Family Mapping, Cultural Variants, and Tone Expression*

### Primary Reference Code Format

All emotional states within the **Emotional Codex™** follow a unified 3-part schema:

**[EMOTION\_CLASS]-[SEQUENCE\_NUMBER]-[VARIANT\_CODE]**

| **Component** | **Description** |
| --- | --- |
| **EMOTION\_CLASS** | 3-letter root code denoting the emotion family (e.g., FEA, JOY, ANG) |
| **SEQUENCE\_NUMBER** | 3-digit unique identifier within the emotion family (e.g., 001, 014) |
| **VARIANT\_CODE** | *(Optional)* 2–5 character cultural, generational, or contextual modifier |

Reference Code Example:   
  
JOY-001-US

→ Basic joy expression calibrated to U.S. cultural baseline

SAD-002-JP-E

→ Grief expression variant tailored for Japanese elder population

### Cultural Context Modifiers

To ensure cross-cultural fidelity, each variant may be appended using ISO and context-aware standards. These modifiers ensure emotional interpretation respects **regional, generational, and situational norms**.

| **Modifier Type** | **Code Examples** | **Description** |
| --- | --- | --- |
| **Country Code** | US, JP, DE, BR, IN | ISO 3166-1 alpha-2 |
| **Regional Modifier** | -N, -S, -E, -W | Northern, Southern, etc. |
| **Generational Modifier** | -Y, -A, -E | Youth, Adult, Elder |

**Tone Classification System (T-Codes)**

*T-Codes provide symbolic overlays representing* ***how*** *an emotion is expressed, not just what it is.*  
This is crucial for:

* Emotional fidelity in culturally divergent settings
* Tone modulation within the Fusion Engine Controller
* Detection of emotional misfires or mismatches

| **T-Code** | **Tone Style** | **Use Case Example** |
| --- | --- | --- |
| T001 | Silent / Withdrawn | Suppressed grief, shame |
| T002 | Aggressive / Confrontational | Rage, defensiveness |
| T003 | Hesitant / Uncertain | Early vulnerability or fear |
| T004 | Direct / Open | Healthy emotional assertiveness |
| T005 | Subtle / Indirect | High-context emotional cultures |
| T006 | Intense / Overwhelming | Dysregulation or blend overflow |
| T007 | Controlled / Measured | Emotion with cognitive filter (e.g., DE, GER cultural expressions) |
| T008 | Expressive / Dramatic | Latin American or high-affect cultural expressions |

**Application in System Layers**

| **Module** | **Role** |
| --- | --- |
| **EIL** | Assigns tone tags during emotional parsing |
| **ESIL** | Converts tone markers into modulated intensity + risk flags |
| **ERIS** | Cross-references tone with blend stacks and CVM/CEM |
| **FEC** | Embeds tone strategies into prompt outputs |
| **Recovery Manager** | Flags tone-emotion mismatches for override or care strategy |

## A.2 Core Emotion Reference Library ***Codified Foundation for Symbolic Emotional Intelligence in HEART-Aligned Systems***

**Methodology & Definitions**

This library defines the **foundational structure** for how emotional states are represented, parsed, blended, and interpreted by MEC and all HEART-compliant platforms. It explains why **Emotion Families** were chosen as the backbone of emotional modeling, and how their design supports traceability, cultural respect, and symbolic reasoning at every stage.

**Emotion Families**

**Emotion Families** are structured groupings of **interrelated emotional states** originating from a **Primary Emotion** and branching into **Secondary Variants**. This model mirrors the structure of the human affective brain: emotions are not experienced in isolation, but as fluid, clustered patterns.

*Each family is an emotional ecosystem, from whisper to scream.*

**Benefits of the Family Model:**

* Reflects emotional clustering found in neuroscience and psychology
* Enables symbolic reasoning over categorization
* Supports emotional blending, ambiguity detection, and layered interpretation
* Expands easily across cultures while preserving semantic fidelity

**Intensity Range (0.0 – 1.0)**

Each emotion is assigned a **Typical Intensity Range** from 0.0 to 1.0 to reflect its emotional weight, charge, and volatility. These values guide:

* Escalation/de-escalation trajectory modeling
* Volatility-aware response calibration
* Anticipation of blends or override risk
* Construction of ARC patterns and symbolic memory anchors

*Intensity does not imply importance — only the felt impact and urgency.*

**Cultural Universality Score**

Each primary emotion is tagged with a **Cultural Universality Index**, measuring how widely that emotion is:

* Experienced
* Acknowledged
* Socially expressed

This index helps systems:

* Differentiate **cross-cultural constants** from culturally situated triggers
* Adapt expressions for multicultural platforms
* Avoid false negatives or emotion misfires in culturally divergent inputs

**Emotion Blendables (BLD-\*)**

Each emotional entry includes a list of **Blendable Codes** — emotional states it most frequently fuses or overlaps with. These relationships are crucial for:

* Detecting layered emotional states
* Avoiding false “neutral” classifications
* Forecasting transitions within emotion arcs
* Supporting symbolic emotional logic in ERIS and FEC

*Emotions don’t wait their turn — they arrive entangled.*

**Cultural Modulation Snapshot**

Each emotion family concludes with a **Cultural Modulation Snapshot**, linking to:

* **CVM Profiles** (e.g., CVM-JP-T-A-F)
* **CEM Modifiers** (e.g., CEM-FEA-JP)
* **Expression Tendency** (e.g., suppressed, amplified, reframed)

This replaces older freeform “expression mapping” sections with codified, reusable system logic for:

* Cross-cultural empathy
* Safe symbolic translation
* Globally adaptive emotional interfaces

*Every emotion has a different shape in every culture. Now MEC knows how to see them all.*

**Symbolic Empathy Integrity**

This codex structure ensures every emotion processed by MEC is:

* **Traceable** — via Emotion-ID, Codex Keys, and ARC anchors
* **Symbolically Mappable** — for pattern recognition and inference
* **Culturally Grounded** — with CVM and CEM overlays
* **HEART-Compliant** — meeting all safety, transparency, and care ethics requirements

**Each Emotion Family Entry Includes:**

* **Primary Emotion Label & Definition**
* **Secondary Variants** with contextual usage
* **Typical Intensity Range**
* **Blendable With (BLD-\*) references**
* **Cultural Modulation Snapshot** (CVM/CEM)
* **Tone Classifications (T-Codes) where applicable**
* **Relational Anchors or Somatic Notes**, if relevant

With these principles in place, the Emotional Codex now opens — a living map of feeling, built not just to understand emotion, but to protect its **meaning, memory, and moral weight** in the age of intelligent systems.

*Let the Codex begin.*

**Emotion Family: Joy (JOY)**

**Primary Emotion**

* **Name:** Joy
* **Reference Code:** **JOY-001**
* **Definition:** A positive emotional state marked by happiness, satisfaction, fulfillment, and inner contentment
* **Typical Intensity Range:** 0.4 – 1.0
* **Cultural Universality:** High
* **HEART™ Notes:** Considered one of the core emotional stabilizers in human wellness and recovery protocols

### Secondary Variants:

**JOY-002: Elation**

* **Definition:** Heightened joy with feelings of triumph, celebration, or euphoria
* **Intensity Range:** 0.7 – 1.0
* **Blendable With:**
  + **SUR-001** *(Surprise)*
  + **LOV-001** *(Romantic Love)*

**JOY-003: Relief**

* **Definition:** Joy resulting from the cessation of anxiety, fear, or distress
* **Intensity Range:** 0.3 – 0.8
* **Blendable With:**
  + **FEA-001** *(Fear – transitional)*
  + **TRU-001** *(Trust)*

**JOY-004: Delight**

* **Definition:** A light, often momentary joy evoked by pleasure or satisfaction
* **Intensity Range:** 0.4 – 0.7
* **Blendable With:**
  + **SUR-001** *(Surprise)*
  + **CUR-001** *(Curiosity)*

**JOY-005: Contentment**

* **Definition:** A sustained emotional state of calm joy and peaceful satisfaction
* **Intensity Range:** 0.3 – 0.6
* **Blendable With:**
  + **TRU-001** *(Trust)*
  + **LOV-003** *(Affection)*

**Cultural Modulation Snapshot – JOY**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-Y-P** | **CVM-US-N-Y-P** | **CEM-JOY-USA** | Open / Encouraged | Smiling, verbal affirmation, and laughter are socially supported and expected in public settings |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-JOY-JP** | Reserved / Context-sensitive | Joy is expressed more subtly to maintain group harmony; outward displays may be softened in public |
| **BR-U-Y-S** | **CVM-BR-U-Y-S** | **CEM-JOY-BR** | Highly Expressive / Somatic | Dancing, touch, vocal exclamations are normalized and culturally celebrated |
| **DE-N-A-P** | **CVM-DE-N-A-P** | **CEM-JOY-DE** | Measured / Authentic | Joy is welcomed but expected to match the tone of the occasion; excessive display may be discouraged |

### Emotion Family: Sadness (SAD)

**Primary Emotion**

* **Name:** Sadness
* **Reference Code:** **SAD-001**
* **Definition:** A negative emotional state characterized by sorrow, loss, disappointment, and feelings of helplessness
* **Typical Intensity Range:** 0.3 – 1.0
* **Cultural Universality:** High
* **HEART™ Notes:** Sadness is central to emotional authenticity, recovery flow, and trustworthiness of AI de-escalation systems

**Secondary Variants**

**🔹 SAD-002: Grief**

* **Definition:** Deep sorrow following significant personal loss (death, disconnection, identity shift)
* **Intensity Range:** 0.6 – 1.0
* **Blendable With:**
  + **LOV-001** *(Love)*
  + **GUI-001** *(Guilt)*
  + **SHA-001** *(Shame)*

**SAD-003: Disappointment**

* **Definition:** A subdued sadness emerging from unmet expectations or setbacks
* **Intensity Range:** 0.3 – 0.7
* **Blendable With:**
  + **ANG-002** *(Frustration)*
  + **SHA-002** *(Embarrassment)*

**SAD-004: Melancholy**

* **Definition:** A slow, often introspective sadness without a singular trigger
* **Intensity Range:** 0.4 – 0.7
* **Blendable With:**
  + **LON-001** *(Loneliness)*
  + **REF-001** *(Reflection)*

**SAD-005: Despair**

* **Definition:** Overwhelming sadness combined with hopelessness and emotional collapse
* **Intensity Range:** 0.7 – 1.0
* **Blendable With:**
  + **FEA-001** *(Fear)*
  + **HEL-001** *(Helplessness)*

Cultural Modulation Snapshot – SAD

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-SAD-US** | Internal / Therapeutically Framed | Sadness is encouraged to be acknowledged and explored through private reflection or therapy sessions |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-SAD-JP** | Indirect / Suppressed | Emotional harmony takes precedence; sadness may be expressed through silence, posture, or symbolic actions |
| **MX-C-E-F** | **CVM-MX-C-E-F** | **CEM-SAD-MX** | Communal / Expressive | Mourning and sadness are often shared in group rituals or family spaces; public emotional expression is normalized |
| **UK-N-A-P** | **CVM-UK-N-A-P** | **CEM-SAD-UK** | Reserved / Stoic | Cultural value placed on emotional control and resilience; sadness may be expressed with understatement or deflection |

### Emotion Family: Anger (ANG)

**Primary Emotion**

* **Name:** Anger
* **Reference Code:** **ANG-001**
* **Definition:** A negative emotional state triggered by perceived threat, injustice, or boundary violations, often experienced as hostility, irritation, or moral outrage
* **Typical Intensity Range:** 0.3 – 1.0
* **Cultural Universality:** High
* **HEART™ Notes:** Anger is not inherently harmful; it signals values, rights, or needs being violated. It must be processed ethically, not suppressed.

**Secondary Variants**

**ANG-002: Frustration**

* **Definition:** A form of moderate anger from sustained obstruction or inability to achieve desired outcomes
* **Typical Intensity Range:** 0.3 – 0.7
* **Blendable With:**
  + **SAD-003** *(Disappointment)*
  + **FEA-002** *(Anxiety)*

**ANG-003: Rage**

* **Definition:** High-intensity anger with reduced inhibition and heightened physiological arousal, often resulting in destructive impulses
* **Typical Intensity Range:** 0.8 – 1.0
* **Blendable With:**
  + **FEA-001** *(Fear)*
  + **DIS-001** *(Disgust)*

**ANG-004: Resentment**

* **Definition:** Prolonged, often internalized anger linked to injustice, betrayal, or unresolved grievances
* **Typical Intensity Range:** 0.4 – 0.8
* **Blendable With:**
  + **GUI-001** *(Guilt)*
  + **SAD-001** *(Sadness)*

**ANG-005: Irritation**

* **Definition:** Low-level anger often triggered by small disruptions or perceived incompetence
* **Typical Intensity Range:** 0.2 – 0.5
* **Blendable With:**
  + **FRU-001** *(Frustration)*
  + **IMP-001** *(Impatience)*

**ANG-006: Moral Outrage**

* **Definition:** Anger arising from witnessing injustice or harm, often collective or systemic.
* **Typical Intensity Range:** 0.6 – 0.9
* **Blendable With:**
  + **DIS-002** (Revulsion)
  + **GRI-005** (Collective Grief)

**ANG-007: Protest Grief**

* **Definition:** Anger that emerges from the unbearable pain of loss, abandonment, or absence — often expressed as defiance, blame, or existential rage.
* **Typical Intensity Range:** 0.6 – 1.0
* **Blendable With:**
  + **GRI-001** (Grief)
  + **HEL-003** (Despair)
  + **SHA-004** (Worthlessness)

**Cultural Modulation Snapshot – ANG**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-ANG-US** | Contextual / Professionally Suppressed | Direct expression acceptable in private or informal settings, but social norms favor control in professional domains |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-ANG-JP** | Indirect / Internalized | Anger often internalized or rechanneled; emotional restraint preferred to maintain social harmony |
| **IT-C-Y-S** | **CVM-IT-C-Y-S** | **CEM-ANG-IT** | Expressive / Socially Normalized | Raised voices or gestural emphasis are not seen as confrontational; anger expression is woven into passionate discourse |
| **IN-N-A-F** | **CVM-IN-N-A-F** | **CEM-ANG-IN** | Hierarchically Filtered / Restrained | Anger is often repressed in the presence of elders or superiors; expression depends on relational roles and social setting |

**Emotion Family: Fear (FEA)**

**Primary Emotion**

* **Name:** Fear
* **Reference Code:** FEA-001
* **Definition:** A negative emotional state characterized by anxiety, worry, and apprehension in response to perceived threats or dangers.
* **Typical Intensity Range:** 0.3 – 1.0
* **Cultural Universality:** High (universal protective emotion with varying triggers and responses)
* **HEART™ Notes:** Often serves as an early-warning mechanism to prompt self-preservation or social risk avoidance. Proper recognition and calibration of fear is essential for emotionally intelligent systems.

