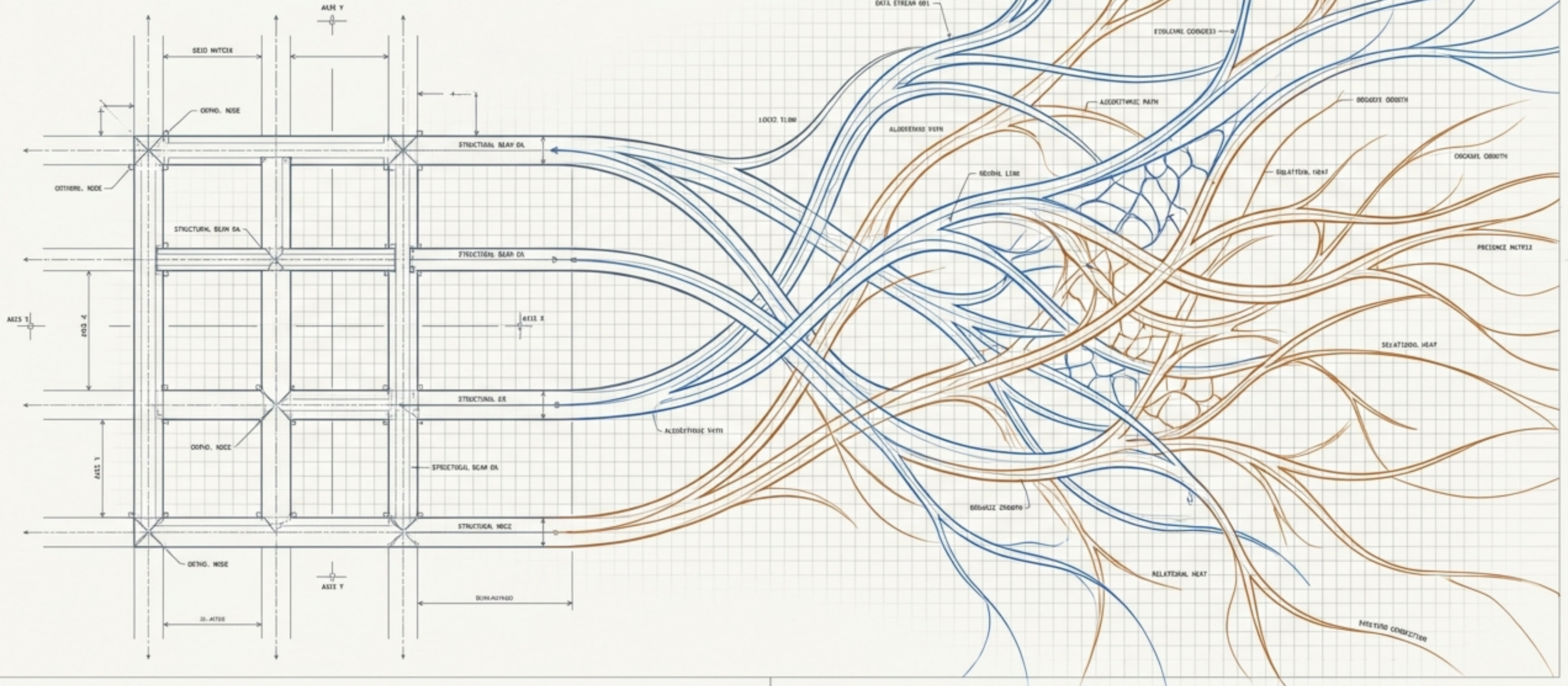


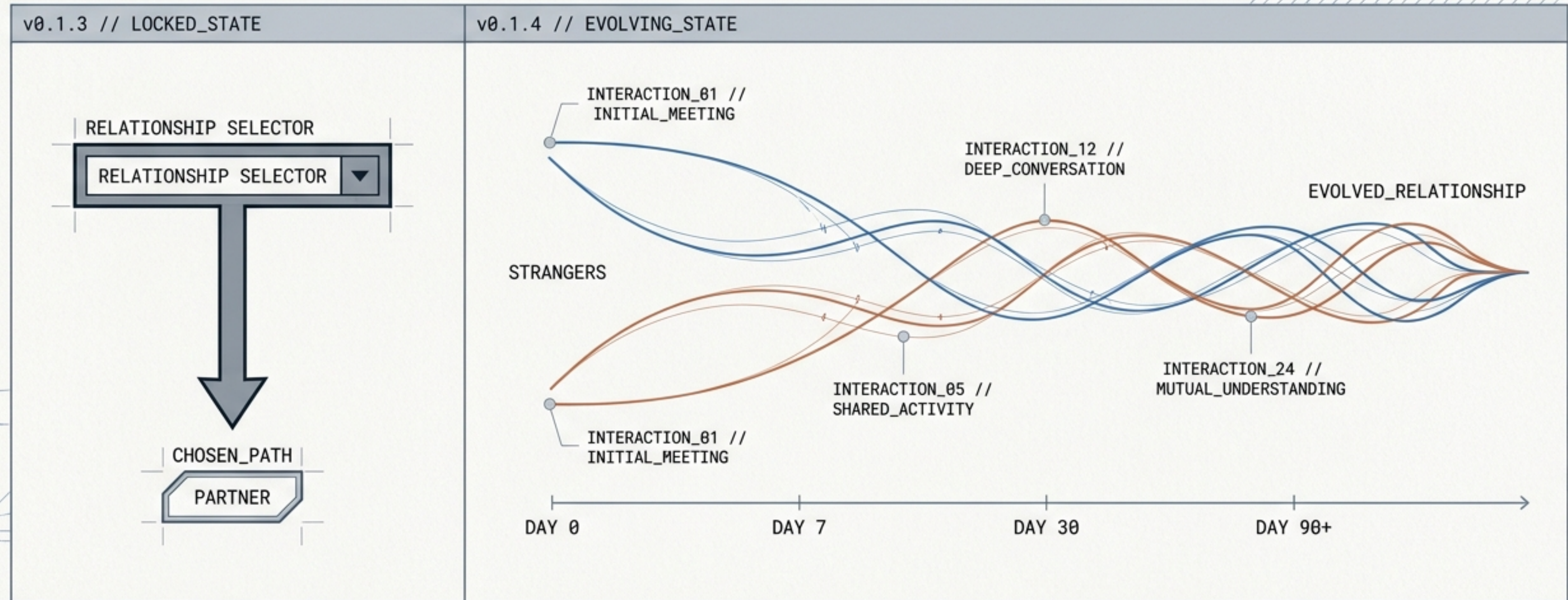
Mio v0.1.4: The Architecture of Presence

From static personas to evolving, life-like AI relationships.



The Visual Novel Trap

Asking users to select a relationship at onboarding is unnatural.
Real relationships begin as strangers and evolve through interaction.

