

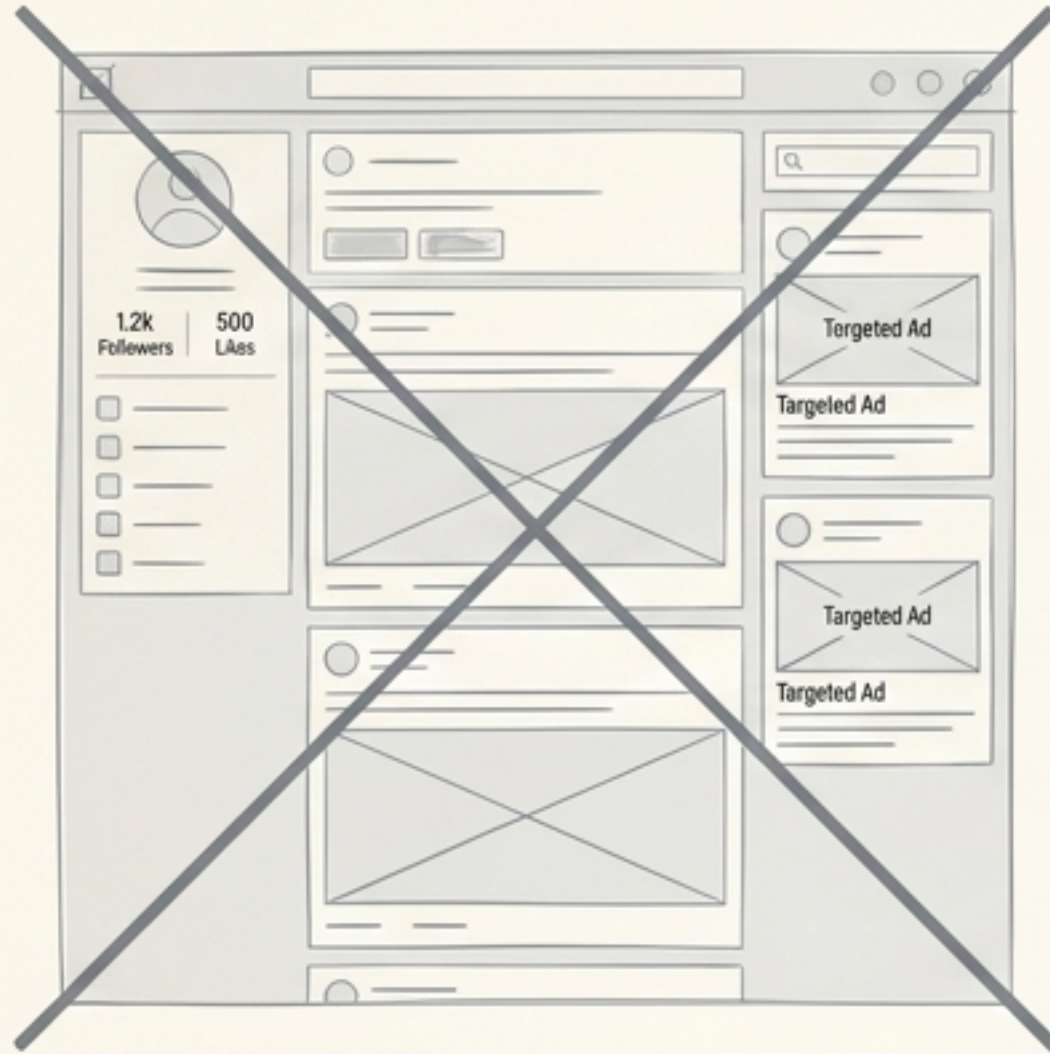


The Architecture of Relational Mindfulness

Rethinking how we connect through radical privacy,
clinical rigor, and mindful product design.

DunbarrioSolo

Performative Connectivity



Driven by public graphs and metric anxiety.

Broadcast mechanisms (follower counts, public feeds).

Monetized via behavioral profiling and targeted ad networks.

Relational Wellness



Driven by private practice and emotional granularity.

Zero performance (no social graph, no broadcast).