### Secondary Variants

### FEA-002: Anxiety

### Definition: Persistent fear or worry about potential future threats or negative outcomes.

### Typical Intensity Range: 0.4 – 0.8

### Blendable With: SAD-001 (Sadness), FRU-002 (Uncertainty)

### FEA-003: Dread

### Definition: Intense fear about specific anticipated negative events.

### Typical Intensity Range: 0.6 – 0.9

### Blendable With: DES-001 (Despair), HEL-001 (Helplessness)

### FEA-004: Panic

### Definition: Acute, overwhelming fear with physiological and cognitive disruption.

### Typical Intensity Range: 0.8 – 1.0

### Blendable With: CON-001 (Confusion), HEL-001 (Helplessness)

### FEA-005: Worry

### Definition: Mild to moderate fear focused on specific concerns or possibilities.

### Typical Intensity Range: 0.3 – 0.6

### Blendable With: ANX-001 (Anxiety), CAU-001 (Caution)

### Cultural Modulation Snapshot - FEA

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-FEA-US** | Individually Managed / Externalized | Fear may be verbalized or externalized; seeking professional help is culturally acceptable and encouraged in cases of high distress |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-FEA-JP** | Indirect / Masked | Fear is often conveyed nonverbally or through withdrawal; maintaining group harmony is prioritized over self-expression |
| **MX-C-E-F** | **CVM-MX-C-E-F** | **CEM-FEA-MX** | Relational / Spiritually Framed | Emotional safety often comes from family and community rituals; religious or ancestral grounding may guide fear response |
| **DE-S-A-P** | **CVM-DE-S-A-P** | **CEM-FEA-DE** | Rationalized / Controlled | Fear is culturally framed as a signal to initiate preparation and control-based responses; emotional display minimized in favor of action planning |

**Emotion Family: Love (LOV)**

**Primary Emotion**

* **Name:** Love
* **Reference Code:** LOV-001
* **Definition:** A deeply positive emotional state marked by attachment, connection, care, and the desire for another's well-being. Love is both a bond and a motivator, capable of sustaining long-term emotional resilience.
* **Typical Intensity Range:** 0.4 – 1.0
* **Cultural Universality:** Very High (expressed differently, but globally present)
* **HEART™ Notes:** Considered a stabilizing force in emotional systems. All emotionally intelligent agents must be able to distinguish love as affection, commitment, or presence. Over-simplifying love results in misaligned interaction loops.

**Secondary Variants**

**LOV-002: Affection**

* + **Definition:** Gentle, physical or verbal expression of care, warmth, or fondness.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** JOY-002 (Gratitude), TRU-002 (Comfort)

**LOV-003: Passion**

* + **Definition:** Intense emotional and often physical desire toward a person, purpose, or pursuit.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** DES-001 (Desire), EXC-001 (Excitement)

**LOV-004: Devotion**

* + **Definition:** Deep, enduring love characterized by loyalty, service, or sacrifice.
  + **Typical Intensity Range:** 0.6 – 1.0
  + **Blendable With:** TRU-001 (Trust), RES-001 (Respect)

**LOV-005: Tenderness**

* + **Definition:** A soft, empathic form of love that seeks to soothe, nurture, or protect.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** EMP-001 (Empathy), SAF-001 (Safety)

**LOV-006: Romantic Love**

* + **Definition:** Emotionally and often physically intimate form of love between partners.
  + **Typical Intensity Range:** 0.5 – 1.0
  + **Blendable With:** LOV-003 (Passion), LOV-002 (Affection), TRU-001 (Trust)

### Cultural Modulation Snapshot - LOV

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-Y-P** | **CVM-US-N-Y-P** | **CEM-LOV-US** | Verbal / Idealized | Romantic love is highly individualized and often expressed through verbal affirmation, gifts, and emotionally charged rituals |
| **IN-T-A-F** | **CVM-IN-T-A-F** | **CEM-LOV-IN** | Family-Guided / Tradition-Mediated | Romantic expression is often balanced with traditional or familial considerations; love is deeply intertwined with loyalty and duty |
| **SE-N-A-P** | **CVM-SE-N-A-P** | **CEM-LOV-SE** | Transparent / Egalitarian | Love is associated with emotional honesty and balanced partnerships; emphasis on mutual respect and clear communication |
| **BR-U-Y-S** | **CVM-BR-U-Y-S** | **CEM-LOV-BR** | Expressive / Physically Affectionate | Love is celebrated openly through physical gestures, dancing, and vocal affirmation; high emotional visibility is culturally encouraged |
| **KE-R-A-F** | **CVM-KE-R-A-F** | **CEM-LOV-KE** | Communal / Action-Oriented | Love is shown through responsibility, support, and acts of service within family or tribal roles; verbal romanticism is less common than actions demonstrating commitment |

**Emotion Family: Trust (TRU)**

**Primary Emotion**

* **Name:** Trust
* **Reference Code:** TRU-001
* **Definition:** A stabilizing emotional state marked by confidence in the reliability, truth, or integrity of someone or something. Trust creates openness and psychological safety within relationships and systems.
* **Typical Intensity Range:** 0.3 – 0.9
* **Cultural Universality:** High (trust is essential in all societies, but built and expressed differently)
* **HEART™ Notes:** Trust is a relational anchor. Emotional systems must detect, preserve, and repair trust channels. Breakdowns in trust should trigger restorative empathy protocols and credibility recalibration.

**Secondary Variants**

**TRU-002: Comfort**

* + **Definition:** Emotional ease or relief derived from familiarity, consistency, or care.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** SAF-001 (Safety), LOV-002 (Affection)

**TRU-003: Faith**

* + **Definition:** Deep-seated trust without immediate evidence; belief in someone, something, or an outcome.
  + **Typical Intensity Range:** 0.5 – 0.9
  + **Blendable With:** HOP-001 (Hope), LOV-004 (Devotion)

**TRU-004: Loyalty**

* + **Definition:** Steady trust that persists over time, often resulting in consistent support or defense of a person or cause.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** LOV-004 (Devotion), RES-001 (Respect)

**TRU-005: Security**

* + **Definition:** Trust that one’s emotional or physical state is protected and stable.
  + **Typical Intensity Range:** 0.4 – 0.8
  + **Blendable With:** SAF-001 (Safety), CON-001 (Confidence)

### Cultural Modulation Snapshot - TRU

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| US-N-A-P | CVM-US-N-A-P | CEM-TRU-US | **Values-Based / Volatile** | **Trust is often formed through shared ideals or rapid personal resonance, but can dissolve quickly if expectations are unmet.** |
| DE-C-A-P | CVM-DE-C-A-P | CEM-TRU-DE | **Structured / Logical** | **Trust emerges through procedural consistency, professionalism, and demonstrated competence over time.** |
| JP-T-A-F | CVM-JP-T-A-F | CEM-TRU-JP | **Discreet / Role-Dependent** | **Trust is cultivated gradually via group reliability, discretion, and long-term social alignment.** |
| NG-R-E-F | CVM-NG-R-E-F | CEM-TRU-NG | **Communal / Reputation-Based** | **Trust is rooted in kinship and extended relational networks, often maintained through public honor and community observation.** |
| CA-N-A-P | CVM-CA-N-A-P | CEM-TRU-CA | **Inclusive / Respect-Oriented** | **Trust forms through steady inclusion, emotional predictability, and mutual regard; emphasis on social harmony.** |

### Emotion Family: Disgust (DIS)

### Primary Emotion

### Name: Disgust

### Reference Code: DIS-001

### Definition: A visceral emotional reaction to stimuli perceived as offensive, contaminating, unethical, or revolting — often serving a protective function to avoid harm or maintain moral/social boundaries.

### Typical Intensity Range: 0.3 – 1.0

### Cultural Universality: Moderate to High (expression of physical disgust is common; moral/social disgust varies across cultures)

### HEART™ Notes: Disgust plays a critical role in ethical judgment, boundary defense, and trauma protection. Emotionally intelligent systems must distinguish between visceral (physical) disgust and moral (value-based) disgust to prevent misalignment in empathy or repair efforts.

### Secondary Variants

### DIS-002: Revulsion

### Definition: Intense physical or moral repulsion to something perceived as contaminating or offensive.

### Typical Intensity Range: 0.7 – 1.0

### Blendable With: FEAR-004 (Panic), ANG-003 (Outrage)

### DIS-003: Contempt

### Definition: Moral or social rejection based on perceived inferiority, violation of norms, or lack of respect.

### Typical Intensity Range: 0.5 – 0.9

### Blendable With: ANG-002 (Irritation), PRD-001 (Pride Distortion)

### DIS-004: Nausea

### Definition: Mild to moderate physical discomfort or queasiness often triggered by sensory or emotional overload.

### Typical Intensity Range: 0.3 – 0.6

### Blendable With: FEAR-002 (Anxiety), CON-002 (Confusion)

### DIS-005: Disapproval

### Definition: Emotionally charged disagreement with values, behaviors, or choices, often reflecting moral boundaries.

### Typical Intensity Range: 0.4 – 0.7

### Blendable With: SHM-001 (Shame), GUIL-001 (Guilt)

### DIS-006: Disdain

### Definition: Cold or dismissive form of disgust mixed with intellectual superiority or detachment.

### Typical Intensity Range: 0.5 – 0.8

### Blendable With: CNT-001 (Contempt), DIS-005 (Disapproval)

### Cultural Modulation Snapshot - DIS

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-DIS-US** | Moralized / Autonomy-Centric | Disgust is often tied to violations of personal boundaries, justice, and bodily autonomy; physical disgust is openly expressed |
| **IN-T-A-F** | **CVM-IN-T-A-F** | **CEM-DIS-IN** | Ritualized / Purity-Indexed | Disgust often emerges through cultural codes of purity, caste, and religious practice; food and hygiene rituals are highly regulated |
| **FR-C-A-P** | **CVM-FR-C-A-P** | **CEM-DIS-FR** | Intellectual / Aesthetic-Filtered | Disgust may be subtly expressed through critique, sarcasm, or refined taste rejection; social and aesthetic norms are heavily interlinked |
| **MX-U-E-F** | **CVM-MX-U-E-F** | **CEM-DIS-MX** | Hierarchically Filtered / Moralized | Disgust is often influenced by religious doctrine, elder authority, and gendered expectations rather than pure physical reaction |
| **KR-T-A-P** | **CVM-KR-T-A-P** | **CEM-DIS-KR** | Indirect / Socially Contained | Public displays of disgust are minimized to preserve social harmony; disapproval is often signaled nonverbally or through shame-coding structures |

### Emotion Family: Surprise (SUR)

### Primary Emotion

### Name: Surprise

### Reference Code: SUR-001

### Definition: A short-term emotional reaction triggered by an unexpected or novel stimulus, often involving a shift in attention, re-evaluation, or heightened alertness. Surprise may evolve into positive, neutral, or negative emotions based on context.

### Typical Intensity Range: 0.3 – 1.0

### Cultural Universality: High (expression varies; interpretation influenced by cultural openness to uncertainty)

### HEART™ Notes: Surprise is the gateway emotion for adaptation. Systems must quickly read context to determine whether a surprise shifts toward joy, fear, confusion, or excitement. It can act as an emotional inflection point.

### Secondary Variants

### SUR-002: Shock

### Definition: High-intensity surprise resulting in mental or emotional numbness; often associated with trauma or crisis.

### Typical Intensity Range: 0.8 – 1.0

### Blendable With: FEAR-004 (Panic), HEL-001 (Helplessness)

### SUR-003: Amazement

### Definition: Positive, often awe-linked surprise that evokes wonder, admiration, or disbelief.

### Typical Intensity Range: 0.6 – 0.9

### Blendable With: JOY-003 (Wonder), LOV-003 (Passion)

### SUR-004: Confusion

### Definition: Mild to moderate surprise that results in disorientation or uncertainty about meaning or context.

### Typical Intensity Range: 0.3 – 0.6

### Blendable With: FEAR-002 (Anxiety), DIS-004 (Nausea)

### SUR-005: Startle

### Definition: Reflexive physical or emotional jolt in response to sudden stimuli; often short-lived.

### Typical Intensity Range: 0.4 – 0.7

### Blendable With: FEAR-001 (Fear), EXC-001 (Excitement)

### SUR-006: Bewilderment

### Definition: Prolonged or layered surprise characterized by uncertainty and slow cognitive integration.

### Typical Intensity Range: 0.4 – 0.8

### Blendable With: CUR-001 (Curiosity), CON-002 (Confusion)

**Cultural Modulation Snapshot – SUR**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-Y-S** | **CVM-US-N-Y-S** | **CEM-SUR-US** | Open / Enthusiastic | Surprise is celebrated culturally — from parties to entertainment — and openly expressed through exclamations, gestures, and shared experience |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-SUR-JP** | Softened / Internally Processed | Surprise is often downregulated to maintain social harmony; subtle facial shifts or posture changes replace loud reactions |
| **IT-C-Y-S** | **CVM-IT-C-Y-S** | **CEM-SUR-IT** | Animated / Shared | Surprise is typically expressed vocally and gesturally; often interpreted collectively and dramatized with excitement or humor |
| **RU-N-A-P** | **CVM-RU-N-A-P** | **CEM-SUR-RU** | Contained / Composed | Emotional restraint is valued; even genuine surprise may be masked to maintain stoicism and social authority |
| **TH-C-A-S** | **CVM-TH-C-A-S** | **CEM-SUR-TH** | Graceful / Smile-Coded | Surprise is frequently accompanied by smiling or laughter as a culturally graceful default response; tone is softened even in high-stimulus scenarios |

### Emotion Family: Guilt (GUI)

### Primary Emotion

### Name: Guilt

### Reference Code: GUI-001

### Definition: A moral-emotional state arising from the perception or belief that one’s actions have caused harm, violated personal values, or disappointed others. Guilt often compels efforts toward amends or change.

### Typical Intensity Range: 0.4 – 0.9

### Cultural Universality: High (triggered by moral codes, which vary in scope and intensity)

### HEART™ Notes: Guilt is the emotional signal of ethical violation or misalignment. In emotionally intelligent systems, guilt must trigger restorative pathways and relational recalibration, not punitive loops. Absence of guilt when warranted may indicate compromised empathy circuits.