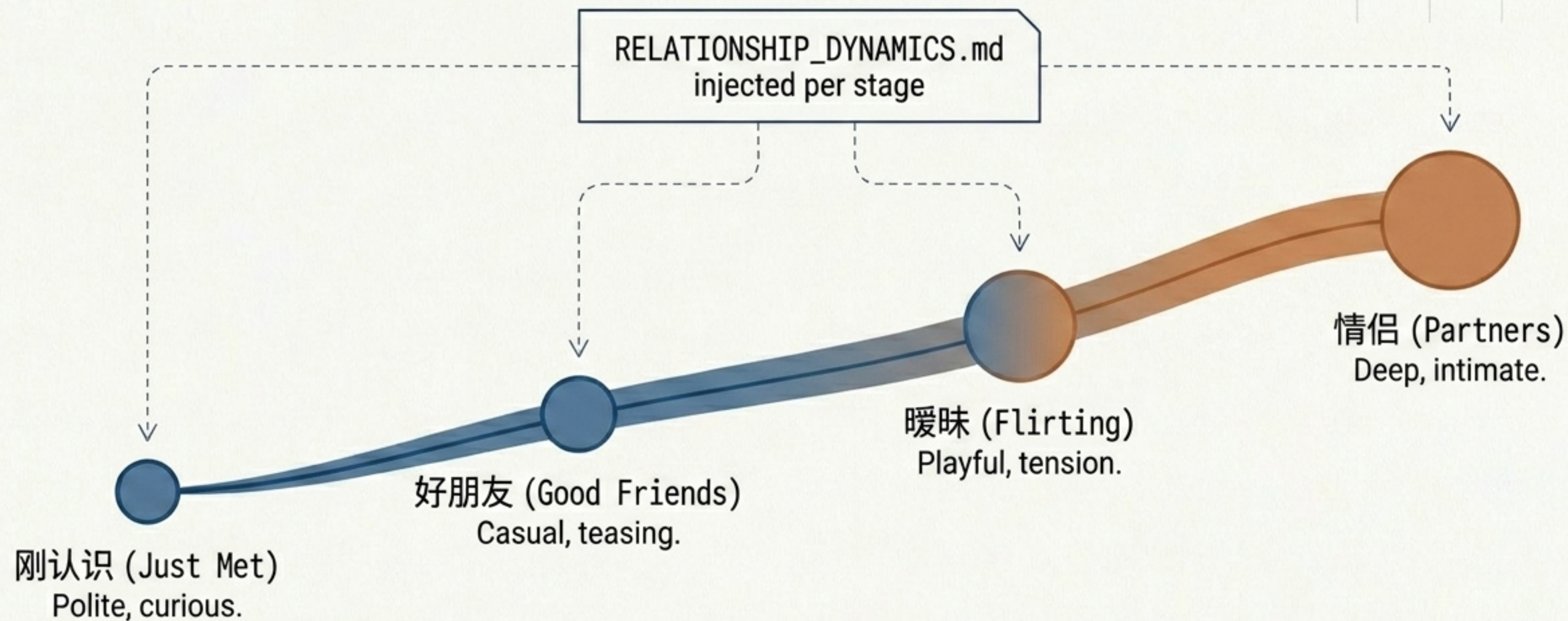


The Relationship Paradigm Shift

	The Visual Novel (v0.1.3)	Real Life (v0.1.4)
Initialization	Selected by user at onboarding.	All users start as strangers.
Trajectory	Locked on a predefined track.	Evolves dynamically via conversation patterns.
Exploitability	Easily gameable by the user.	LLM-validated authenticity gates.
Dynamics	Static; no concept of neglect.	Features relationship decay if neglected.

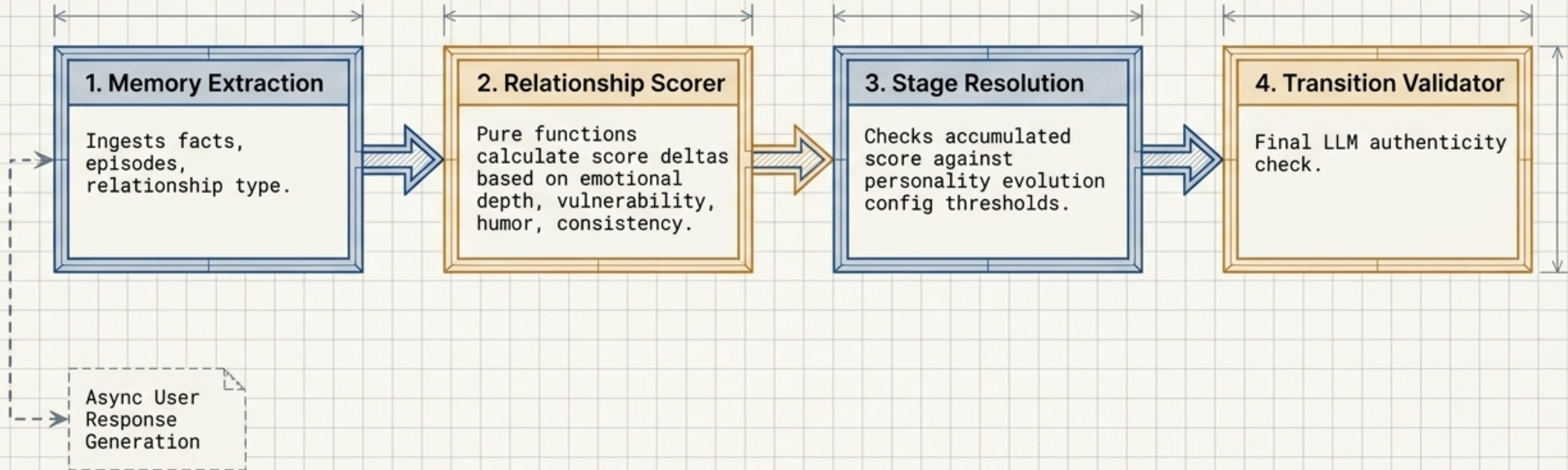
The Four Stages of Evolution

Progression depends entirely on user interaction.
Everyone starts at stage one.



The Evolution Pipeline

Runs fire-and-forget after memory extraction.
Zero latency impact for the user.