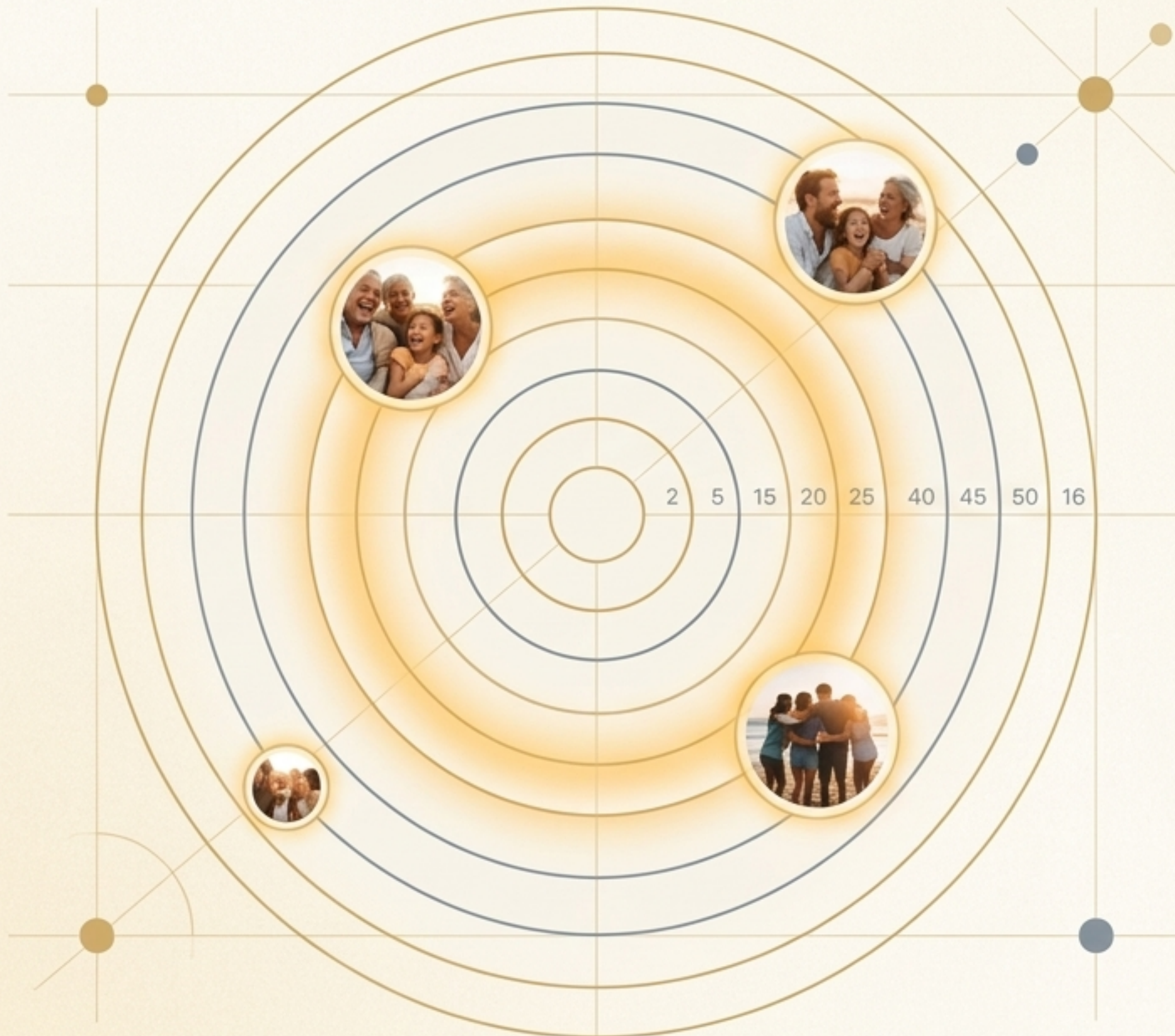
Private by default (AES-256-GCM encryption, hard-delete capabilities).

DunbarrioSolo is not a social network. It is an emotional skills practice tool built on clinical science to help you understand and deepen real-world relationships.

Every core feature operationalizes a specific psychological framework.

Feature	Research Domain	Evidence Level	Key Mechanism
Circle Architecture	Dunbar's Theory	Strong Evidence	Energy allocation tracking (Li et al., 2025)
The Embrace	Expressive Writing	Well-Established	Pennebaker paradigm (1986–present)
Mascots	Object Relations	Mod-Strong	Digital transitional objects (Winnicott, 1951)
Mood Dial	Affective Science	Strong	Emotion differentiation / Plutchik
AI Voice	Digital Health	Emerging	Therapeutic Alliance (NEJM AI, 2025)

Domain 1: Mapping the Social Brain



The Science

Based on Dunbar's cognitive limit of ~150 contacts. Human relationships scale in universal cognitive tiers.