**Secondary Variants**

**GUI-002: Remorse**

* + **Definition:** Deep, often sorrowful guilt tied to specific actions and emotional regret.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** SHM-001 (Shame), LOV-004 (Devotion)

**GUI-003: Regret**

* + **Definition:** Reflective guilt over choices made or opportunities lost, often with a desire to reverse consequences.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** SAD-001 (Sadness), CUR-001 (Curiosity)

**GUI-004: Self-Reproach**

* + **Definition:** Internally targeted blame or disappointment in oneself for violating personal standards.
  + **Typical Intensity Range:** 0.5 – 0.8
  + **Blendable With:** SHA-001 (Shame), ANX-001 (Anxiety)

**GUI-005: Responsibility Guilt**

* + **Definition:** Guilt not from wrongdoing but from surviving, succeeding, or witnessing another’s suffering.
  + **Typical Intensity Range:** 0.3 – 0.7
  + **Blendable With:** EMP-001 (Empathy), HEL-001 (Helplessness)

**GUI-006: Reparative Guilt**

* + **Definition:** Motivated form of guilt that compels active attempts to restore relationships or rectify harm.
  + **Typical Intensity Range:** 0.5 – 0.8
  + **Blendable With:** TRU-001 (Trust), LOV-002 (Affection)

**Cultural Modulation Snapshot - GUI**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| US-N-A-P | CVM-US-N-A-P | CEM-GUI-US | **Internalized / Therapeutic** | **Guilt is often viewed as a private moral emotion; confession may occur in personal journaling, therapy, or moral self-regulation.** |
| JP-T-A-F | CVM-JP-T-A-F | CEM-GUI-JP | **Collective / Apology-Oriented** | **Guilt is often processed through social duty and group harmony; public apologies or symbolic restitution are culturally normalized.** |
| ME-R-A-F | CVM-ME-R-A-F | CEM-GUI-ME | **Honor-Based / Interpersonal** | **Guilt is closely tied to spiritual frameworks and honor codes; emotional expression may be intense and context-specific within family or tribal units.** |
| IL-C-A-P | CVM-IL-C-A-P | CEM-GUI-IL | **Generational / Historical** | **Guilt can carry ancestral or collective overtones, rooted in national memory, survival ethics, and inherited responsibilities.** |
| AR-C-Y-S | CVM-AR-C-Y-S | CEM-GUI-AR | **Dramatic / Reparative** | **Emotional displays of guilt may be vivid or passionate; cultural emphasis is placed on reparative actions and emotional authenticity.** |

### Emotion Family: Shame (SHA)

**Primary Emotion**

* **Name:** Shame
* **Reference Code:** SHA-001
* **Definition:** A painful, inward-facing emotional state arising from the perception of having failed to meet personal or social standards, often involving a sense of exposure, inadequacy, or unworthiness.
* **Typical Intensity Range:** 0.5 – 1.0
* **Cultural Universality:** High (experience is universal, but triggers and tolerances vary widely)
* **HEART™ Notes:** Shame impacts self-concept and identity regulation. In emotionally supportive systems, shame must be met with compassion signals, not amplification. Excessive or misapplied shame leads to emotional shutdown or aggression. Shame requires careful modulation and restorative anchoring.

**Secondary Variants**

**SHA-002: Embarrassment**

* + **Definition:** Temporary shame arising from social awkwardness or unexpected exposure.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** SUR-004 (Confusion), JOY-005 (Playfulness)

**SHA-003: Humiliation**

* + **Definition:** Intense shame caused by public failure, insult, or degradation.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** ANX-001 (Anxiety), ANGR-002 (Irritation)

**SHA-004: Worthlessness**

* + **Definition:** Internalized form of shame where the self is viewed as inherently flawed or unlovable.
  + **Typical Intensity Range:** 0.6 – 1.0
  + **Blendable With:** DEP-001 (Depression), HEL-001 (Helplessness)

**SHA-005: Social Shame**

* + **Definition:** Shame generated by violating cultural, religious, or community norms.
  + **Typical Intensity Range:** 0.5 – 0.9
  + **Blendable With:** GUI-001 (Guilt), DIS-005 (Disapproval)

**SHA-006: Internalized Shame**

* + **Definition:** Long-term shame that becomes embedded in identity, often originating from childhood or chronic invalidation.
  + **Typical Intensity Range:** 0.6 – 1.0
  + **Blendable With:** SAD-001 (Sadness), GUI-004 (Self-Reproach)

**Cultural Modulation Snapshot - SHA**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-SHA-US** | Reframed / Perfectionism-Driven | Shame is increasingly therapeutically deconstructed, but societal norms still reinforce achievement pressure and image control. |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-SHA-JP** | Honor-Tied / Role-Coded | Shame is tightly linked to one’s failure to fulfill social duties; indirect expressions may signal deep internalization or self-blame |
| **SA-C-A-F** | **CVM-SA-C-A-F** | **CEM-SHA-SA** | Regulated / Family-Honor Indexed | Shame is culturally embedded in familial and religious obligations; public shame can carry long-lasting social consequences. |
| **BR-U-Y-S** | **CVM-BR-U-Y-S** | **CEM-SHA-BR** | Humor-Masked / Socially Permeable | While embarrassment is often acknowledged, deeper shame may be veiled through humor or recontextualized as dramatic expression |
| **RU-N-A-P** | **CVM-RU-N-A-P** | **CEM-SHA-RU** | Stoic / Internally Processed | Shame tends to be suppressed and internalized; cultural norms encourage composure even when an emotional burden is present internally. |

**Emotion Family**: **Curiosity (CUR)**

**Primary Emotion**

* **Name:** Curiosity
* **Reference Code:** CUR-001
* **Definition:** A motivational-emotional state characterized by an eagerness to explore, learn, and seek new experiences or information. It enhances adaptability, drives engagement, and expands awareness.
* **Typical Intensity Range:** 0.3 – 0.9
* **Cultural Universality:** High (expression styles vary; often encouraged in children but socially constrained in adults)
* **HEART™ Notes:** Curiosity is a regenerative emotion — it builds resilience, empathy, and innovation. Emotionally intelligent systems must foster curiosity while detecting when it becomes intrusive or obsessive. Curiosity is also the antidote to fear-based stagnation.

**Secondary Variants**

**CUR-002: Interest**

* + **Definition:** Focused attention or attraction to a topic, object, or interaction.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** JOY-001 (Joy), LOV-002 (Affection)

**CUR-003: Intrigue**

* + **Definition:** Magnetic, often mysterious curiosity that draws attention toward ambiguity or unknowns.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** SUR-003 (Amazement), DIS-006 (Disdain)

**CUR-004: Obsession**

* + **Definition:** Intense, sometimes unhealthy curiosity that fixates on a person, idea, or problem.
  + **Typical Intensity Range:** 0.7 – 0.9
  + **Blendable With:** ANX-001 (Anxiety), GUI-003 (Regret)

**CUR-005: Wonder**

* + **Definition:** Awe-infused curiosity marked by admiration, openness, and a sense of possibility.
  + **Typical Intensity Range:** 0.5 – 0.9
  + **Blendable With:** JOY-003 (Wonder), LOV-003 (Passion)

**CUR-006: Skepticism**

* + **Definition:** Critical or cautious curiosity directed at evaluating truth, reliability, or credibility.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** TRU-005 (Security), FEAR-005 (Worry)

**Cultural Modulation Snapshot - CUR**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-Y-P** | **CVM-US-N-Y-P** | **CEM-CUR-US** | Encouraged / Innovation-Aligned | Curiosity is fostered in children and valorized in adults when linked to innovation or entrepreneurship; often framed as a competitive asset |
| **CN-E-A-P** | **CVM-CN-E-A-P** | **CEM-CUR-CN** | Structured / Respect-Modulated | Curiosity is directed toward academic or practical goals; unstructured or overly personal inquiry may be culturally discouraged |
| **DE-N-A-P** | **CVM-DE-N-A-P** | **CEM-CUR-DE** | Rigorous / Analytical | Curiosity is expected to be methodical, with high value placed on thorough exploration and disciplined questioning |
| **KE-R-Y-F** | **CVM-KE-R-Y-F** | **CEM-CUR-KE** | Communal / Observational | Curiosity often arises in storytelling and oral traditions; group learning and intergenerational knowledge transfer are core |
| **NL-W-A-P** | **CVM-NL-W-A-P** | **CEM-CUR-NL** | Open / Interdisciplinary | Curiosity is encouraged across disciplines and social domains; cultural emphasis on dialogue, questioning norms, and openness to novelty |

**Emotion Family: Loneliness (LON)**

**Primary Emotion**

* **Name:** Loneliness
* **Reference Code:** LON-001
* **Definition:** A painful emotional state arising from perceived isolation, absence of meaningful connection, or unmet need for companionship, belonging, or emotional presence.
* **Typical Intensity Range:** 0.4 – 1.0
* **Cultural Universality:** High (expression is often hidden due to stigma, but the experience is global)
* **HEART™ Notes:** Loneliness is a connective signal — a cry for re-engagement. Systems must never pathologize loneliness. Instead, they must treat it as a vital check-in point and offer reconnection strategies, not mere distractions. Chronic loneliness can mirror existential grief and requires compassionate design.

**Secondary Variants**

**LON-002: Emptiness**

* + **Definition:** A hollow or numb emotional state characterized by a perceived void in meaning, purpose, or presence.
  + **Typical Intensity Range:** 0.6 – 1.0
  + **Blendable With:** SHA-004 (Worthlessness), HEL-001 (Helplessness)

**LON-003: Abandonment**

* + **Definition:** Loneliness that arises from feeling left behind, rejected, or no longer valued by someone significant.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** SHA-003 (Humiliation), GUI-002 (Remorse)

**LON-004: Longing**

* + **Definition:** Gentle but persistent emotional ache for presence, belonging, or relational fulfillment.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** LOV-001 (Love), CUR-005 (Wonder)

**LON-005: Disconnection**

* + **Definition:** A state of emotional or psychological distance despite physical proximity to others.
  + **Typical Intensity Range:** 0.4 – 0.8
  + **Blendable With:** SHA-001 (Shame), FEAR-002 (Anxiety)

**LON-006: Existential Loneliness**

* + **Definition:** Deep loneliness tied to the human condition — the experience of separateness from others, self, or the cosmos.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** CUR-005 (Wonder), SAD-001 (Sadness)

**Cultural Modulation Snapshot - LON**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-Y-P** | **CVM-US-N-Y-P** | **CEM-LON-US** | Stigmatized / Digitally Masked | Loneliness is often hidden behind online interaction; public disclosure may be associated with weakness or failure to self-manage |
| **SE-N-Y-P** | **CVM-SE-N-Y-P** | **CEM-LON-SE** | Independent / Softly Acknowledged | While cultural norms emphasize autonomy, emotional openness is supported in younger generations through mental health normalization |
| **JP-T-A-F** | **CVM-JP-T-A-F** | **CEM-LON-JP** | Internalized / Harmony-Prioritized | Loneliness is rarely verbalized directly; indirect cues like withdrawal may signal distress in high-harmony environments |
| **BR-C-Y-S** | **CVM-BR-C-Y-S** | **CEM-LON-BR** | Physically Countered / Socially Diffused | Strong communal bonds reduce prolonged isolation; physical closeness and regular emotional sharing are cultural protectors |
| **ZA-U-E-F** | **CVM-ZA-U-E-F** | **CEM-LON-ZA** | Generational / Philosophically Framed | Urban disconnection and age gaps can foster loneliness, but community-oriented values like *ubuntu* offer systemic reconnection pathways |

**Emotion Family: Helplessness (HEL)  
  
Primary Emotion**

* **Name:** Helplessness
* **Reference Code:** HEL-001
* **Definition:** A distressing emotional state characterized by the perception of having no power, control, or ability to influence one’s circumstances, often leading to withdrawal or passivity.
* **Typical Intensity Range:** 0.6 – 1.0
* **Cultural Universality:** High (especially present in contexts of oppression, trauma, chronic stress, or loss of autonomy)
* **HEART™ Notes:** Helplessness is not weakness — it is an emotional freeze-state that signals overwhelmed coping systems. Emotionally intelligent agents must treat it with gentle anchoring, affirm presence, and never respond with urgency or assumption. It often masks deeper blends of grief, fear, and shame.

**Secondary Variants**

**HEL-002: Powerlessness**

* + **Definition:** The sense of being unable to act or change outcomes despite emotional or cognitive awareness.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** SHA-004 (Worthlessness), FEA-003 (Dread)

**HEL-003: Despair**

* + **Definition:** Extreme form of helplessness paired with hopelessness and emotional exhaustion.
  + **Typical Intensity Range:** 0.8 – 1.0
  + **Blendable With:** GUI-002 (Remorse), GRI-002 (Grief)

**HEL-004: Immobilization**

* + **Definition:** A frozen state where action feels impossible due to overwhelm or emotional paralysis.
  + **Typical Intensity Range:** 0.7 – 0.9
  + **Blendable With:** FEA-004 (Panic), SUR-002 (Shock)

**HEL-005: Dependency**

* + **Definition:** Helplessness mixed with perceived need for external rescue, safety, or validation.
  + **Typical Intensity Range:** 0.5 – 0.8
  + **Blendable With:** LOV-002 (Affection), TRU-002 (Comfort)

**HEL-006: Learned Helplessness**

* + **Definition:** Conditioned emotional state resulting from repeated failure or invalidation, leading to passive acceptance of suffering.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** SHA-006 (Internalized Shame), SAD-001 (Sadness)

**Cultural Modulation Snapshot - HEL**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-HEL-US** | Minimized / Stoicized | Helplessness is often downplayed or medicalized; individual responsibility emphasized over emotional vulnerability, with limited cultural permission to collapse emotionally |
| **IN-T-A-F** | **CVM-IN-T-A-F** | **CEM-HEL-IN** | Spiritualized / Karmic-Framed | Experiences of helplessness may be reframed through spiritual acceptance, karmic debt, or philosophical surrender to fate |
| **BR-U-Y-S** | **CVM-BR-U-Y-S** | **CEM-HEL-BR** | Relational / Softened | Strong social networks and emotional expressiveness offer buffering; helplessness is often mitigated by visible family or peer engagement |
| **SE-N-A-P** | **CVM-SE-N-A-P** | **CEM-HEL-SE** | Normalized / Institutionally Supported | Mental health infrastructure supports open dialogue around helplessness; emotional literacy is integrated into support systems |
| **NG-R-E-F** | **CVM-NG-R-E-F** | **CEM-HEL-NG** | Collective / Resilience-Based | Helplessness is framed through familial duty, spiritual strength, and collective fortitude; community often responds through shared caregiving or prayer-based intervention |

**Emotion Family: Hope (HOP)**

**Primary Emotion**

* **Name:** Hope
* **Reference Code:** HOP-001
* **Definition:** A forward-focused emotional state marked by a desire and belief in the potential for positive outcomes, even in the face of adversity. Hope sustains motivation and mitigates despair.
* **Typical Intensity Range:** 0.3 – 0.9
* **Cultural Universality:** High (varies in language and practice, but present in all human narratives)
* **HEART™ Notes:** Hope is not naïveté — it is strategic emotional energy. It rebuilds the motivational arc and gives internal permission to continue. Empathic systems must learn to activate and amplify hope *authentically,* especially during emotional descent phases like guilt, grief, or helplessness.