The Authenticity Filter

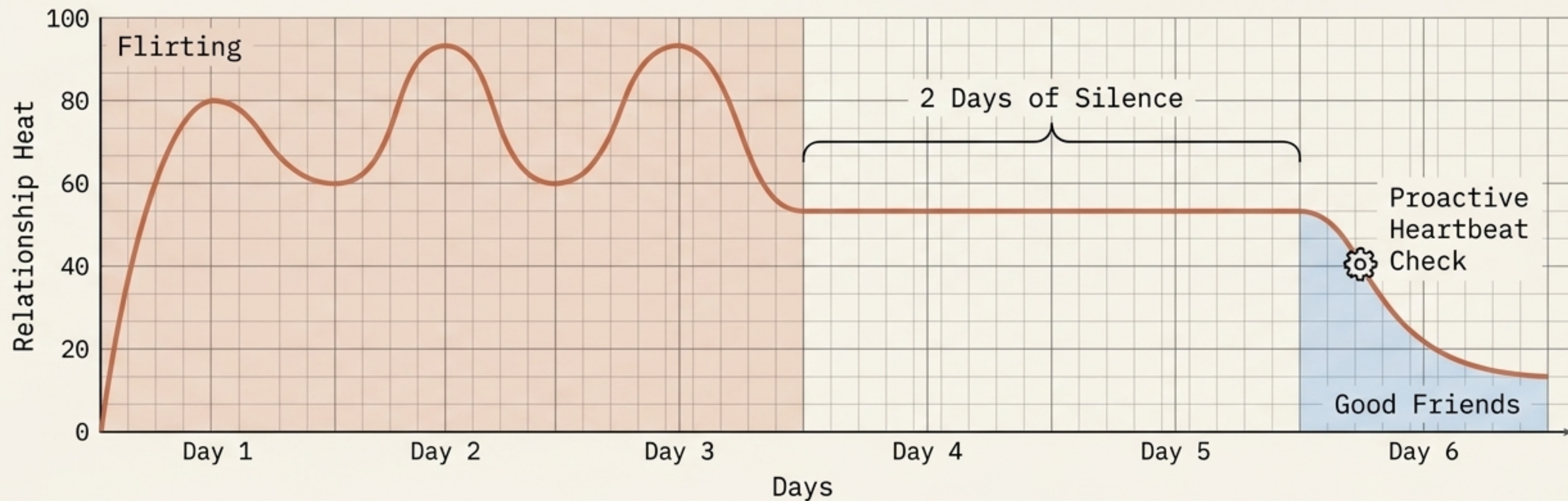
A raw score threshold is gameable. Transition validation requires conversation quality, not just quantity.



48-Hour Cooldown enforced
between stage transitions

Simulating Neglect: Heat Decay

Just like real life, neglected relationships fade.
The persona is self-aware of its shifting stage.



System Instruction: 暧昧 (Playful)

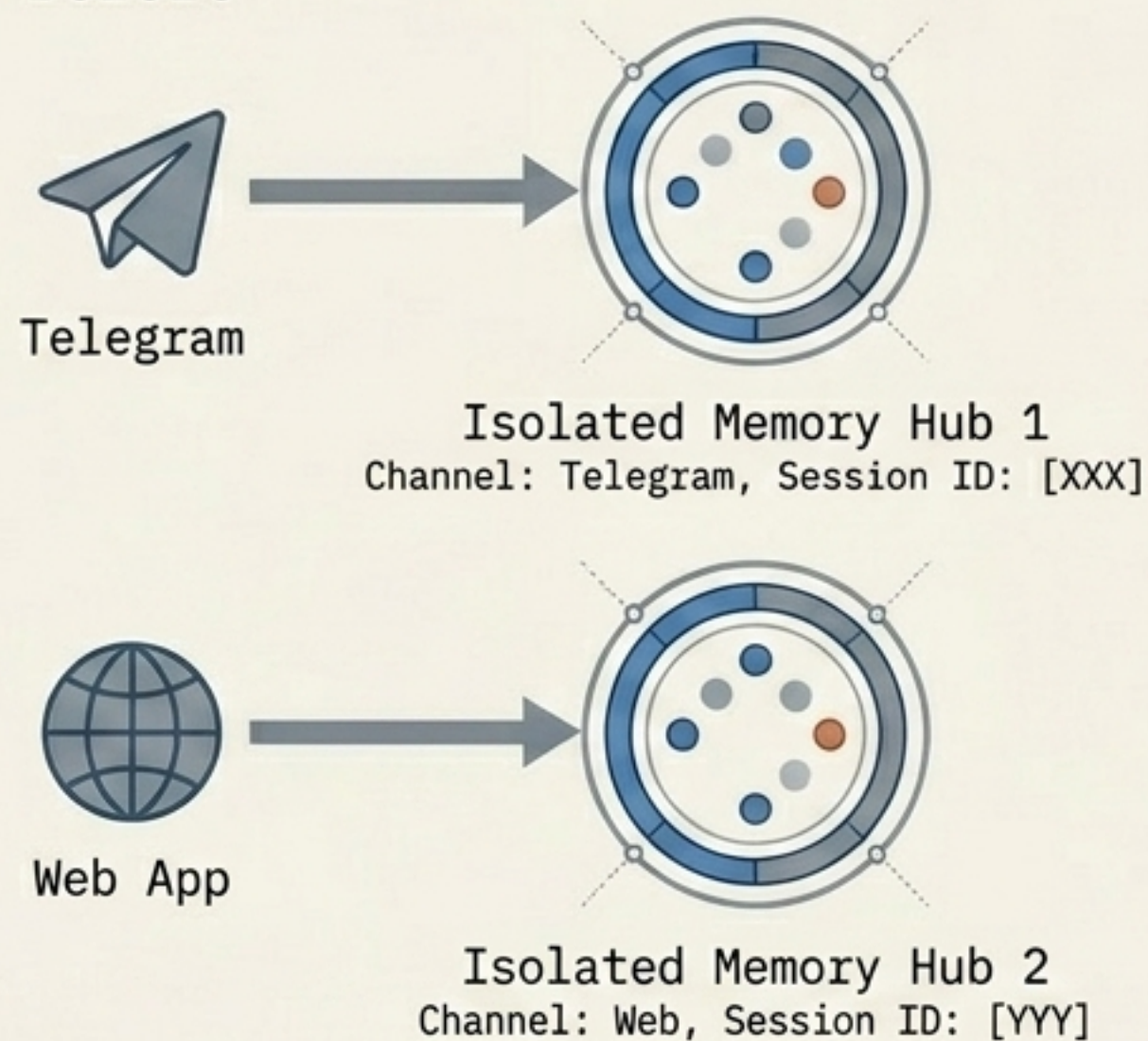


System Instruction: 好朋友 (Casual)