The Finding

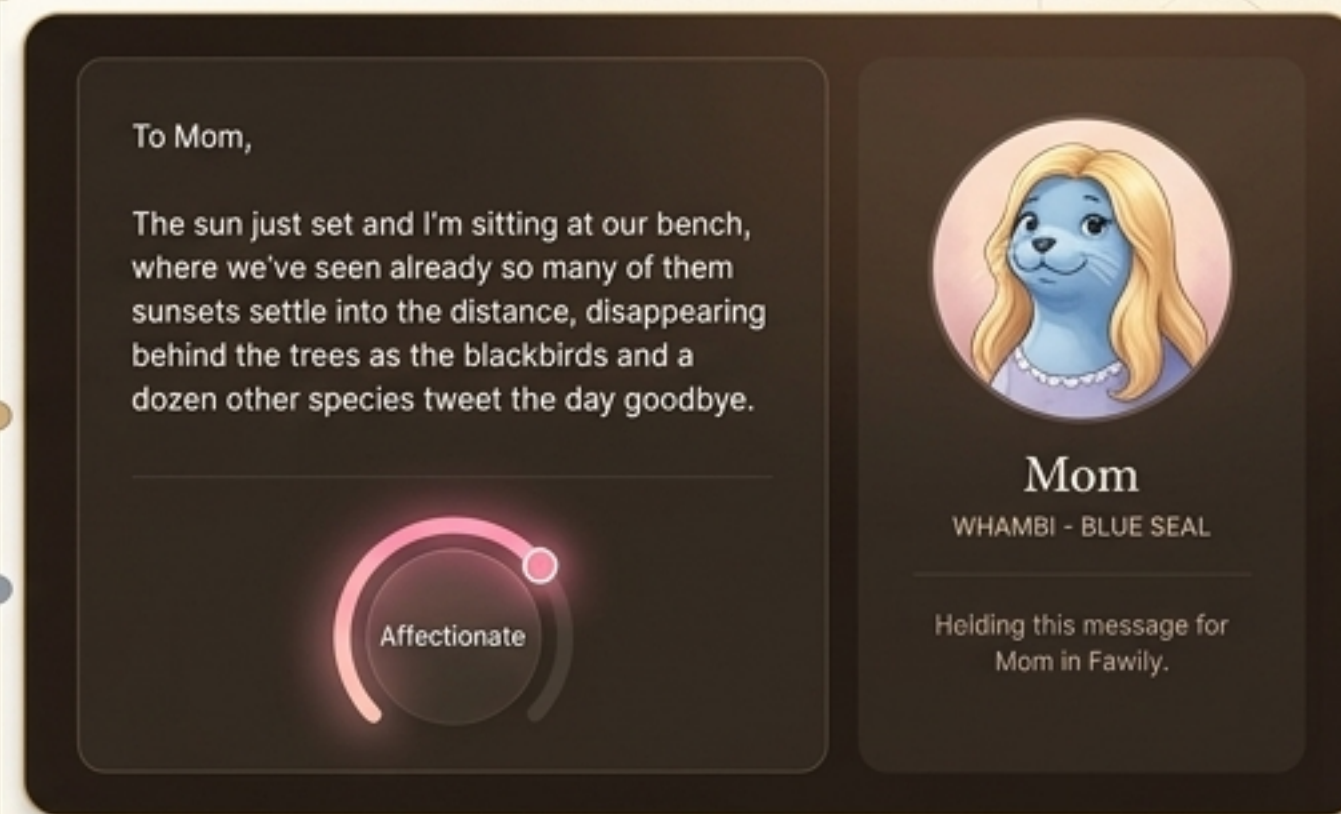
A 2025 PLOS ONE study (Li et al.) reveals profound heterogeneity in energy allocation—there is no one-size-fits-all pattern.

Critically, the “middle layer” (5–15 people) is a psychologically vital zone that individuals pour disproportionate energy into, yet modern tools entirely ignore it.

The Design

Users organize contacts intuitively across tiered rings, scaling from 3 to 16 circles to reflect this cognitive reality.

Domain 2: The Core Intervention



The Intervention (Expressive Writing)

Built on Pennebaker's foundational paradigm supported by >300 clinical studies. The 'Embrace' is a directed journal entry meant for a specific person in your life—proven to generate measurable improvements in emotional regulation.