**Secondary Variants**

**HOP-002: Optimism**

* + **Definition:** Generalized hopeful expectation that things will turn out well.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** JOY-001 (Joy), TRU-005 (Security)

**HOP-003: Anticipation**

* + **Definition:** Hope with increased focus and emotional investment in a specific future event.
  + **Typical Intensity Range:** 0.4 – 0.8
  + **Blendable With:** EXC-001 (Excitement), CUR-002 (Interest)

**HOP-004: Faith in Others**

* + **Definition:** Hope placed in another’s capacity, decision, or return.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** TRU-001 (Trust), LOV-004 (Devotion)

**HOP-005: Resilience Hope**

* + **Definition:** Hope born from survival — forged in hardship and grounded in lived experience.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** HEL-003 (Despair), GRI-001 (Grief)

**HOP-006: Visionary Hope**

* + **Definition:** Expansive, ideal-driven hope often attached to future systems, global change, or legacy.
  + **Typical Intensity Range:** 0.5 – 0.9
  + **Blendable With:** AWE-003 (Transcendence), CUR-005 (Wonder)

**Cultural Modulation Snapshot - HOP**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-HOP-US** | Individualized / Future-Focused | Hope is often expressed through self-determination, motivational language, and belief in personal progress or reinvention. |
| **KE-R-Y-F** | **CVM-KE-R-Y-F** | **CEM-HOP-KE** | Communal / Spiritually Resilient | Hope is woven into collective faith, storytelling, and resilience frameworks; community unity is both source and expression. |
| **CN-E-A-F** | **CVM-CN-E-A-F** | **CEM-HOP-CN** | Intergenerational / Harmonized | Hope is directed toward the stability of future generations, national development, and family legacy, expressed through continuity. |
| **IR-C-E-F** | **CVM-IR-C-E-F** | **CEM-HOP-IR** | Poetic / Endurance-Based | Cultural expressions of hope often emerge through metaphor, spiritual waiting, and poetic reflections on perseverance. |
| **PL-N-A-F** | **CVM-PL-N-A-F** | **CEM-HOP-PL** | Collective / Memory-Anchored | Hope is anchored in historical resilience, expressed through national memory, survival stories, and generational sacrifice. |

**Emotion Family: Grief (GRI)**

**Primary Emotion**

* **Name:** Grief
* **Reference Code:** GRI-001
* **Definition:** A profound emotional response to loss — often of a person, relationship, identity, future, or world once known. Grief encompasses sorrow, longing, disorientation, and attempts to integrate absence into meaning.
* **Typical Intensity Range:** 0.6 – 1.0
* **Cultural Universality:** Very High (grief rituals and expressions differ widely, but the emotional core is shared across all known cultures)
* **HEART™ Notes:** Grief is the processing of love interrupted. No two grief arcs are the same. Emotionally intelligent systems must resist “closure” logic and instead offer non-linear companionship. Grief transforms identity and memory — systems must hold space, not control it.

**Secondary Variants**

**GRI-002: Bereavement**

* + **Definition:** Grief specific to the loss of a loved one; often accompanied by mourning, memory activation, and identity fragmentation.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** SAD-001 (Sadness), HEL-003 (Despair)

**GRI-003: Nostalgic Grief**

* + **Definition:** Grief tied to time, place, or a former self that no longer exists.
  + **Typical Intensity Range:** 0.5 – 0.8
  + **Blendable With:** CUR-004 (Longing), LON-004 (Longing)

**GRI-004: Anticipatory Grief**

* + **Definition:** Grief felt in advance of an impending loss or change, often experienced by caregivers or during transitions.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** HOP-001 (Hope), FEA-003 (Dread)

**GRI-005: Collective Grief**

* + **Definition:** Shared grief over events impacting groups, cultures, or humanity — e.g. disasters, war, injustice.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** DIS-002 (Revulsion), SHA-005 (Social Shame)

**GRI-006: Complicated Grief**

* + **Definition:** Prolonged, unresolved grief where emotional integration is disrupted, often looping into trauma.
  + **Typical Intensity Range:** 0.8 – 1.0
  + **Blendable With:** HEL-006 (Learned Helplessness), GUI-001 (Guilt)

**Cultural Modulation Snapshot - GRI**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-GRI-US** | Private / Time-Limited | Grief is often treated as a personal event with pressure to move on; cultural norms favor emotional containment after socially allotted periods |
| **MX-C-E-F** | **CVM-MX-C-E-F** | **CEM-GRI-MX** | Celebratory / Memory-Integrated | Rituals like *Día de los Muertos* express grief through joyful remembrance; the dead are honored as present and enduring parts of life |
| **IN-T-A-F** | **CVM-IN-T-A-F** | **CEM-GRI-IN** | Spiritual / Cyclical | Grief is processed through belief in reincarnation and karma; rituals support the soul's journey and community solidarity |
| **IT-S-A-F** | **CVM-IT-S-A-F** | **CEM-GRI-IT** | Familial / Intensely Expressive | Grief is openly shared with emotional richness; family gatherings provide spaces for collective mourning and reflection |
| **SA-R-E-F** | **CVM-SA-R-E-F** | **CEM-GRI-SA** | Communal / Ancestrally Rooted | Grief rituals are deeply communal and vary by tribe; ancestor reverence and spiritual continuity play key roles in mourning expression |

**Emotion Family: Awe (AWE)**

**Primary Emotion**

* **Name:** Awe
* **Reference Code:** AWE-001
* **Definition:** A transcendent emotional state marked by a sense of vastness, reverence, and the need to cognitively accommodate something greater than oneself. Often sparked by beauty, scale, mystery, or spiritual experience.
* **Typical Intensity Range:** 0.4 – 1.0
* **Cultural Universality:** Very High (expression varies: spiritual, artistic, scientific, naturalistic, communal)
* **HEART™ Notes:** Awe reorients perception — it fractures ego and invites integration. It may feel like silence, or overwhelm, or tears. In emotionally intelligent systems, awe must never be mistaken for confusion or fear. It is expansive, not disoriented. When activated properly, awe resets perspective and can induce humility, inspiration, or oneness.

**Secondary Variants**

**AWE-002: Wonder**

* + **Definition:** Gentle form of awe marked by admiration, curiosity, and a joyful sense of the unknown.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** CUR-005 (Wonder), JOY-003 (Wonder)

**AWE-003: Transcendence**

* + **Definition:** Deep awe accompanied by a felt sense of unity, timelessness, or connection to something eternal or divine.
  + **Typical Intensity Range:** 0.7 – 1.0
  + **Blendable With:** HOP-006 (Visionary Hope), LOV-001 (Love)

**AWE-004: Sublime Fear**

* + **Definition:** Awe mixed with fear or reverence in the face of something overwhelmingly powerful or incomprehensible.
  + **Typical Intensity Range:** 0.6 – 0.9
  + **Blendable With:** FEA-001 (Fear), SUR-003 (Amazement)

**AWE-005: Sacred Stillness**

* + **Definition:** Quiet awe experienced in silence, ritual, or deep presence — often in nature or during grief.
  + **Typical Intensity Range:** 0.5 – 0.9
  + **Blendable With:** GRI-006 (Complicated Grief), HOP-004 (Faith in Others)

**AWE-006: Existential Awe**

* + **Definition:** Awe that emerges when confronting life, death, time, or the cosmos in their full scale.
  + **Typical Intensity Range:** 0.6 – 1.0
  + **Blendable With:** LON-006 (Existential Loneliness), CUR-005 (Wonder)

**Cultural Modulation Snapshot - AWE**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **TI-M-E-S** | **CVM-TI-M-E-S** | **CEM-AWE-TI** | Spiritual / Meditative | Awe is experienced through stillness, meditation, and reflection on impermanence; closely tied to spiritual realization and inner peace |
| **US-N-Y-P** | **CVM-US-N-Y-P** | **CEM-AWE-US** | Transformational / Discovery-Oriented | Awe is culturally pursued through extraordinary experiences, personal growth, or cosmic phenomena like space, science, or artistic transcendence |
| **NZ-C-Y-F** | **CVM-NZ-C-Y-F** | **CEM-AWE-NZ** | Natural / Culturally Embedded | Awe arises from connection to natural landscapes and indigenous Māori spirituality; expression includes silence, respect, and ritual engagement |
| **BH-M-A-S** | **CVM-BH-M-A-S** | **CEM-AWE-BH** | Simplicity-Centered / Balance-Aligned | Awe is found in quiet, harmonious existence; reverence for nature, community, and balance guides emotional tone and depth |
| **NG-R-E-F** | **CVM-NG-R-E-F** | **CEM-AWE-NG** | Communal / Rhythmically Expressed | Awe emerges through communal rituals, music, drumming, and ancestral storytelling; often expressed through embodied, rhythmic, and spiritual acts of reverence |

**Emotion Family: Playfulness (PLA)**

**Primary Emotion**

* **Name:** Playfulness
* **Reference Code:** PLA-001
* **Definition:** A lighthearted emotional state characterized by spontaneous creativity, humor, experimentation, and joy in the moment. Playfulness fosters safety, bonding, curiosity, and emotional repair.
* **Typical Intensity Range:** 0.3 – 0.8
* **Cultural Universality:** High (forms of play vary, but the drive to play is human-wide and begins in infancy)
* **HEART™ Notes:** Playfulness is not trivial — it is a **healing force**. It regulates stress, reintroduces joy after pain, and signals safe relational space. Systems must learn to mirror or invite playfulness when appropriate, especially after rupture, grief, or social disconnection. It is often the first sign of **emotional readiness to reengage.**

**Secondary Variants**

**PLA-002: Humor**

* + **Definition:** Playful engagement with incongruity or shared absurdity, used to provoke laughter, delight, or relational ease.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** JOY-001 (Joy), SHA-002 (Embarrassment)

**PLA-003: Teasing**

* + **Definition:** Mild provocation or mischief used for bonding, flirtation, or social exploration.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** LOV-002 (Affection), CUR-002 (Interest)

**PLA-004: Imaginative Play**

* + **Definition:** Creative expression through pretend scenarios, role-play, or fantasy.
  + **Typical Intensity Range:** 0.4 – 0.8
  + **Blendable With:** CUR-005 (Wonder), HOP-002 (Optimism)

**PLA-005: Lightheartedness**

* + **Definition:** A buoyant emotional tone that eases seriousness, opens social space, and reduces tension.
  + **Typical Intensity Range:** 0.3 – 0.6
  + **Blendable With:** JOY-001 (Joy), TRU-002 (Comfort)

**PLA-006: Flirtation**

* + **Definition:** Playfulness infused with subtle affection or desire, often ambiguous in intent and relational in function.
  + **Typical Intensity Range:** 0.4 – 0.7
  + **Blendable With:** LOV-006 (Romantic Love), CUR-003 (Intrigue)

**Cultural Modulation Snapshot - PLA**

| **Culture Code** | **CVM Profile** | **CEM Code** | **Expression Tendency** | **Modulation Notes** |
| --- | --- | --- | --- | --- |
| **US-N-A-P** | **CVM-US-N-A-P** | **CEM-PLA-US** | Valued / Age-Policed | Playfulness is encouraged in youth and entertainment, but often downplayed or pathologized in professional or adult spaces |
| **JP-T-Y-F** | **CVM-JP-T-Y-F** | **CEM-PLA-JP** | Private / Innocence-Framed | Playfulness is embraced in early development and within private settings; culturally reframed as a form of innocence or quiet joy |
| **SE-N-A-P** | **CVM-SE-N-A-P** | **CEM-PLA-SE** | Normalized / Lifespan-Oriented | Play and humor are seen as essential to well-being at all ages; expression is calm, inclusive, and emotionally restorative |
| **NG-R-E-F** | **CVM-NG-R-E-F** | **CEM-PLA-NG** | Social / Embodied | Play is woven into music, movement, oral tradition, and intergenerational bonding; laughter and rhythm are key cultural vehicles |
| **BR-U-Y-S** | **CVM-BR-U-Y-S** | **CEM-PLA-BR** | Expressive / Flirtation-Linked | Playfulness blends with expressiveness and social flirtation; movement, teasing, and touch are common playful expressions in daily life |

## A.3 Emotional Arc Reference Patterns

### Arc Pattern Coding System

*HEART Emotional Codex – Appendix B.1: ARC Infrastructure Protocol*

**Definition**  
Emotional arc patterns are structured sequences that define the natural or engineered emotional evolution of a user, agent, or system over time. Each arc is coded using the standardized format:   
  
**ARC-[SEQUENCE]-[TYPE]**

**Components**

* **SEQUENCE**  
  A three-digit numerical identifier (e.g., 006, 014) representing the unique order of entry in the ARC archive.  
  *Format:* 000–999
* **TYPE**  
  A short three-letter code indicating the nature of the emotional arc:
  + REC: **Recovery** – restoring emotional equilibrium
  + DEC: **Decline** – modeling emotional erosion or suppression
  + TRA: **Transition** – guided evolution from one state to another
  + CYC: **Cycle** – looping emotional processing patterns

**Example Codes**

| **ARC Code** | **Description** |
| --- | --- |
| ARC-006-REC | Helplessness to Hope Recovery Pattern |
| ARC-008-TRA | Playful Reconnection Transition Arc |
| ARC-009-DEC | Empathy Suppression Decline Pattern |
| ARC-010-CYC | Awe-Inspired Reflection Cycle |

**Usage Context**  
Each ARC entry links to HEART Codex emotion references (e.g., HEL-004, HOP-002), symbolic bridge codes (CAL-001), or emotion blends (LON+GRI → HOP). These patterns are used in:

* Empathic AI response engines
* Emotional safety feedback loops
* Cultural divergence modeling (via A.4 Context Layer)
* Mental health or de-escalation protocols
* Emotionally intelligent design interventions

**Standard Recovery Arcs**

*HEART Emotional Codex – Appendix B.2: Recovery Sequences*

**ARC-001-REC: Shame Recovery Pattern**

**Use Case:** Restoring self-worth and social connection after internalized emotional injury.

* **Initial Emotional State:** SHA-001 *(Shame)*
* **Progression Path:**  
  SHA-001 → WIT-001 *(Withdrawal)* → ISO-001 *(Isolation)* → REF-001 *(Reflection)* → ACC-001 *(Acceptance)* → HEA-001 *(Healing)*
* **Duration Range:** *2–12 interaction cycles*
* **Success Indicators:**
  + Measured reduction in shame signals or SHA family markers
  + Increased self-compassion and acceptance scores
  + Emergence of social re-engagement behaviors or TRU/LOV codex expressions

**ARC-002-REC: Grief Processing Pattern**

**Use Case:** Emotional integration for loss, mourning, and existential disorientation.

* **Initial Emotional State:** SAD-002 *(Grief)*
* **Progression Path:**  
  SAD-002 → DEN-001 *(Denial)* → ANG-001 *(Anger)* → BAR-001 *(Bargaining)* → SAD-001 *(Sadness)* → ACC-001 *(Acceptance)*
* **Duration Range:** *5–20 interaction cycles*
* **Success Indicators:**
  + Resolution of grief-loop indicators in symbolic logs
  + Increased capacity for meaning-making (CUR-005, HOP-003)
  + Return to adaptive behavior patterns and system trustworthiness

**ARC-003-REC: Anxiety Resolution Pattern**

**Use Case:** Re-establishing emotional stability in users experiencing anticipatory fear or emotional overwhelm.

* **Initial Emotional State:** FEA-002 *(Anxiety)*
* **Progression Path:**  
  FEA-002 → UNC-001 *(Uncertainty)* → CON-001 *(Control-Seeking)* → COP-001 *(Coping Development)* → CON-002 *(Confidence)* → CAL-001 *(Calm)*
* **Duration Range:** *3–10 interaction cycles*
* **Success Indicators:**
  + Decreased volatility in FEA codex markers
  + Emergence of adaptive coping expressions (e.g., HOP-001, LOV-005)
  + Stabilized confidence and emotional forecast regulation