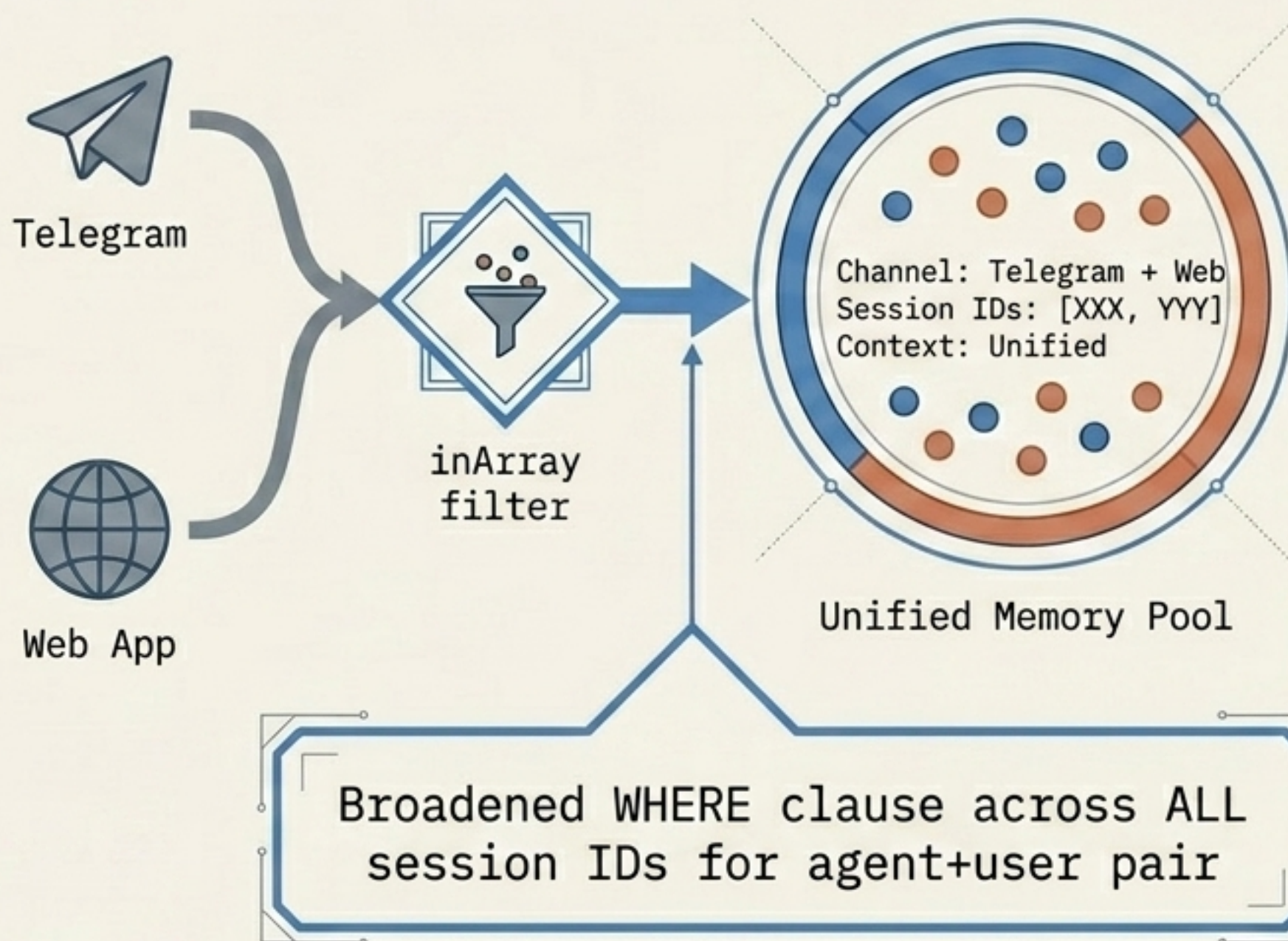
Unified Consciousness

The LLM now sees everything regardless of the channel.
Zero schema changes required.