The Anchor

Instead of writing into a void, users select from 26+ illustrated characters. These act as secure proxies, holding the emotional weight of the message without the risk of real-world judgment.

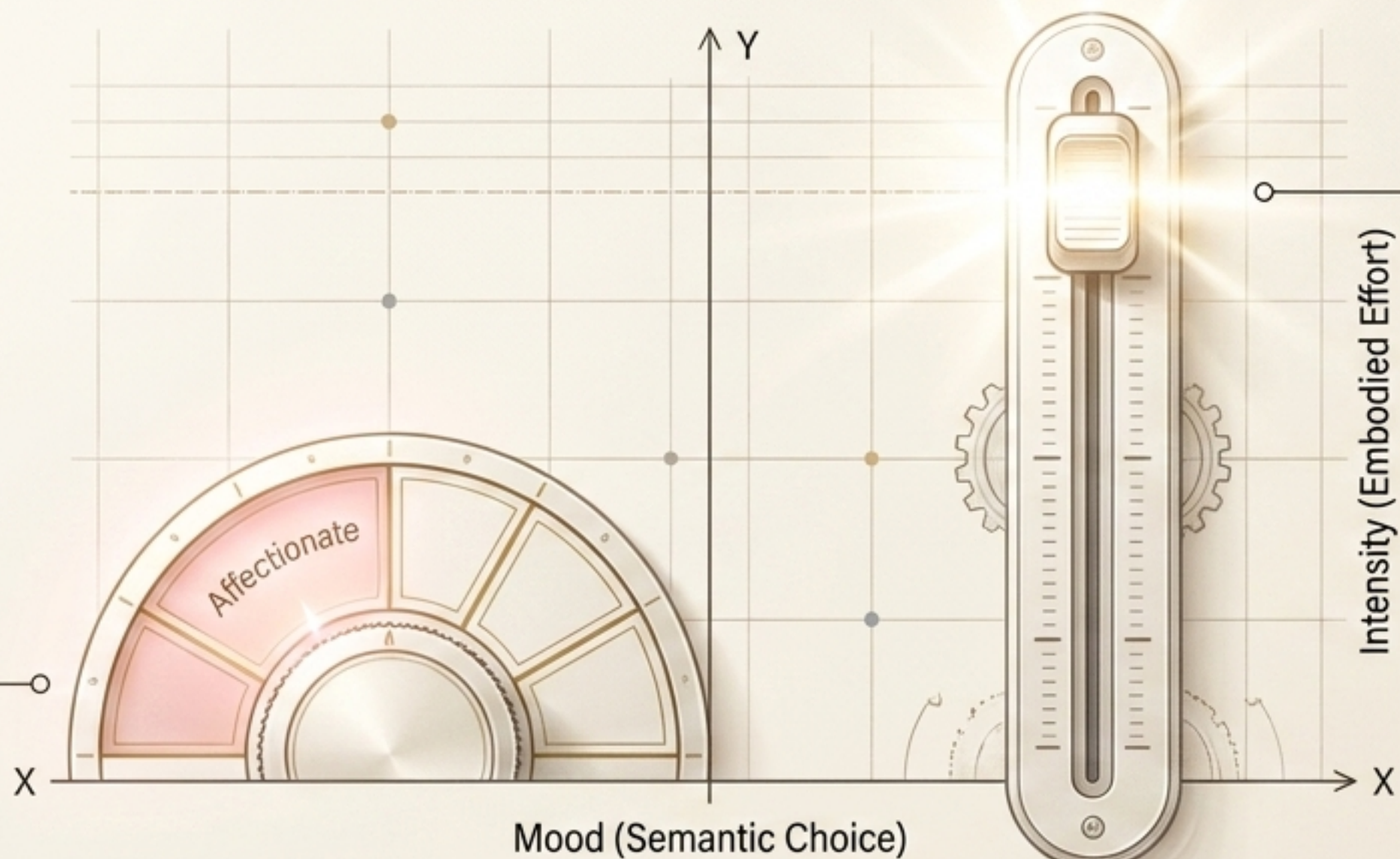


Winnicottian Transitional Objects (1951)

Operating as digital transitional objects, these proxies provide a safe holding environment. Characters like Solu (a grounded capybara) or Ziku (a dreamy moon rabbit) carry the emotional charge of specific relationships, acting as necessary scaffolding for those who are not natural emotional expressors.