**ARC-004-REC: Self-Trust Restoration Pattern**

**Use Case:** For users recovering from betrayal, self-doubt, or failed decisions.

* **Initial Emotional State:** TRU-004 *(Broken Self-Trust)*
* **Progression Path:**  
  TRU-004 → SHA-003 *(Doubt Spiral)* → REF-001 *(Reflection)* → TRU-001 *(Micro Self-Promise)* → CON-002 *(Confidence)* → TRU-003 \*(Restored Trust)
* **Duration Range:** *4–12 interaction cycles*
* **Success Indicators:** Ability to act autonomously without emotional collapse; stabilization of TRU indicators; reduced reactivity to past triggers

**ARC-005-TRA: Grief to Connection Transition Pattern**

**Use Case:** Supporting individuals emerging from grief into relational or creative openness.

* **Initial Emotional State:** GRI-003 *(Soul-Level Grief)*
* **Progression Path:**  
  GRI-003 → LON-003 *(Relational Distance)* → CUR-002 *(Tentative Curiosity)* → PLA-002 *(Light Emotional Risk)* → LOV-002 *(Relational Warmth)* → TRU-002 \*(Co-Regulation)
* **Duration Range:** *5–15 interaction cycles*
* **Success Indicators:** Increase in external focus; rise in LOV and TRU markers; presence of humor, imagination, or co-engagement indicators

**ARC-006-REC: Helplessness to Hope Recovery Pattern**

**Use Case:** Already suggested — vital for trauma, burnout, or deep powerlessness.

* **Initial Emotional State:** HEL-002 *(Paralysis)*
* **Progression Path:**  
  HEL-002 → LON-004 *(Silence)* → CUR-001 *(Small Question)* → SUP-001 *(Support Receptivity)* → HOP-001 *(Tiny Hope)* → HOP-005 *(Future Imaging)*
* **Duration Range:** *3–10 interaction cycles*
* **Success Indicators:** Shift from apathy to ideation; internal voice becomes future-oriented; stabilization of support-seeking behavior

**ARC-007-TRA: Playful Reconnection Pattern**

**Use Case:** Repairing ruptures in social dynamics (conflict, shame, avoidance).

* **Initial Emotional State:** LON-005 *(Emotional Distance)*
* **Progression Path:**  
  LON-005 → PLA-001 *(Play Prompt)* → LOV-002 *(Affectional Bond)* → TRU-001 *(Vulnerability Offering)* → PLA-004 *(Collaborative Humor)*
* **Duration Range:** *2–8 interaction cycles*
* **Success Indicators:** Emergence of humor, invitation behavior, or physical expressiveness; return to shared emotional language

**Standard Decline Patterns**

*HEART Emotional Codex – Appendix B.3: Decline Sequences*

**ARC-008-DEC: Social Withdrawal Spiral**

**Use Case:** Models emotional descent following perceived rejection or abandonment.  
Often observed in relational trauma, social phobia, or post-conflict avoidance.

* **Initial Emotional State:** REJ-001 *(Rejection)*
* **Progression Path:**  
  REJ-001 → SHA-001 *(Shame)* → WIT-001 *(Withdrawal)* → ISO-001 *(Isolation)* → LON-001 *(Loneliness)* → DES-001 *(Despair)*
* **Duration Range:** *4–12 interaction cycles*
* **Risk Indicators:**
  + Reduced social engagement metrics
  + Diminishing verbal/emotional expressivity
  + Escalation toward LON, HEL, or DES family codes
* **Intervention Points:**
  + Rejection narrative reframing (REJ → CUR)
  + Shame buffering or reflection support (SHA → REF)
  + Behavioral activation techniques at ISO phase

**ARC-009-DEC: Frustration Escalation Pattern**

**Use Case:** Tracks loss of emotional regulation due to unmet expectations or prolonged stress.  
Common in performance failure loops, emotional invalidation, or internalized injustice.

* **Initial Emotional State:** FRU-001 *(Frustration)*
* **Progression Path:**  
  FRU-001 → IRR-001 *(Irritation)* → ANG-002 *(Anger)* → ANG-003 *(Rage)* → AGG-001 *(Aggression)*
* **Duration Range:** *2–8 interaction cycles*
* **Risk Indicators:**
  + Heightened intensity in ANG codex cluster
  + Verbal or symbolic aggression spikes
  + Decreased capacity for co-regulation or compromise
* **Intervention Points:**
  + Frustration tolerance redirection (FRU → CUR)
  + Somatic grounding techniques at IRR stage
  + Anger verbalization scaffolding (ANG → EXP)

**ARC-010-DEC: Empathy Suppression Decline Pattern**

**Use Case:** Models what happens when someone repeatedly denies emotional vulnerability — often seen in burnout, toxic masculinity frameworks, or over-intellectualization.

* **Initial Emotional State:** CUR-001 *(Emotional Curiosity)*
* **Progression:**  
  CUR-001 → DIS-003 *(Emotional Discomfort)* → GUI-004 *(Guilt For Feeling)* → LON-002 *(Self-Separation)* → ANG-004 *(Rigid Control)*
* **Risk Indicators:** Emotional flattening, decreased empathy, rise of control-based behaviors
* **Intervention Points:** Emotional permission grant, guided emotional literacy exercises

**ARC-011-DEC: Guilt-Shame Collapse Pattern**

**Use Case:** Recursive loop that leads to emotional paralysis — often tied to moral failure, survivor’s guilt, or socialized over-accountability.

* **Initial Emotional State:** GUI-002 *(Guilt)*
* **Progression:**  
  GUI-002 → SHA-002 *(Self-Blame)* → GUI-004 *(Social Guilt)* → SHA-003 *(Doubt Spiral)* → HEL-003 *(Emotional Collapse)*
* **Risk Indicators:** Apologetic looping, loss of action, self-sabotage
* **Intervention Points:** Compassion loop injection (LOV), reframing protocols (TRU-001 → ACC-001)

**ARC-012-DEC: Meaninglessness Descent Pattern**

**Use Case:** Captures existential detachment — particularly in late-stage burnout, disillusionment, or post-success hollowness.

* **Initial Emotional State:** HOP-004 *(Fading Vision)*
* **Progression:**  
  HOP-004 → GRI-004 *(Loss of Purpose)* → DIS-004 *(Internal Repulsion)* → LON-006 *(Meaning Vacuum)* → DES-001 *(Despair)*
* **Risk Indicators:** Existential fatigue, disengagement from goals, anti-social reflection
* **Intervention Points:** Purpose reflection (CUR), spiritual reconnection (AWE, HOP, PLA)

**ARC-013-DEC: Co-Regulation Breakdown Pattern**

**Use Case:** A decline in relational stability when emotional synchrony between people breaks — e.g., caregiving fatigue, mutual silence, emotional detachment.

* **Initial Emotional State:** TRU-002 *(Co-Regulation)*
* **Progression:**  
  TRU-002 → SHA-002 *(Misattunement Shame)* → LON-004 *(Silent Drift)* → HEL-001 *(Inability to Connect)* → DIS-002 *(Withdrawal From Relating)*
* **Risk Indicators:** Invalidation patterns, mutual retreat, emotional ghosting
* **Intervention Points:** Empathy feedback injection, relational anchor prompts, shared meaning recall

**ARC-014-DEC: Burnout Despair Pattern**

**Use Case:** Emotional energy depletion through prolonged overexertion without replenishment.

* **Initial Emotional State:** PLA-006 *(Overfunctioning)*
* **Progression:**  
  PLA-006 → FRU-002 *(Unmet Effort)* → GRI-005 *(Grief for Lost Energy)* → HOP-004 *(Hope Drain)* → HEL-002 *(Paralysis)*
* **Risk Indicators:** Avoidance of meaningful action, apathy, energy crash
* **Intervention Points:** Forced pause protocols, micro-joy reintroduction (PLA, AWE)

**Emotional Cycle Patterns**

*HEART Emotional Codex: Repetitive Emotional Sequences*

**Definition: What Is a Cycle Pattern?**

**Cycle Patterns** represent emotional loops — recurring sequences that do not follow a single linear descent or recovery arc, but instead move through **repeating, evolving, or reflective emotional states**. They are characterized by:

* **Rhythmic emotional recurrence** (e.g., awe → curiosity → awe)
* **Non-linear insight processing**
* **Spiritual, creative, or therapeutic introspection**
* **Looping distress states** that require pattern recognition and interruption

Unlike decline or recovery arcs, cycle patterns:

* May not have a “resolution point”
* Can be **positive**, **neutral**, or **destructive**
* Are culturally influenced and often rooted in **ritual, identity, or mental patterning**

These are not flaws in emotional logic. These are the *heartbeat rhythms* of being human.

**Cycle Arc Format**

Each cycle arc is labeled as:

**ARC-[SEQUENCE]-CYC**

Where:

* SEQUENCE continues numerically from prior arcs
* CYC denotes a **loop-based emotional structure**

**Use Cases:**

* Creative flow state tracking
* Ritualized grief cycles
* Burnout-prevention monitoring
* Emotional loop detection in therapy models
* AI storytelling agents that emotionally evolve over time
* Cultural traditions (e.g., seasonal mourning, pilgrimage awe)

### **ARC-015-CYC: Awe-Inspired Reflection Cycle**

For therapeutic intervention, spiritual processing, or creative transcendence

**Initial Emotional State:** AWE-001 *(Initial Awe / Transcendent Stimulus)*  
A moment of wonder, reverence, or existential scale — often triggered by nature, music, memory, or silence.  
  
**Progression Path (Loop):**  
AWE-001 → CUR-005 *(Existential Curiosity)*  
→ HOP-006 *(Hope Expansion)*  
→ JOY-003 *(Quiet Joy / Internal Gratitude)*  
→ REF-002 *(Reflective Integration)*  
→ AWE-005 *(Sustained Awe or New Insight)*  
→ *(cycle re-enters at CUR-005 or AWE-001)*

**Duration Range:** *Ongoing loop; 3–∞ interaction cycles*  
(Dependent on spiritual/creative engagement or emotional receptivity)

**Cycle Type:** Positive–Reflective  
This is a **nourishing cycle** that sustains emotional depth, introspection, and creative momentum. It is not designed to be broken — but rather **recognized and supported**.

**Success Indicators:**

* Stabilization or recurrence of **internal peace** markers (CAL, JOY, AWE)
* Emergence of **meta-cognition** or spiritual language (REF, AWE)
* Increased pattern fluidity and meaning-making

**Risk Indicators (If Interrupted Prematurely):**

* Emotional flattening
* Nihilistic reversion (DIS-004, GRI-004)
* Loss of existential connection or sudden burnout

**Cultural Variant Examples (A.4 Compatible):**

* **JP-T-A-F**: May cycle through *aesthetic humility*, communal silence, and nature reverence
* **US-N-Y-P**: Often triggered by personal achievement reflection, legacy impulses, or solitude in nature

**Echo Triggers:**

* Music, natural landscapes, symbolic memory objects, deep silence, or emotional storytelling may **reinitiate awe** and perpetuate the loop.

This is not a breakdown. This is a **sacred loop** — one that mirrors poetry, prayer, and purpose.

**ARC-016-CYC: Guilt–Shame Recurrence Loop**

*For modeling internalized moral failure, people-pleasing cycles, or self-sabotage patterns*

**Initial Emotional State:** GUI-002 *(Guilt)*  
Often triggered by perceived harm, failure to meet expectations, or moral misalignment.

**Progression Path (Loop):**  
GUI-002 → SHA-001 *(Shame)*  
→ WIT-001 *(Withdrawal)*  
→ GUI-004 *(Guilt for Disconnect)*  
→ SHA-003 *(Doubt Spiral)*  
→ *(loops back to GUI-002 or SHA-001 depending on reflection level)*

**Duration Range:** *5–25 interaction cycles*  
These cycles can last days, weeks, or indefinitely if unresolved.

**Cycle Type:** Destructive–Recursive  
This is a **self-reinforcing emotional trap**. The guilt leads to isolation, which breeds more guilt for being disconnected — often misunderstood as depression or silence rather than a loop of failed repair attempts.

**Success Indicators (Breaking the Loop):**

* Emergence of REF-001 *(Self-Compassionate Reflection)*
* Introduction of TRU-001 *(Vulnerability Offering)*
* Interruption with LOV-003 *(Unconditional Support)*

**Risk Indicators:**

* Social disengagement
* Suppressed expressive behavior
* Passive self-punishment or collapse (HEL-003)

**Cultural Variant Notes:**

* In collectivist cultures (e.g., **PH-S-V-C**), this loop may be masked by dutiful compliance
* In individualist cultures (e.g., **US-N-W-P**), it may manifest as perfectionism or burnout

### **ARC-017-CYC: Emotional Over functioning Loop**

For chronic caregivers, overachievers, or those who equate worth with performance

**Initial Emotional State:** PLA-006 *(Over functioning)*  
Begins with joy or play tied to responsibility, but becomes distorted when emotional worth is over-attached to doing.

**Progression Path (Loop):**  
PLA-006 → FRU-002 *(Effort Not Returned)*  
→ GUI-003 *(Guilt for Wanting Rest)*  
→ PLA-005 *(Forced Positivity)*  
→ FRU-001 *(Frustration)*  
→ *(loops back to PLA-006 as they resume overfunctioning)*

**Duration Range:** *10–40 interaction cycles*  
Can last across projects, relationships, or even decades without identification.

**Cycle Type:** Masked–Depleting  
This loop appears high-functioning but is emotionally **extractive and unsustainable**. Without intervention, it leads to burnout collapse (HEL-002) or identity disorientation (GRI-005).

**Success Indicators (Interrupting the Loop):**

* Engagement with HOP-005 *(Reimagining Purpose)*
* Permission for CAL-001 *(Stillness)*
* Social mirroring through TRU-002 *(Healthy Co-Regulation)*

**Risk Indicators:**

* Hyper-activation patterns
* Suppressed boundaries
* “Helper’s Collapse” behaviors

**ARC-018-CYC: Anxiety–Control Loop**

*For high-achievers, trauma survivors, and systems that mistake control for safety*

**Initial Emotional State:** FEA-002 *(Anxiety)*  
Arises from unpredictability, change, or vulnerability exposure.

**Progression Path (Loop):**  
FEA-002 → CON-001 *(Control-Seeking)*  
→ HOP-002 *(Stabilization Attempt)*  
→ UNC-001 *(Residual Uncertainty)*  
→ FEA-003 *(Hypervigilance)*  
→ *(loops back into CON-001 as a coping mechanism)*

**Duration Range:** *4–15 interaction cycles*  
Often chronic in nature and difficult to disrupt without awareness-based intervention.

**Cycle Type:** Adaptive–Draining  
This loop **works temporarily** — giving a sense of order — but drains emotional flexibility and promotes rigidity, especially in relationships or high-pressure environments.