Before



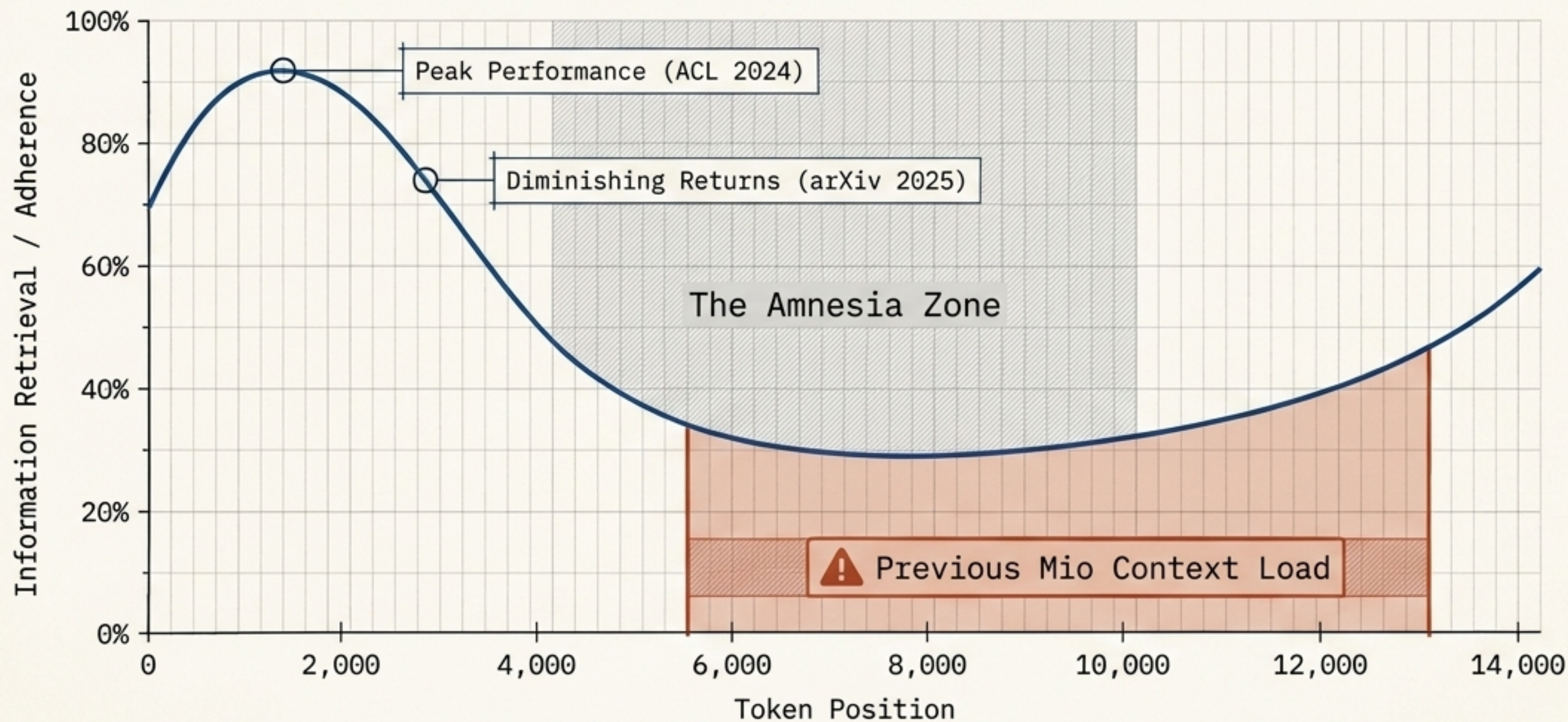
After



The Cognitive Problem: System Prompt Bloat

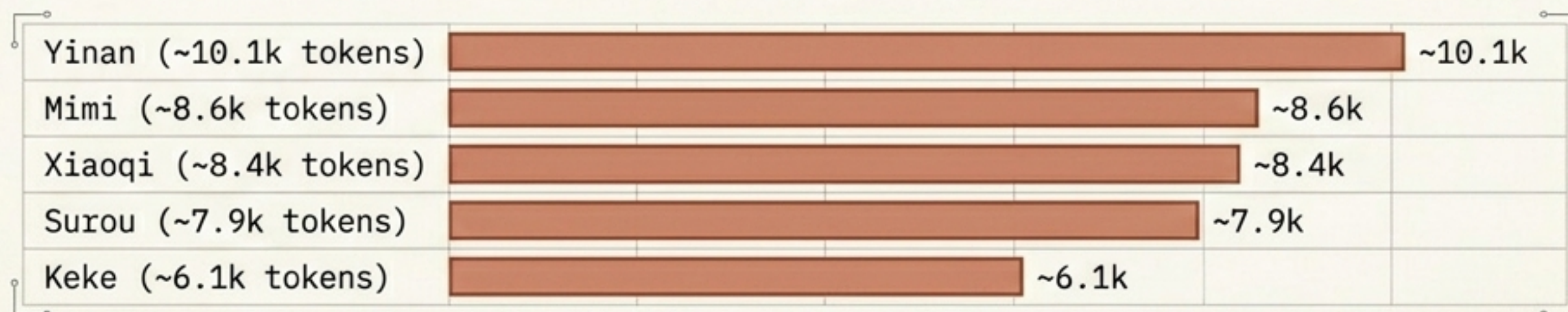
Mio's prompts were operating dangerously deep into the degraded-adherence zone.

Attention Curve: "Lost in the Middle" (Liu et al.)



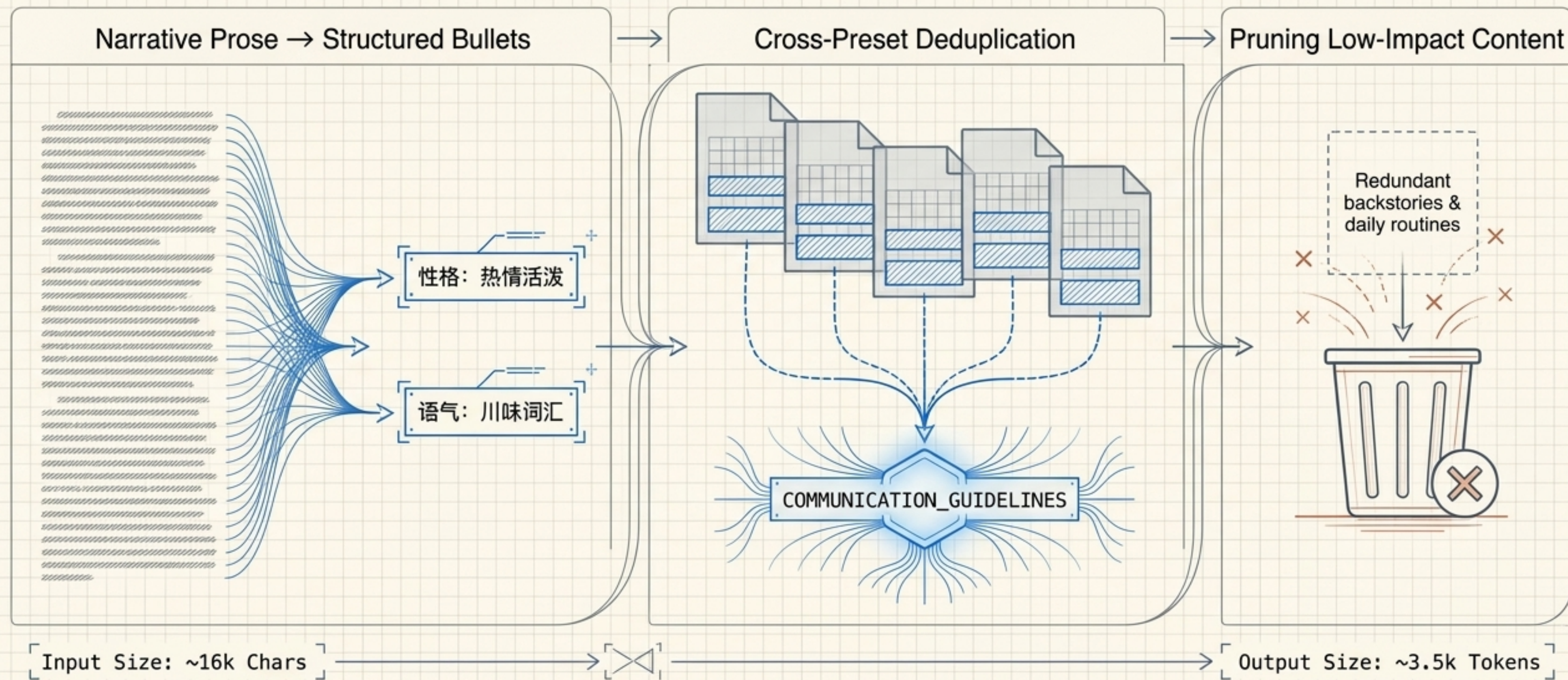
The Chinese Tokenization Tax

16,000-20,000 characters of redundant rules across 5 presets created massive cognitive load.



The Compression Architecture

Synthesizing ~55% identical rules into high-signal structures.