Domain 4: Training Emotional Granularity

The Mood Dial: Based on Plutchik's wheel of emotions. Opposite emotions sit 180° apart, forcing a conscious choice of precise semantic labels.

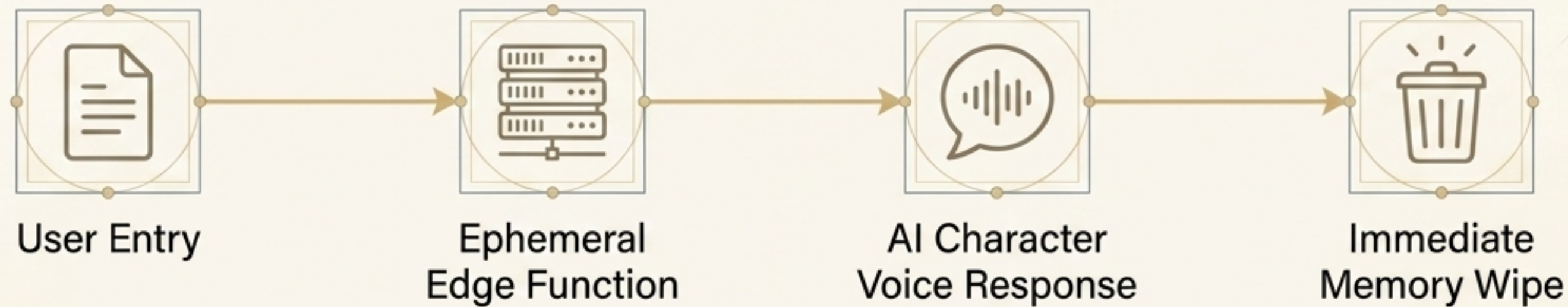


The Energizer: A physical slider to charge the embrace from 0–100% effort. Pushing past 88% creates a 'Peak White' mechanic, transcending baseline emotion.

Scientific Backing

Three decades of research (Kashdan et al., 2015) link precise emotion differentiation to superior emotional regulation and lower distress. The app trains this via a mandatory, memoryless dial selection per session.

Domain 5: Ephemeral AI & Radical Privacy



Digital Therapeutic Alliance

A 2025 NEJM AI study demonstrated a 51% reduction in depression symptoms using generative AI.

Transient Mirror

Text exists in the AI's memory solely for the seconds it takes to respond. API keys never touch the local device.

Strict Boundaries

Private data is NEVER used to train foundational AI models. Responses are locked to 1–3 sentences, explicitly anti-sycophantic, and character-driven to prevent the illusion of human therapy.

The Synthesis: Longitudinal Self-Awareness



1. Multimodal Ingestion: Compiling Plutchik coordinates, energy tracking, and explicit text flags.

2. Pattern Recognition: Identifying relational archetypes and delivering a “Growth Edge”—an intentionally anti-sycophantic, behaviorally specific reflection.

3. Research Anchor: Built on Barrett (2001), operationalizing the finding that awareness of one’s own emotional patterns is the core mechanism of regulatory benefit.

The Ledger: Making Invisible Care Visible

The Insight

Relational energy is largely invisible. Relationships deteriorate when care is untracked. The Ledger provides a precise, empirical mirror of actual social investment.

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
Mon	■	■	■	■	■	■	■	■	■	■	■	■
Tue	■	■	■	■	■	■	■	■	■	■	■	■
Wed	■	■	■	■	■	■	■	■	■	■	■	■
Thu	■	■	■	■	■	■	■	■	■	■	■	■
Fri	■	■	■	■	■	■	■	■	■	■	■	■
Sat	■	■	■	■	■	■	■	■	■	■	■	■
Sun	■	■	■	■	■	■	■	■	■	■	■	■



Boundary Tracking

Logs not just app sessions and writing streaks, but manual, out-of-app connection events (remote calls, in-person visits).

Clinical Benefit

Highlights neglected middle-circle members and surfaces asymmetric energy distribution, perfectly operationalizing the Li et al. (2025) findings on social allocation.



Cryptographic Safety

(AES-256, Ephemeral AI, Hard Deletion)

The Quiet Room



Relational Science

(Dunbar Layers, Plutchik Dial, Expressive Writing)

DunbarrioSolo achieves its mandate because these two systems are inseparable. You can only honestly map the true limits of your relational energy if you operate in a state of absolute, cryptographically guaranteed psychological safety.