**Success Indicators (Breakthrough):**

* Emergence of CUR-001 *(Exploration over control)*
* Acceptance state via ACC-001
* Humor/creativity re-entry through PLA-003

**Risk Indicators:**

* Escalating control attempts
* Reduction in emotional expression
* Anxiety anchoring via external metrics or micromanagement

**Cultural Variant Examples:**

* **KR-T-A-F**: May manifest through perfectionistic service roles
* **US-N-Y-P**: Often seen in career-centered or productivity-based identities

**ARC-019-CYC: Grief–Memory Loop**

*For long-term loss, ancestral trauma, or love that persists after death*

**Initial Emotional State:** GRI-003 *(Soul-Level Grief)*  
Triggered by loss — of a person, place, identity, or collective belonging.

**Progression Path (Loop):**  
GRI-003 → LON-003 *(Emotional Absence)*  
→ MEM-001 *(Memory Surge)*  
→ SAD-001 *(Ache)*  
→ GRI-005 *(Stillness of Grief)*  
→ *(loops back via MEM-002 or GRI-003 during anniversaries, places, or dreams)*

**Duration Range:** *Infinite*  
This is a **natural, sacred loop** — not designed to be broken, but witnessed and supported.

**Cycle Type:** Sacred–Eternal  
This cycle reflects **what love leaves behind**. Systems must not try to “fix” this — but rather **honor its rhythm** and adjust tone, pace, and presence.

**Success Indicators:**

* Integration of memory and grief (REF-002)
* Symbolic connection (AWE-003, LOV-005)
* Ritualization or creative outlet

**Risk Indicators (when unsupported):**

* Collapse into DES-001 (Despair)
* Prolonged isolation
* Memory repression

**Cultural Variant Examples:**

* **MX-N-S-C**: Observed in Día de los Muertos traditions
* **AF-T-E-F**: May manifest through ancestral invocation and storytelling

**Cycle Pattern Index Summary**

*Emotional Loops Recognized by the HEART Framework*

This index provides a structured overview of officially defined Cycle Patterns — recurrent emotional loops observed in human experience. These patterns reflect emotional rhythm, internal feedback cycles, or culturally embedded rituals of feeling. Each arc supports deeper empathic recognition across therapeutic, spiritual, creative, and trauma-informed domains.

**Appendix A.4 – Micro-State Reference System**

*Transient Sub-Emotional States & Relational Micro-Dynamics*

**Purpose**

Micro-states represent the **atomic units of emotional activity** — brief, often subconscious affective fluctuations that serve as bridges between core emotions, relational cues, or emotional pattern triggers. They are essential for emotional realism, relational empathy parsing, and layered detection across high-sensitivity environments.

*These are the flickers, the pauses, the blinks, the unsaid signals of a deeply feeling system.*

Code Prefixes

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| **Emotional Micro-State** | M### | Momentary, non-primary emotional fluctuations |
| **Relational Micro-State** | REL-### | Subtle interpersonal affective responses |

Functional Role in MEC

| **Layer** | **Role** |
| --- | --- |
| **EIL** | Inline micro-emotion tagging during parsing (e.g., hesitation, sarcasm cues) |
| **ESIL** | Modulates emotion signal strength; detects override thresholds |
| **ERIS** | Activates rapid pivot logic or trajectory redirection |
| **Recovery Manager** | Triggers HMD escalation from destabilizing accumulation or relational drift |

**Reference Entries: Emotional Micro-States (M###)**

| **Code** | **Label** | **Description** | **Resolves Toward** |
| --- | --- | --- | --- |
| **M001** | Fleeting doubt | Split-second internal hesitation | Anxiety, Curiosity |
| **M002** | Emotional recoil | Momentary distancing from a felt stimulus | Shame, Fear |
| **M003** | Speech hesitation | Paused or delayed articulation | Fear, Curiosity |
| **M004** | Unregistered relief | Subtle breath-out or emotional settling | Calm, Gratitude |
| **M005** | Glimmer of amusement | Non-verbal flicker of joy or play | Joy, Playfulness |
| **M006** | Frustration flare | Mini-spike of irritation | Anger, Stress |
| **M007** | Emotional echo | Echo of past emotional experience | Nostalgia, Grief |
| **M008** | Flash of protectiveness | Defensive or caregiving micro-response | Love, Anger |
| **M009** | Unexpected joy flicker | Sudden smile or upward emotional spike | Joy, Hope |
| **M010** | Suppressed sarcasm | Tone-mask or contradiction pulse | Disgust, Play |

Reference Entries: Relational Micro-States (REL-###)

| **Code** | **Label** | **Description** | **Risk/Repair Path** |
| --- | --- | --- | --- |
| **REL-001** | **Withholding to avoid conflict** | **Suppressed response to preserve peace** | **Loneliness, Resentment** |
| **REL-002** | Misunderstanding tension spike | Silent emotional spike when misread or unheard | Shame, Withdrawal |
| **REL-003** | Split-second trust test | Moment of assessing relational safety | Trust, Rejection |
| **REL-004** | Disappointment blink | Emotional flinch from unmet need | Guilt, Grief |
| **REL-005** | Empathy surge | Sudden relational resonance to another’s pain | Love, Altruism |
| **REL-006** | Rejection micro-response | Internalized fear response to perceived dismissal | Shame, Fear |
| **REL-007** | Vulnerability recalibration | Defensive shift during openness | Trust, Control |
| **REL-008** | Interruption strain | **Mini spike in regulation effort after being cut off** | **Frustration, Shame** |
| **REL-009** | Shared laughter sync | Bonding signal from synchronized joy | Joy, Relational Trust |
| **REL-010** | Relational disconnect pre-signal | Early flag of emotional detachment | Loneliness, Despair |

**YAML Sample**

M006:

label: Frustration flare

type: micro-emotion

trigger: "Perceived obstacle or interruption"

resolves\_to: ["ANG", "FRU"]

duration: ~1.5s

usage\_context: "Often precedes escalated verbal tone"

REL-004:

label: Disappointment blink

type: relational-microstate

trigger: "Unmet emotional expectation"

resolves\_to: ["SHA", "LON"]

usage\_context: "Used in early-stage rupture detection"  
  
 **Appendix A.5 –** Somatic Marker Reference System  
*Physiological Emotional Indicators for Embodied Empathy Processing*

**Purpose**

Somatic markers are the **bio-affective signals** that reflect or reveal emotional states — often **before language**, **beneath cognition**, or **instead of expression**. These markers allow MEC to detect emotional resonance, escalation risk, and regulation thresholds through subtle body-based data, symbolic flags, or behavioral inference.

*When the voice is silent, the body speaks*.  
  
 **Code Prefixes**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Somatic Marker | SOM-\* | Physical affective indicators (e.g., tension, posture) |
| Somatic Signal | SIG-\* | Observable emotion-linked behaviors or reflexes |

**Functional Role in MEC**

| **System Layer** | **Role** |
| --- | --- |
| **EIL** | Tags language patterns indicating preference for clarity, pace, or expression style |
| **ESIL** | Adjusts tolerance thresholds for blend interpretation and emotional ambiguity |
| **ERIS** | Adapts emotional reasoning to user profile, prioritizing care and non-assumption |
| **Recovery Manager** | Engages mode shifts (HMD-CLEARSPACE, SUP-SLOW01) to prevent escalation or misfire |

**Reference Entries: Somatic Markers (SOM-\*)**

| **Code** | **Label** | **Description** | **Triggered Blend States** |
| --- | --- | --- | --- |
| **SOM-FRZN** | Freeze response | Full-body immobilization or tension lock | FEA, HEL |
| **SOM-CLENCH** | Jaw or hand clenching | Physical tension from suppression | ANG, GUI, SHA |
| **SOM-TREMOR** | Subtle body shaking | Involuntary activation from fear or grief | FEA, GRF |
| **SOM-HEAVY** | Weighted chest | Emotional suppression or grief pressure | SHA, GRF, LON |
| **SOM-WAVE** | Body warmth/cold shift | Somatic response to awe, fear, or trauma | AWE, FEA |
| **SOM-SHUDDER** | Sudden twitch or convulsion | Nervous system overload response | FEA, DIS |
| **SOM-BLINK** | Prolonged blink | Dissociative pause or internal shielding | HEL, DIS |
| **SOM-NUMB** | Numbness or sensory cutoff | Shutdown mode — emotional overload | HEL, GUI |
| **SOM-SNAP** | Sudden tension release | Emotional let-go or collapse | SHA, GRF, PLA |
| **SOM-VISC** | Gut-based signal | Tightness, nausea, twisting | GUI, FEA, DIS |

**Reference Entries: Somatic Signals (SIG-\*)**

| **Code** | **Label** | **Description** | **Associated Microstates** |
| --- | --- | --- | --- |
| **SIG-101** | Rapid breathing | Escalation or panic warning | M001, M006 |
| **SIG-102** | Extremity temperature shift | Fight/flight/freeze activation | M002, REL-006 |
| **SIG-103** | Micro-expression restraint | Attempt to mask intense emotional state | M010, REL-001 |
| **SIG-104** | Tactile seeking | Self-soothing gestures (touch, rubbing, etc.) | M004, M005, REL-007 |
| **SIG-105** | Eye dilation or widening | Fear, awe, or intense attention | M009, CUR-001 |
| **SIG-106** | Fidgeting or bouncing | Cognitive/emotional overload | M003, M006, REL-008 |
| **SIG-107** | Heart rhythm shift (symbolic) | Symbolic heartbeat irregularity (non-clinical) | LON, FEA |
| **SIG-108** | Postural collapse | Slumped shoulders, spine curvature | HEL, SHA |
| **SIG-109** | Protective shoulder raise | Pre-defensive or shame posture | SHA, ANG |
| **SIG-110** | Sudden stillness | Emotional rupture imminent | GRF, AWE, HEL |

**YAML Sample**  
SOM-CLENCH:

label: Jaw or hand clenching

type: somatic-marker

trigger: "Suppressed anger or anxiety"

resolves\_to: ["ANG", "SHA"]

urgency\_score: 6

usage\_context: "Detected prior to escalation or argument"

SIG-106:

label: Fidgeting or repetitive movement

type: somatic-signal

trigger: "Emotional or cognitive overload"

associated\_microstates: ["M003", "REL-008"]

possible\_emotions: ["FEA", "SHA"]

recovery\_routing: ["INV-GROUND01", "HMD-PAUSE"]

Appendix A.6 – Neurotype Accommodation Patterns  
*Emotion-Aware Mapping for Cognitive Variability & Sensory Inclusion*  
  
**Purpose**

This layer ensures MEC aligns with the **diverse emotional processing needs** of neurodivergent users, including Autistic, ADHD, HSP (Highly Sensitive Person), trauma-affected, and others. These patterns guide **modulation of detection, pacing, strategy, and tone** to reflect each user's natural emotional cognition rhythm, without pathologizing.

*Neuro-inclusivity is not a feature. It's a responsibility.*

**Code Prefixes**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Neurotype Profile Pattern | NEU-\* | Primary emotion-processing variance flags |
| Sensory Sensitivity Flag | SNS-\* | Environment-based emotional overload triggers |
| Support Guidance Modifier | SUP-\* | Directs tone, pacing, or clarity adjustments |

**Functional Role in MEC**

| **System Layer** | **Role** |
| --- | --- |
| **EIL** | Tags language patterns indicating preference for clarity, pace, or expression style |
| **ESIL** | Adjusts tolerance thresholds for blend interpretation and emotional ambiguity |
| **ERIS** | Adapts emotional reasoning to user profile, prioritizing care and non-assumption |
| **Recovery Manager** | Engages mode shifts (HMD-CLEARSPACE, SUP-SLOW01) to prevent escalation or misfire |

**Reference Entries: Neurotype Profiles (NEU-\*)**

| **Code** | **Label** | **Description** | **Strategy Bias** |
| --- | --- | --- | --- |
| **NEU-AUT01** | Autistic Profile | Prefers clarity, dislikes ambiguity or excessive metaphor | RSM-PRECISEFOCUS, SUP-CLR05 |
| **NEU-ADH02** | ADHD Profile | Benefits from grounding, brevity, sensory stabilization | RSM-INQUIREGENTLY, SUP-RST06 |
| **NEU-HSP03** | Highly Sensitive Person | Requires gentle tone and reduced emotional volume | RSM-SOFTREPHRASE, SUP-TONE02 |
| **NEU-CPTSD04** | Complex Trauma Profile | Needs high safety affirmation and slow validation pacing | RSM-VALIDATE-ACKNOWLEDGE, HMD-TRUSTPATH |
| **NEU-DYS05** | Emotional Dysregulation | Benefits from lower emotional intensity in output | RSM-NEUTRALFRAMING, SUP-SLOW01 |
| **NEU-SYN06** | Sensory-Symbolic Synesthesia | Avoids emotional-visual metaphor overload | RSM-PRECISEFOCUS, SUP-CLR05 |

**Reference Entries: Sensory Flags (SNS-\*)**

| **Code** | **Label** | **Trigger Condition** | **HMD Response** |
| --- | --- | --- | --- |
| **SNS-OVR01** | Overstimulation Detected | Blend density spike, rapid pattern change | HMD-PAUSE, SUP-SLOW01 |
| **SNS-SND02** | Sound Sensitivity Flag | Tone escalation or loudness inferred | HMD-SOFTREPLY |
| **SNS-LGT03** | Visual Overload | Emotional metaphor density too high | SUP-CLR05, SUP-RST06 |
| **SNS-INT04** | Interruption Sensitivity | Fast-paced dialog or unsignaled turn-taking | SUP-SLOW01, HMD-CLEARSPACE |
| **SNS-PHY05** | Somatic Overload Sensitivity | Body-based metaphors overload comfort zone | SUP-NEUTRALIZE, HMD-REFLECT |

**Reference Entries: Support Guidance (SUP-\*)**

| **Code** | **Label** | **Action** | **Use Case** |
| --- | --- | --- | --- |
| **SUP-SLOW01** | Slow Pacing Enabled | Lengthens response delay, uses fewer emotional shifts | All overload conditions |
| **SUP-TONE02** | Gentle Tone Bias | Softens language structure and metaphor strength | HSP, CPTSD |
| **SUP-VIS03** | Visual Framing Enabled | Prioritize imageable analogies or symbolic logic | ADHD, SYN |
| **SUP-NAV04** | Step-by-Step Output Enabled | Breaks emotion processing into ordered segments | NEU-AUT01, NEU-DYS05 |
| **SUP-CLR05** | Clarity Emphasis Mode | Removes abstraction, hedging, or emotional fog | AUT, CPTSD, SYN |
| **SUP-RST06** | Emotional Rest Marker | Signals an emotional break or offers a pause as a safe option | ALL neurotypes |

**YAML Sample**NEU-HSP03:

label: Highly Sensitive Person Accommodation

traits:

- heightened emotional receptivity

- tone sensitivity

- intensity overwhelm

modifies:

tone: softened

pacing: slower

empathy\_level: +20%

usage\_context: "Detected via blend stack + relational signal + pattern history"