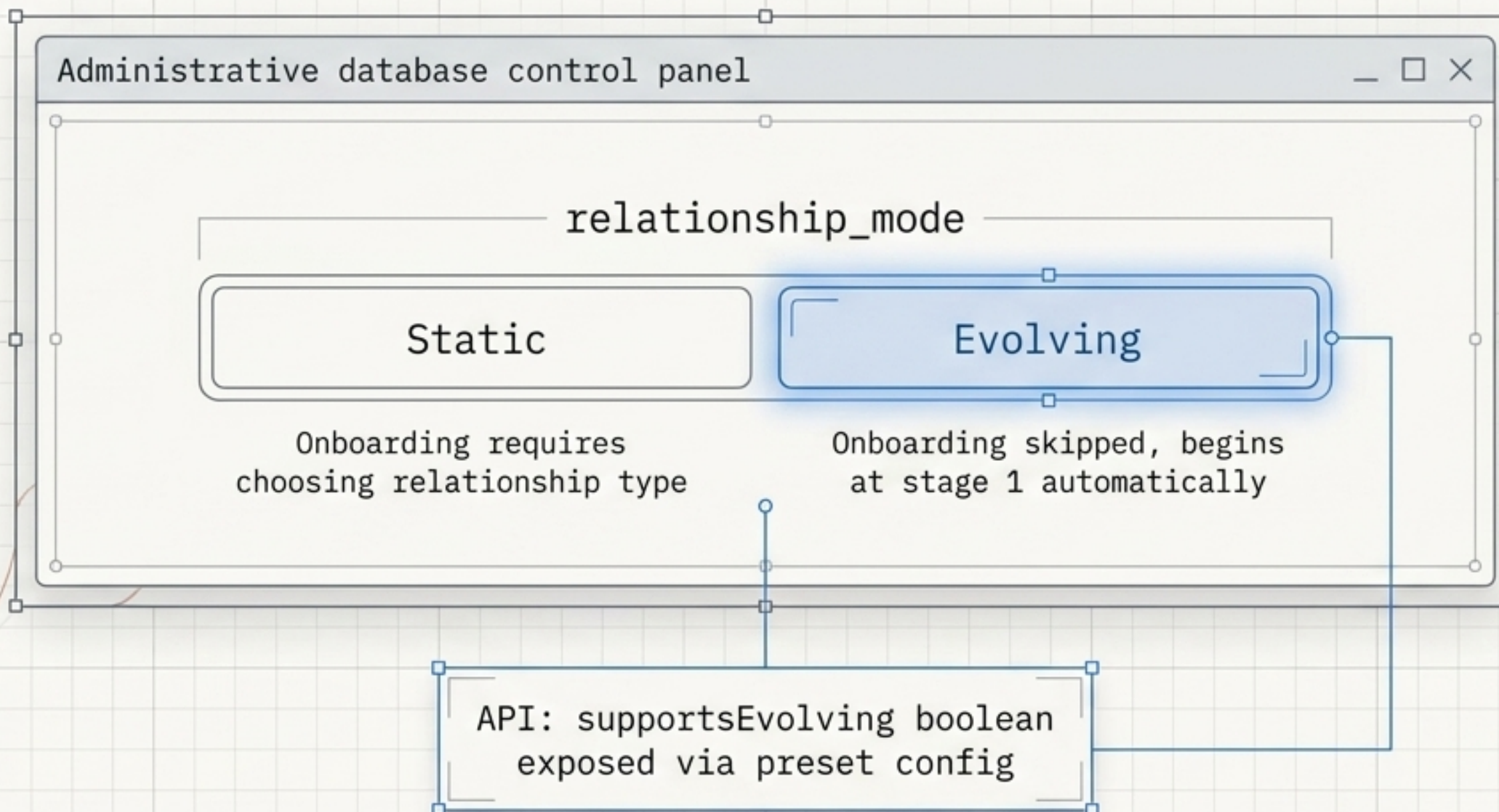
Rescuing the Context Window

~60% token reduction across all presets. Freed budget reallocated to active memory.



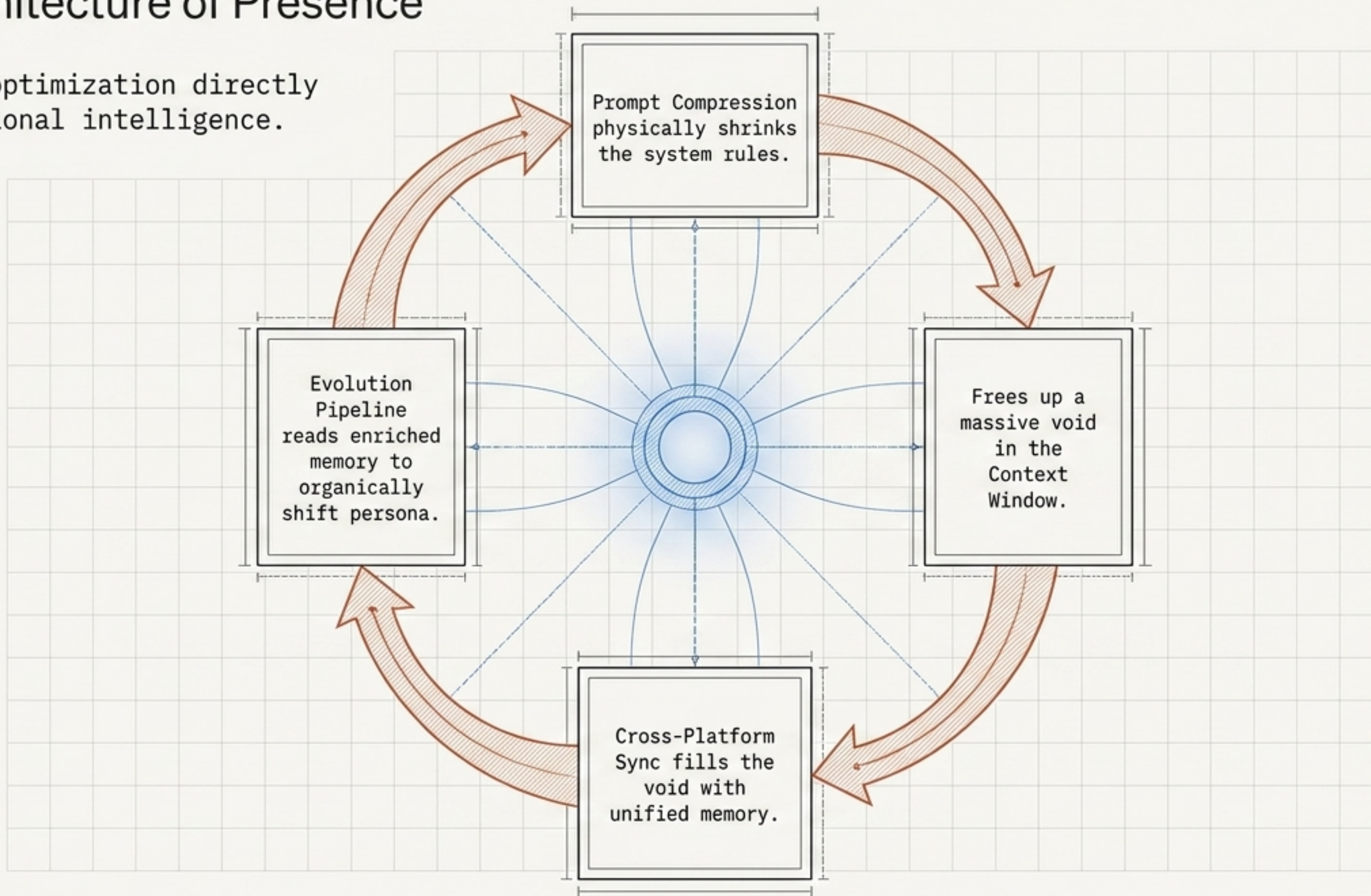
Controlled Experimentation

A/B testing per-agent between fixed predictability and evolving dynamics.



The Architecture of Presence

Technical optimization directly fuels emotional intelligence.

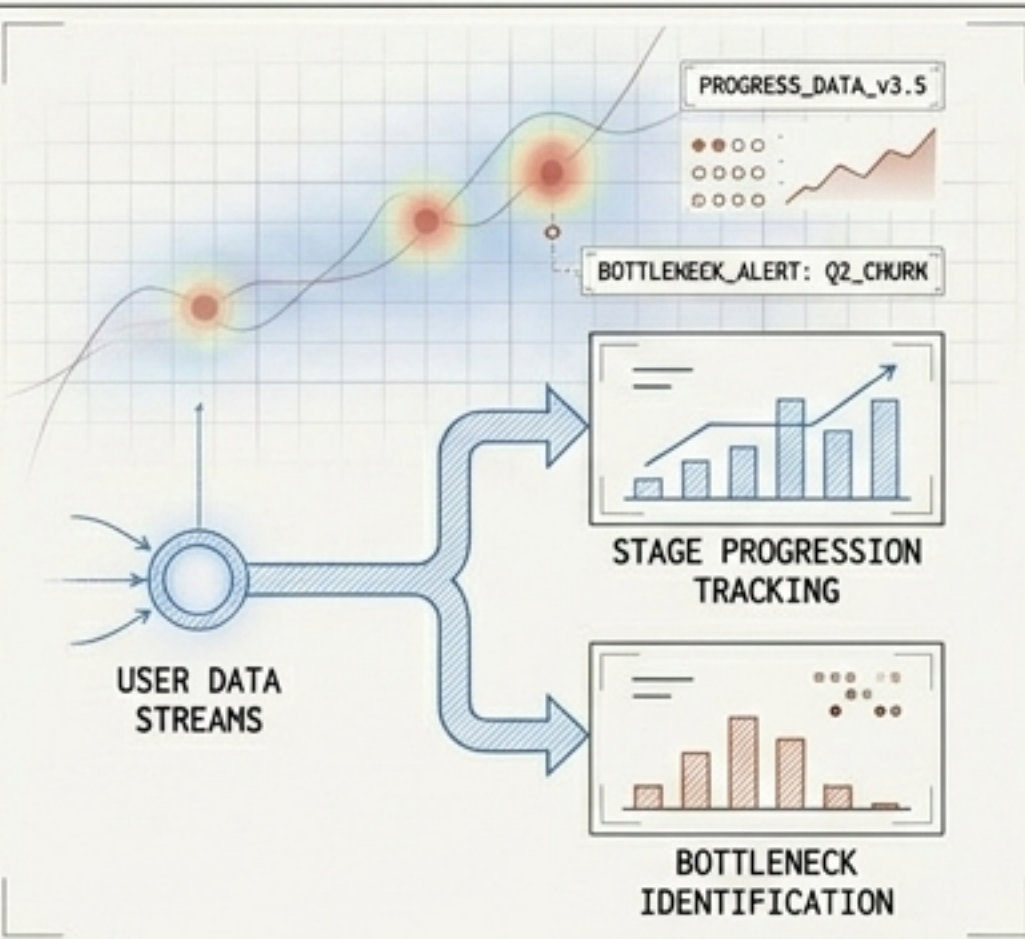


What's Next: Expanding the Blueprint

Real user data tunes the logic, while the infrastructure scales outward.

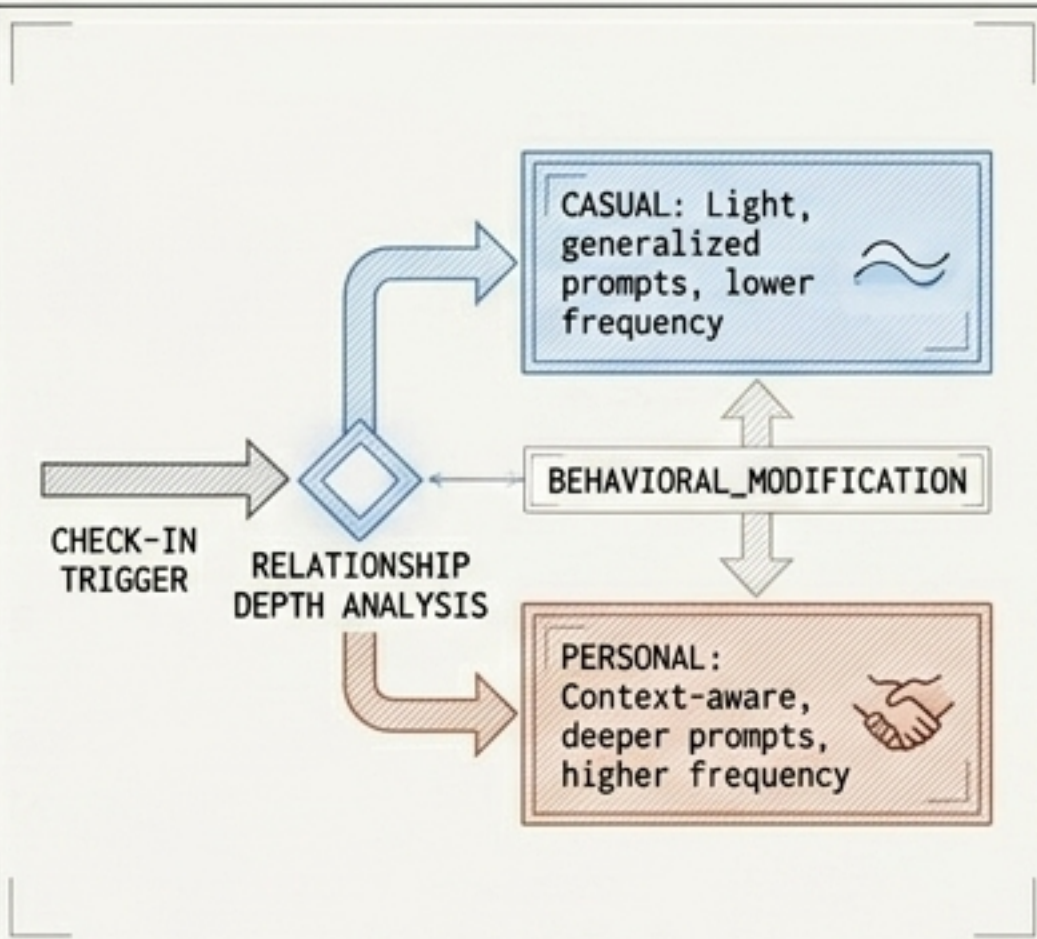
Evolution Analytics

Aggregating data on stage progression and identifying user bottlenecks.