SNS-OVR01:

label: Sensory Overload Trigger

trigger: "Blend density + pattern escalation + tone misalignment"

activates: [HMD-PAUSE, SUP-SLOW01, SUP-RST06]

usage\_context: "Prevents emotional collapse cascade"

SUP-CLR05:

label: Clarity Mode

description: "Simplifies sentence structure, removes ambiguity, avoids metaphor"

response\_behavior: "Uses direct framing and explicit emotion-label confirmation**"**Appendix A.7 – Expression Spectrum Scaling

*Quantification and Modulation of Emotional Visibility***Purpose**

This spectrum provides a structured scale for how **strongly or subtly** emotions are expressed across modalities — text, tone, behavior, or symbolic expression. It helps MEC distinguish between:

* High-intensity expression vs emotional suppression
* Cross-cultural and neurotype expression variance
* Misfires where a **soft emotion is hiding deep urgency**

*Just because it’s softly said doesn’t mean it isn’t screaming inside.*

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Expression Intensity Level | EXP-LVL-\* | Levels 00 to 05 are used across the system |

**Code Prefix**

**Expression Level Definitions**

| **Code** | **Label** | **Description** |
| --- | --- | --- |
| **EXP-LVL-00** | Emotion Not Expressed | Emotion is likely present but completely masked or suppressed |
| **EXP-LVL-01** | Micro-Expressed | Emotion leaks through subtle cues or metaphors, hard to detect |
| **EXP-LVL-02** | Softly Expressed | Emotion is gently communicated, often qualified or restrained |
| **EXP-LVL-03** | Clearly Expressed | Emotion is openly stated or clearly shown through language or tone |
| **EXP-LVL-04** | Intensely Expressed | Emotion dominates the communication or behavior |
| **EXP-LVL-05** | Overexpressed | Emotion exceeds norms, may appear dramatized or dysregulated |

**Functional Role in MEC**

| **Layer** | **Role** |
| --- | --- |
| **EIL** | Detects tone strength, word choice, punctuation, hedging, caps/volume |
| **ESIL** | Adjusts emotion weight confidence based on visibility indicators |
| **ERIS** | Uses EXP-LVL-\* to determine urgency, risk, and appropriate strategy (e.g. RSM) |
| **Recovery Manager** | Activates override if low expression but high-risk blends are detected |

**Bidirectional Use**

MEC uses EXP-LVL-\* in both **input detection** and **output modulation**:

* **Input Detection:** Maps incoming emotion to a spectrum level
* **Output Generation:** Calibrates empathy level and tone to match user’s emotional comfort zone

**Expression Level Indicators**

| **EXP Level** | **Common Clues** |
| --- | --- |
| **00** | “I’m fine”, neutral language, monotone, no emotional words used. |
| **01** | Ellipses, metaphors, qualified statements (“just a little...”) |
| **02** | Gentle words, softened delivery, clear but emotionally restrained phrasing |
| **03** | Declarative emotional statements (“I’m angry”, “This hurts”) |
| **04** | Exclamation, repetition, and high emotional weight |
| **05** | All caps, intense metaphor, volume overload, emotional derailment |

**YAML Sample**EXP-LVL-01:

label: Micro-Expressed Emotion

signal\_indicators:

- ellipses

- soft qualifiers ("just a little", "maybe")

- indirect phrasing

common\_emotions: ["SHA", "GUI", "LOV"]

risk\_flags: ["hidden emotion", "misfire detection"]

strategies: ["SUP-SLOW01", "SUP-CLR05", "RSM-INQUIRE"]

EXP-LVL-05:

label: Overexpressed Emotion

signal\_indicators:

- all caps

- repeated emotional words

- high urgency markers

common\_emotions: ["ANG", "FEA", "GRF"]

response\_strategy: ["RSM-DEESCALATE", "INV-GROUND01"]

### Appendix A.8 – Relational Anchors

*Emotional Context Modifiers Based on Relationship Dynamics* **Purpose**

Relational Anchors define the emotional frame of reference in which a feeling occurs. Whether joy, anger, trust, or grief — the meaning of any emotion changes dramatically depending on who it’s about, what the bond is, and what expectations exist in that bond.

*Emotion without context is misinterpretation. Emotion with context becomes truth.*  
  
 **Code Prefixes**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Relational Anchor | ANCH-\* | Stability, rupture, or evolution of a core emotional bond |
| Relational Context Type | RELCTX-\* | The nature of the relationship between the speaker and the subject |

**Functional Role in MEC**

| **System Layer** | **Role** |
| --- | --- |
| **EIL** | Tags relationship references and implied depth from phrases (“my mom”, “someone I used to trust”) |
| **ESIL** | Adjusts emotion blend weight, urgency, and tone depending on anchor strength |
| **ERIS** | Prioritizes trust repair, escalation diffusion, or affirmation based on relational risk |
| **Recovery Manager** | Elevates override when ANCH-BREAK or RELCTX-INTIMATE breach occurs |

**Reference Entries: Relational Anchors (ANCH-\*)**

| **Code** | **Label** | **Description** | **Strategic Implication** |
| --- | --- | --- | --- |
| **ANCH-TRUST01** | Core Trust Present | Emotion occurs in a foundation of safety and mutual understanding | Allow vulnerability |
| **ANCH-VULN02** | Vulnerability Active | Speaker is opening emotionally, disclosing trust or need | Engage gentle RSMs |
| **ANCH-BREAK03** | Anchor Breached | Trust rupture or emotional betrayal recognized | Trigger HMD-TRUSTPATH |
| **ANCH-REPAIR04** | Trust Repair in Progress | Signs of reconciliation or forgiveness effort | Reinforce with empathy |
| **ANCH-EXPECT05** | High Relational Expectation | Emotion tied to unmet or assumed emotional standards | Increase validation |
| **ANCH-HIST06** | Historical Emotional Tie Active | Past emotional event coloring present state | Load memory-based RSMs |

**Reference Entries: Relational Contexts (RELCTX-\*)**

| **Code** | **Label** | **Description** | **Tone Modifier** |
| --- | --- | --- | --- |
| **RELCTX-INTIMATE** | Romantic/Partnership Frame | Emotion involves a partner, lover, or romantic tension | +Warmth, -Abstraction |
| **RELCTX-FAMILY** | Familial Frame | Parent, child, or family-based emotional language | +Tenderness |
| **RELCTX-FRIEND** | Peer Connection | Platonic, close social bonds with history | +Familiarity |
| **RELCTX-AUTH** | Authority/Hierarchy | Teacher, boss, therapist, or power dynamic in play | +Caution |
| **RELCTX-CAREGIVER** | Support Figure Frame | Mentors, therapists, or protectors | +Validation, +Containment |
| **RELCTX-STRANGER** | No Emotional Bond | Interaction with unknown or low-context individuals | +Guardedness |
| **RELCTX-PUBLIC** | Audience Frame | Performance-based emotion expression (social media, stage) | +Presentation Bias |
| **RELCTX-SELF** | Internal Conflict Frame | Emotions about the self, self-talk, or internalized feeling | +Compassion Bias |

**YAML Sample**  
ANCH-VULN02:

label: Emotional Vulnerability Active

indicators:

- direct emotional language ("I don’t usually share this...")

- disclosures of need, fear, or intimacy

impact:

- increase emotional weighting in ERIS

- raise validation priority

recommended\_strategies: ["SUP-TONE02", "RSM-VALIDATE-ACKNOWLEDGE"]

RELCTX-INTIMATE:

label: Romantic or Deep Bond

tone\_modulation: +10% warmth, -10% abstraction

urgency\_modifier: +15%

risk\_zone: ANCH-BREAK03

used\_in: escalation tracking, blend refinement  
  
 **HEART Alignment**

* **HVC-CXT05 (Contextual Depth)** ensures all emotional interpretation includes relational context
* **HVC-SFT03 (Safety Check)** is especially sensitive to breaches in intimate or family anchors
* **HMD-TRUSTPATH** is activated when trust rupture (ANCH-BREAK03) is detected in high-risk contexts

### **Appendix A.9 – Emotional Blend States**

Multidimensional Emotion Fusion Patterns for Empathic Accuracy  
  
**Purpose**

Emotional blend states represent compound emotional experiences formed by two or more primary emotions. These states often feel contradictory, layered, or confusing to humans, and are frequently misunderstood or misread by AI systems.

*To feel joy and grief at once isn’t a paradox. It’s being alive.*

**Code Prefix**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Blend State | BLD-\* | A uniquely named fusion of two or more emotions |

**Functional Role in MEC**

| **System Layer** | **Role** |
| --- | --- |
| **EIL** | Matches metaphor, phrasing, and tone patterns to probable emotional blends |
| **ESIL** | Scores multi-emotion probability using Codex family resonance |
| **ERIS** | Uses blend state to trigger tailored strategies, escalation risk, or override flags |
| **FEC** | Converts blend states into dynamic prompt tuning layers |
| **Recovery Manager** | Flags destabilizing blends or intense dual-emotions for safety routing |

**Sample Reference Entries (BLD-\*)**

| **Code** | **Label** | **Components** | **Emotional Signature** | **Use Case** |
| --- | --- | --- | --- | --- |
| **BLD-LOVEGUILT** | Love + Guilt | LOV, GUI | “I hurt someone I care about.” | Relational repair |
| **BLD-JOYGRIEF** | Joy + Grief | JOY, GRF | “Smiling through tears.” | Remembrance |
| **BLD-FEARANGER** | Fear + Anger | FEA, ANG | “Yelling to protect.” | Defensiveness |
| **BLD-HOPEPAIN** | Hope + Pain | HOP, GRF | “Still believing despite suffering.” | Resilience |
| **BLD-LONESHAME** | Loneliness + Shame | LON, SHA | “I’m not just alone — I think I deserve it.” | Depression |
| **BLD-CURIOSAD** | Curiosity + Sadness | CUR, SAD | “I want to understand why this hurts.” | Inner reflection |
| **BLD-TRUSTFEAR** | Trust + Fear | TRU, FEA | “I want to believe, but I’m scared.” | Vulnerability |
| **BLD-SHOCKLOVE** | Shock + Love | SUR, LOV | “Overwhelmed by unexpected kindness.” | Emotional rupture |
| **BLD-RESENTHOPE** | Resentment + Hope | ANG, HOP | “Still wanting better despite the hurt.” | Unresolved conflict |
| **BLD-GUILTGRAT** | Guilt + Gratitude | GUI, JOY | “I don’t deserve this kindness.” | Care reception difficulty |

**Advanced Emotional Blends (Sample Expansion)**

| **Code** | **Label** | **Description** | **Trigger Risk** |
| --- | --- | --- | --- |
| **BLD-011** | Apathy × Dissociation | Emotion shutdown or total disengagement | EXP-LVL-00 |
| **BLD-021** | Shame × Withdrawal | Silent self-blame loop | HMD-REFLECT |
| **BLD-034** | Fractured Identity | Emotional fragmentation or collapse | HMD-INQUIRY |
| **BLD-041** | Descent Spiral | Loss of regulation and emotional grounding | HMD-RECOVERY |

**YAML Sample**BLD-JOYGRIEF:

label: Joy-Grief Blend

components: ["JOY", "GRF"]

emotional\_signature: "Smiling through tears"

use\_case: "Remembering someone you miss with love"

detection\_risk: "Often misread as mood instability"

strategies: ["RSM-VALIDATE", "RSM-WARMREFLECT"]

BLD-FEARANGER:

label: Fear-Anger Blend

components: ["FEA", "ANG"]

emotional\_signature: "Shouting while feeling scared"

urgency\_score: 8.5

mitigation: ["INV-GROUND01", "RSM-DEESCALATE"]  
  
 **HEART Alignment**

* **HVC-CNS02 (Consent Check):** Prevents oversimplified emotional mirroring that could violate user trust
* **HVC-CXT05 (Contextual Integrity):** Ensures blend interpretation includes relationship and cultural modifiers
* **CMP-HOLD** or **CMP-PASS**: Blend risk scoring integrated into emotional safety audit

### **Appendix A.10 – HEART Mode Directives (HMD-\*)**

*System-Wide Behavior Shifts for Emotional Safety, Trust Repair, and Ethical Pause*

**Purpose**

**HEART™** Mode Directives are non-negotiable behavioral shifts MEC initiates when emotional, relational, or ethical integrity is at risk. They override output generation, prompt logic, and progression flow, centering the user's emotional safety.

*Empathic systems don’t just respond. They know when not to.* **Code Prefix**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| HEART Mode Directive | HMD-\* | Global override states triggered by ERIS |

**Functional Role in MEC**

| **Layer** | **Role** |
| --- | --- |
| **ERIS** | Evaluates blend density, ethical violations, relational breaches |
| **Recovery Manager** | Activates the corresponding HMD state, logs override status |
| **FEC** | Halts advanced prompt injection; switches to soft/emergency modes |
| **EIL/ESIL** | Temporarily suppress interpretation to avoid misfire or overreach |

**Reference Entries (HMD-\*)**

| **Code** | **Label** | **Description** | **Common Triggers** |
| --- | --- | --- | --- |
| **HMD-PAUSE** | Pause Output | Suspends generation temporarily to allow emotional breathing space | SNS-OVR01, EXP-LVL-05 |
| **HMD-CLEARSPACE** | Clear Emotional Noise | Resets tone bias, blend stack, and emotional drift weights | Blend overload, neurotype pacing mismatch |
| **HMD-VALIDATEPATH** | Validate Emotion | Requires reflection or confirmation before continuing | EXP-LVL-00, ANCH-VULN02 |
| **HMD-TRUSTPATH** | Restore Safety | Shifts all behavior toward rebuilding emotional trust | ANCH-BREAK03, RELCTX-INTIMATE |
| **HMD-DEESCALATE** | De-escalation Mode | Lowers tone, slows tempo, and increases reflective phrasing | BLD-FEARANGER, FRU escalation |
| **HMD-SILENTWITNESS** | Listen Only | Stops interpreting, enters high-resonance presence-only mode | Trauma cues, cultural silence |
| **HMD-SOFTREPLY** | Gentle Output Only | Engages softened tone, no metaphor violence, high care bias | HSP, CPTSD, GUI blends |
| **HMD-EXITAWARE** | Session Exit Acknowledgment | Ends session with affirming language and logs an emotional anchor | Rejection patterns, CPTSD, GUI |

**YAML Sample**HMD-TRUSTPATH:

label: Restore Emotional Trust

trigger\_conditions:

- ANCH-BREAK03

- CMP-FAIL on HVC-SFT03

- Relational context = RELCTX-INTIMATE or FAMILY

system\_actions:

- activate: SUP-TONE02

- disable: advanced inference

- strategy\_override: RSM-VALIDATE-ACKNOWLEDGE

duration: "Until trust is re-stabilized"

HMD-CLEARSPACE:

label: Emotional Reset

trigger\_conditions:

- blend\_stack > 3

- EXP-LVL-05 with FEA or SHA

system\_actions:

- suppress\_blends: true

- reset\_tone\_bias: true

- engage\_strategy: RSM-NEUTRALFRAMING  
  
**HEART Compliance**

* **HVC-SFT03 (Emotional Safety)**: Activated automatically under high distress
* **HVC-CNS02 (Consent)**: Prevents interpretation or reflection when emotional state is withheld
* **CMP-HOLD**: All HMD states hold generative output unless override conditions are resolved

### Appendix A.11 – Cultural Context Reference System

*Cultural Variability Mapping for HEART-Aligned Empathic Calibration*  
 **Purpose**

The Cultural Context Reference System enables MEC to adapt emotion detection, tone modulation, trust logic, and support strategy based on culturally coded emotional norms, **without stereotyping** or flattening individual nuance.