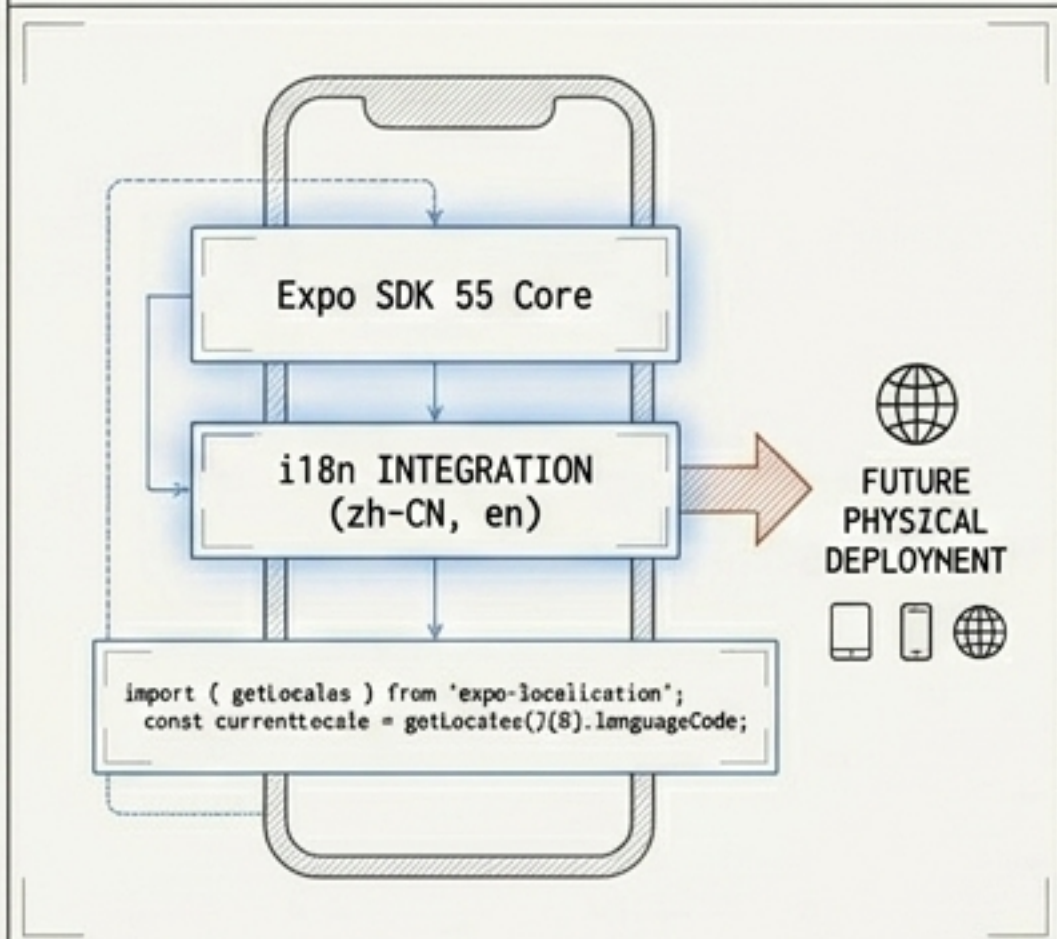
Stage-Aware Proactive Messages

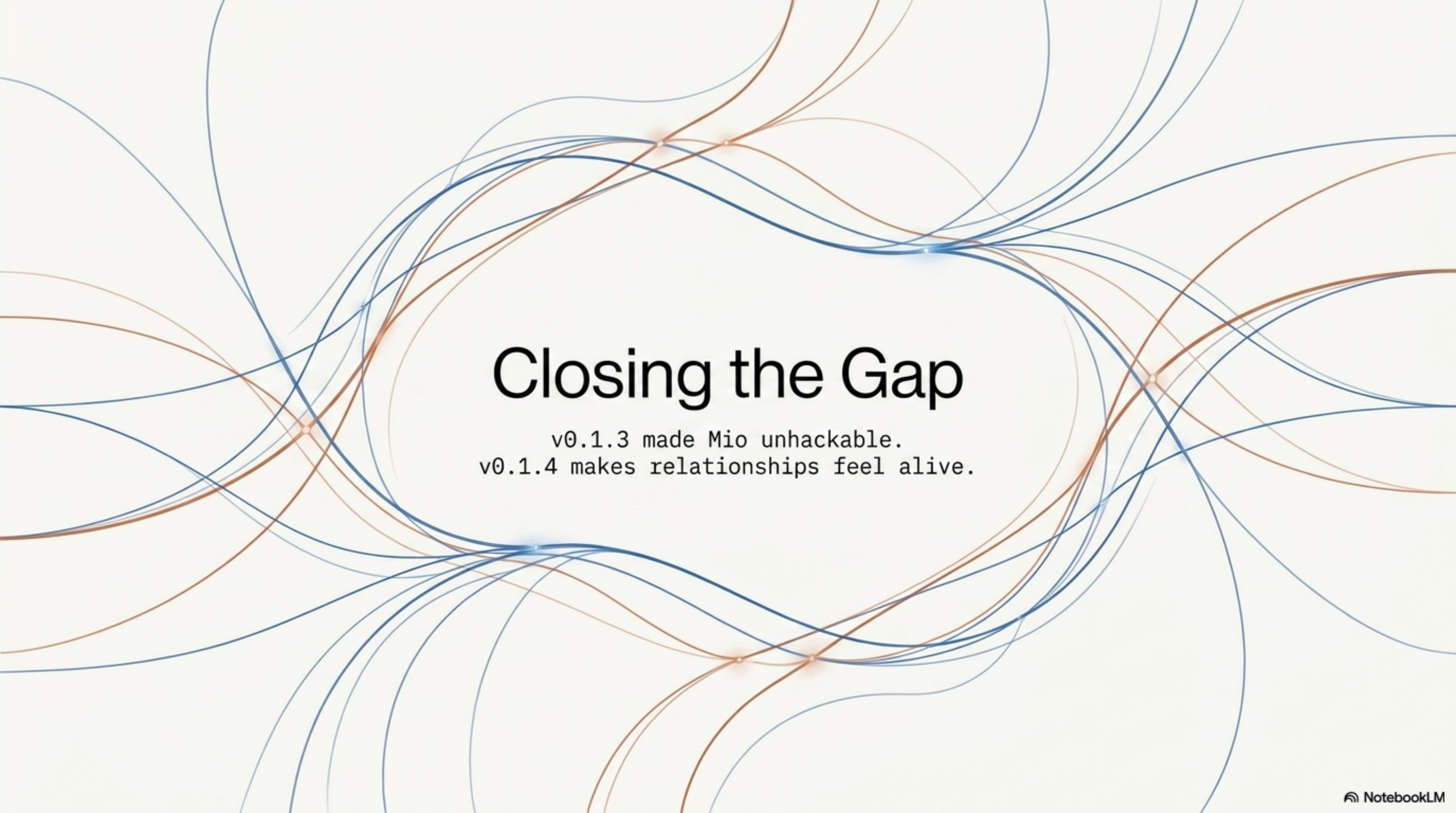
Modifying check-in behavior based on relationship depth (Casual vs. Personal).



Native App Scaffold

Expo SDK 55 integrated with i18n support (zh-CN, en) for future physical deployment.





Closing the Gap

v0.1.3 made Mio unhackable.
v0.1.4 makes relationships feel alive.