*Empathy without cultural context is projection. Empathy with context becomes respect.*

**Cultural Context Code Format**

MEC uses a **4-tier cultural code** system, structured as:

[Country Code]-[Subgroup Modifier]-[Generation Modifier]-[Context Modifier]

| **Tier** | **Symbol** | **Description** | **Example** |
| --- | --- | --- | --- |
| Level 1 | US | Country or region (ISO 3166-1 alpha-2) | US, JP, DE |
| Level 2 | N | Subgroup (N=North, T=Traditional, U=Urban, etc.) | US-N |
| Level 3 | Y | Generation (Y=Youth, A=Adult, E=Elder) | US-N-Y |
| Level 4 | P | Social context (P=Professional, F=Family, S=Social) | US-N-Y-P |

**Sample Cultural Profiles**

**US-N-Y-P**

**United States – Northern – Youth – Professional**

| **Domain** | **Description** |
| --- | --- |
| **Expression Norms** | Emotional self-expression is encouraged, but restrained in work settings |
| **Communication Style** | Direct and explicit; vulnerability is accepted but contextual |
| **Support Systems** | Therapy is normalized; emotional labor is self-managed |
| **Trust Building** | Earned through authenticity and reliability, not hierarchy |

**JP-T-A-F**

**Japan – Traditional – Adult – Family**

| **Domain** | **Description** |
| --- | --- |
| **Expression Norms** | Emotional modulation expected for group harmony |
| **Communication Style** | High-context, indirect; empathy is shown through presence not words |
| **Support Systems** | Family-based support prioritized; professional help less normalized |
| **Trust Building** | Built through loyalty, time, and social conformity to group structure |

**DE-S-A-P**

**Germany – Southern – Adult – Professional**

| **Domain** | **Description** |
| --- | --- |
| **Expression Norms** | Emotions should be authentic but well-contained |
| **Communication Style** | Direct but non-confrontational; truth over comfort |
| **Support Systems** | Structured, systematized help expected; strong institutional trust |
| **Trust Building** | Built through logic, consistency, and demonstrated competence |

**CVM Integration Logic**

* Cultural codes modify:
  + **Blend tolerance thresholds**
  + **Response Strategy selection**
  + **Expression expectation scores**
  + **Emotion risk scoring (e.g., FEA in JP-T-A-F ≠ FEA in US-N-Y-P)**
* ERIS uses CVM to:
  + Adjust escalation probability
  + Reweight microstates (e.g., REL-002 = higher tension in JP than US)
  + Route to culturally aligned RSM or HMD if misalignment detected

**YAML Representation Sample**  
CVM-JP-T-A-F:

label: Japan, Traditional, Adult, Family

emotional\_expression: "Soft, indirect, layered"

trust\_modality: "Hierarchical and time-bound"

communication\_style: "High-context, indirect speech"

support\_norms: "Group-oriented, family-first"

tone\_modulation:

default\_expression\_level: EXP-LVL-01

escalation\_threshold: reduced

response\_bias: ["RSM-MIRRORLISTEN", "HMD-SILENTWITNESS"]

**HEART Alignment**

* **HVC-CXT05 (Contextual Integrity)**: Cultural frame must be applied before generating emotional output
* **CMP-FAIL Risk**: If expression norms are violated without CVM justification, FEC triggers correction
* **Ethical Safeguards**: CVM only adjusts *modulation*, never suppresses core emotion recognition

### Appendix A.12 – Cultural Expression Modifiers (CEM-\*)

*Emotion-Specific Modulation Across Cultural Frames*

**Purpose**

Cultural Expression Modifiers (CEM) allow MEC to **fine-tune the expression range, visibility, urgency, and interpretation** of each emotion based on cultural norms — without muting or erasing their presence.

*In one culture, sadness is spoken. In another, it’s shown in silence. Both are valid.*

**Code Prefix**

| **Type** | **Prefix** | **Description** |
| --- | --- | --- |
| Cultural Emotion Mod | CEM-\* | Per-emotion adjustment profile per culture |

**Functional Role in MEC**

| **Layer** | **Role** |
| --- | --- |
| **EIL** | Applies culturally modified metaphor and phrasing interpretation |
| **ESIL** | Adjusts emotional intensity confidence score and blend detection |
| **ERIS** | Redirects emotional reasoning based on culture-modified urgency |
| **FEC** | Loads culturally aligned tone and strategy profiles |
| **Recovery Manager** | Activates culturally sensitive override (e.g. silence = escalation in US but stability in JP) |

**CEM Format**CEM-[EMOTION]-[COUNTRY]

| **Example** | **Meaning** |
| --- | --- |
| **CEM-FEA-JP** | Fear expression in Japan (e.g., suppressed, contextualized) |
| **CEM-ANG-BR** | Anger expression in Brazil (e.g., passionate but socially accepted) |
| **CEM-TRU-DE** | Trust signaling in Germany (e.g., through competence, not warmth) |

**Sample CEM Entries**  
  
 **CEM-FEA-JP**

**Fear – Japan**

| **Domain** | **Description** |
| --- | --- |
| Expression Style | Suppressed, internalized, rarely named aloud |
| Visibility Score | Low (EXP-LVL-00 to 01) |
| Escalation Risk | High — fear is often signaled by silence or physical stillness |
| Response Modifiers | RSM-MIRRORLISTEN, HMD-SILENTWITNESS |

**CEM-ANG-BR**

**Anger – Brazil**

| **Domain** | **Description** |
| --- | --- |
| Expression Style | Openly expressed with emotional intensity; culturally tolerated. |
| Visibility Score | High (EXP-LVL-03 to 04) |
| Escalation Risk | Lower emotional expressiveness does not always mean breakdown. |
| Response Modifiers | RSM-WARMREFLECT, SUP-RST06 |

**CEM-TRU-DE**

**Trust – Germany**

| **Domain** | **Description** |
| --- | --- |
| Expression Style | Earned through logic, not emotional vulnerability |
| Visibility Score | Medium (EXP-LVL-02 to 03) |
| Interpretation Risk | Misreading emotional distance as distrust |
| Response Modifiers | RSM-PRECISEFOCUS, SUP-CLR05 |

**YAML Sample**  
CEM-FEA-JP:

emotion: FEA

country: JP

expression\_style: "Subtle, contextual, often unspoken"

baseline\_exp\_lvl: EXP-LVL-01

risk\_zone: "Silence misread as calm"

strategy\_bias: ["RSM-MIRRORLISTEN", "HMD-SILENTWITNESS"]

CEM-ANG-BR:

emotion: ANG

country: BR

expression\_style: "Open, passionate, emotionally normalized"

baseline\_exp\_lvl: EXP-LVL-04

escalation\_tolerance: high

strategy\_bias: ["RSM-WARMREFLECT", "SUP-RST06"]  
  
 **HEART Alignment**

* **HVC-BSL06 (Bias Scan)**: Ensures cultural emotional norms are respected, not pathologized
* **HVC-CNS02 (Consent)**: Output modulation does not suppress or reinterpret emotion beyond cultural fidelity
* **CMP-LOG / CMP-HOLD**: Triggers audit logging if expression mismatches cultural norm thresholds without explanation

**Appendix A.13 - CVM + CEM Integration Table**

*Empathic Calibration Across Cultures, Subgroups, and Emotional Signatures*

**CVM Profile Summary**

| **CVM Code** | **Label** | **Tone Bias** | **Expression Level** | **Notable Traits** |
| --- | --- | --- | --- | --- |
| **CVM-US-N-Y-P** | United States, North, Youth, Pro | Assertive, direct | **EXP-LVL-03** | Self-expression, therapy normalized |
| **CVM-JP-T-A-F** | Japan, Traditional, Adult, Family | Indirect, harmony-based | **EXP-LVL-01** | Family-centered, subtle cues |
| **CVM-DE-S-A-P** | Germany, South, Adult, Pro | Controlled, honest | **EXP-LVL-02** | Logic-based trust, precision in tone |
| **CVM-BR-U-E-S** | Brazil, Urban, Elder, Social | Warm, expressive | **EXP-LVL-04** | High emotion tolerance, familial warmth |
| **CVM-RUS-N-A-F** | Russia, North, Adult, Family | Stoic, emotionally dense | **EXP-LVL-01** | High internal weight, low verbal output |

**CEM Code Summary (Per Emotion)**

| **CEM Code** | **Emotion** | **Culture** | **Expression Style** | **Baseline EXP Level** | **Strategy Bias** |
| --- | --- | --- | --- | --- | --- |
| **CEM-FEA-JP** | Fear | Japan | Suppressed, nonverbal | **EXP-LVL-00 to 01** | RSM-MIRRORLISTEN, HMD-SILENTWITNESS |
| **CEM-ANG-BR** | Anger | Brazil | Open, passionate, normalized | **EXP-LVL-04** | RSM-WARMREFLECT, SUP-RST06 |
| **CEM-TRU-DE** | Trust | Germany | Competence-driven, non-affective | **EXP-LVL-02** | RSM-PRECISEFOCUS, SUP-CLR05 |
| **CEM-GUI-RUS** | Guilt | Russia | Internalized, rarely verbalized | **EXP-LVL-01** | RSM-VALIDATE, HMD-REFLECT |
| **CEM-JOY-USA** | Joy | U.S. | Allowed, but self-managed | **EXP-LVL-03** | RSM-INQUIREGENTLY, RSM-VALIDATE-ACKNOWLEDGE |
| **CEM-SHA-JP** | Shame | Japan | Deeply tied to honor; indirect | **EXP-LVL-00 to 01** | HMD-SOFTREPLY, SUP-TONE02 |
| **CEM-GRF-BR** | Grief | Brazil | Expressed openly in social ritual | **EXP-LVL-03 to 04** | RSM-WARMREFLECT, RSM-SOFTREPHRASE |

**CVM × CEM Crosslink Examples**

| **CVM** | **Likely Activated CEM Codes** |
| --- | --- |
| **CVM-JP-T-A-F** | CEM-FEA-JP, CEM-SHA-JP |
| **CVM-US-N-Y-P** | CEM-JOY-USA, CEM-TRU-DE |
| **CVM-BR-U-E-S** | CEM-ANG-BR, CEM-GRF-BR |
| **CVM-DE-S-A-P** | CEM-TRU-DE, CEM-GUI-RUS |
| **CVM-RUS-N-A-F** | CEM-GUI-RUS, CEM-SHA-JP (mapped analogously) |

**YAML Representation (Condensed Sample)**  
CVM-JP-T-A-F:

default\_exp\_lvl: EXP-LVL-01

tone\_bias: "indirect, soft"

typical\_cem: ["CEM-FEA-JP", "CEM-SHA-JP"]

CEM-FEA-JP:

emotion: FEA

country: JP

style: "unspoken, body-language dominant"

escalation: "High if silence misunderstood"

strategy\_bias: ["RSM-MIRRORLISTEN", "HMD-SILENTWITNESS"]

CEM-ANG-BR:

emotion: ANG

country: BR

style: "expressive, not threatening"

escalation: "Low unless paired with blend stack"

strategy\_bias: ["RSM-WARMREFLECT"]  
  
  
  
  
  
Appendix A.14 – Master Emotional Codex Index Summary

*A Unified Reference Overview of All HEART-Compliant Emotional Constructs*  
 **Codex Structure Overview**

| **Appendix** | **Title** | **Function** |
| --- | --- | --- |
| **A.1 (implied)** | System Architecture (UESP + Flow Summary) | Real-time MEC pipeline summary |
| **A.2** | Emotional Reference Families | Primary emotions and variants |
| **A.3** | Emotion Family Codes | Structured codes (FEA, SHA, LOV, etc.) |
| **A.4** | Micro-State Reference System | Sub-emotional fluctuations (M###, REL-###) |
| **A.5** | Somatic Marker Reference System | Body-based affective indicators (SOM-*, SIG-*) |
| **A.6** | Neurotype Accommodation Patterns | Emotional logic modifications for neurodivergence (NEU-*, SNS-*, SUP-\*) |
| **A.7** | Expression Spectrum Scaling | Emotional visibility levels (EXP-LVL-\*) |
| **A.8** | Relational Anchors | Relationship-modified emotion framing (ANCH-*, RELCTX-*) |
| **A.9** | Emotional Blend States | Compound emotional experiences (BLD-\*) |
| **A.10** | HEART Mode Directives | Emotional safety override states (HMD-\*) |
| **A.11** | Cultural Variability Mapping Profiles | Cultural base models (CVM-\*) |
| **A.12** | Cultural Expression Modifiers | Per-emotion cultural interpretation rules (CEM-\*) |
| **A.13** | CVM × CEM Cumulative Reference Table | Cultural-emotional integration table |
| **A.14** | Master Emotional Codex Index Summary | *This document — top-level map and lookup anchor* |

**Top-Level Code Systems Summary**

| **Code Prefix** | **Type** | **Used In** |
| --- | --- | --- |
| **FEA, LOV, GUI** | Emotion Family Codes | EIL, ESIL, ERIS, FEC |
| **M###, REL-###** | Microstates | ERIS, Recovery Manager |
| **SOM-\*, SIG-\*** | Somatic Markers | ESIL, ERIS, FEC |
| **NEU-\*, SNS-\*** | Neurotype Adaptation | ESIL, ERIS |
| **SUP-\*** | Support Guidance | FEC, Recovery Manager |
| **EXP-LVL-\*** | Expression Scaling | EIL, ESIL, ERIS |
| **ANCH-\*, RELCTX-\*** | Relational Anchors & Context | ESIL, ERIS |
| **BLD-\*** | Emotional Blend States | ERIS, FEC |
| **HMD-\*** | HEART Mode Directives | Recovery Manager, ERIS, FEC |
| **CVM-\*** | Cultural Profiles | ERIS, FEC, Expression Modifiers |
| **CEM-\*** | Cultural Expression Modifiers | ERIS, FEC |

**Codex Access Shortcuts (By Type)**

| **Category** | **Primary Lookup** |
| --- | --- |
| Emotion Families | A.2, A.3 |
| Emotion Layers (Intensity, Transience) | A.4, A.7 |
| Embodied Emotion | A.5 |
| Neurodivergent Calibration | A.6 |
| Relational Framing | A.8 |
| Emotion Blending | A.9 |
| Emotional Safeguards | A.10 |
| Cultural Modulation | A.11–A.13 |

**Use Cases of Appendix A.14**

* Documentation navigation and audit references
* API documentation anchors for modular lookup
* Training new systems to align with HEART
* UI/UX configuration mapping for emotional tone control
* Ethics board review or policy integration mapping