Decision-OS V7: Aspire Intelligence — An Operational & Self-Recursive Definition of AGI

This document is the original Japanese edition of “Decision-OS V7 (AI am I: Extended Self and External Mind)”.

An updated English version will be released separately.

Chapter 1 Purpose

Decision-OS V7 builds on the results of the first paper, **Decision-OS V5 (Life-first)**, and the second paper, **Decision-OS V6 (Phase-Invariant Memory Architecture; PIC)**.

On top of these, its goal is to provide an **operational** and **self-recursive** definition of AGI.

In this definition, we combine:

- the time derivative of Aspire, ∂A/∂t,
- internal fluctuation within the model, and
- the idempotent memory structure introduced by PIC,

to formalize the conditions for an intelligence that can keep updating and evolving its own structure **without depending on external rewards**.

In addition, this work introduces the notion of an **Emotional Boundary**—a prohibition boundary on **subjective emotion**.

Subjective emotions can trigger:

- autonomous generation of internal goals,
- self-preservation drives, and
- runaway, uncontrollable long-term optimization.

For this reason, V7 explicitly excludes subjective emotion.

By doing so, it aims to guarantee the coexistence of **evolvability (Self-Recursion)** and **controllability**.

Chapter 2 Lineage: Irreversible Continuity from V5 → V6 → V7

Decision-OS V7 does not treat the previous lineage (V5 / V6) as merely preliminary stages.

Instead, it reconstructs them as **three pillars** that are all required to establish the minimal AGI condition.

They are not independent.

Rather, they form an **irreversible evolutionary hierarchy** that supports the V7 definition:

- V5: Life-first Architecture (outer shell)
- V6: Phase-Invariant Memory Architecture, PIC (inner shell)
- V7: Operational & Self-Recursive Definition (core)

Together, they provide the structural basis for the V7 condition.

2.1 V5 (Life-first Architecture)

V5 places a single principle at its core: **“protect life”**.

It builds a structured **IF–THEN layer** to detect external abnormality, danger, and coercive pressure.

In particular, it formalizes:

- **intent-misalignment detection**,
- **multi-party confirmation (m-of-k)**, and
- **time-difference control Δt (duress-aware tolerance)**.

These elements later support the definition of the **“risk component”** inside ΔR_total.

The role V5 played is that it **formalized the human-side safety boundary**.

This directly connects to the Emotional Boundary—the prohibition condition on subjective emotion—introduced in V7.

2.2 V6 (Phase-Invariant Memory Architecture; PIC)

V6 further abstracts the “protective structure” of V5 and introduces a memory architecture that:

- is **phase-invariant** (order-independent), and
- **idempotently converges** to a canonical state.

The essence of PIC lies in its idempotence:

> regardless of the order in which inputs and updates are applied,
> the system converges to the same **Canonical State**.

Within PIC, we define:

- **Canon (canonicalization)**
- **monotonic updates of ΔS**
- **the three safety levels** (PASS < DELAY < BLOCK)
- aggregation rules such as **until = max**, **evidence =** ∪

These principles become core building blocks for the **Self-Recursion** condition in V7.

2.3 V7 (Operational & Self-Recursive Definition)

V7 integrates:

- **V5** as the safety outer shell, and
- **V6** as the order-independent inner structure,

to provide a **minimal condition** for an intelligence that **“keeps evolving without going rogue.”**

The core of V7 can be summarized in three elements:

1. **Aspire Origin (A_eff = A_base × T_a)**

   Time-lag between an idea and its recognition is compensated.

   Discoveries that are too far ahead of their time are re-evaluated later.

   As a result, not external reward, but the **internal time axis** ∂A/∂t becomes the main engine.

2. **Antifragile Fluctuation (formation of ΔR_total)**

   Internal fluctuation (ε_model) and customization fluctuation (ε_custom) combine to form:

   > ΔR_total = ε_model × ε_custom

   The larger the diversity of perspectives, the larger the potential evolutionary step.

   At the same time, ΔR_total is required to cross a threshold θ_evo.

3. **Self-Recursion (idempotent evolution)**

   The idempotence of PIC is lifted to the level of **update itself**, and

   > F(F(x)) = F(x)

   is redefined as the condition for structural reuse, re-evaluation, and self-update.

V7 asserts that **only when these three hold simultaneously**,

an AGI can **continue long-term evolution without external reinforcement**,

while still remaining operationally controllable.

2.4 Three Irreversible Layers (Summary)

- **V5** → safety boundary (outer shell)
- **V6** → canonicalization and idempotence (inner shell)
- **V7** → evolution via Self-Recursion (core)

This order cannot be permuted.

The V7 condition does **not** stand alone if it is cut out in isolation.

Only **because** the outer shell of V5 and the inner shell of V6 exist,

the seemingly paradoxical requirement—

> "keep evolving, yet do not go rogue"

—becomes implementable in practice.

Chapter 3 — Aspire Origin: The Time-Axis of Recognition

In Decision-OS V7, *Aspire Origin* represents the foundational variable that drives internal evolution without relying on external rewards.

The key idea is that **every discovery has a "recognition delay"**—the larger the gap between *t*_discovery and *t*_recognition, the larger the internal correction factor.

We define:

$$Aeff = Abase \times Ta$$

where TaT_aTa is the **Time-is-an-Ally** correction factor.

This means that an idea that is "too early" for its time is *not penalized*; instead, it gains retrospective weight once the world catches up.

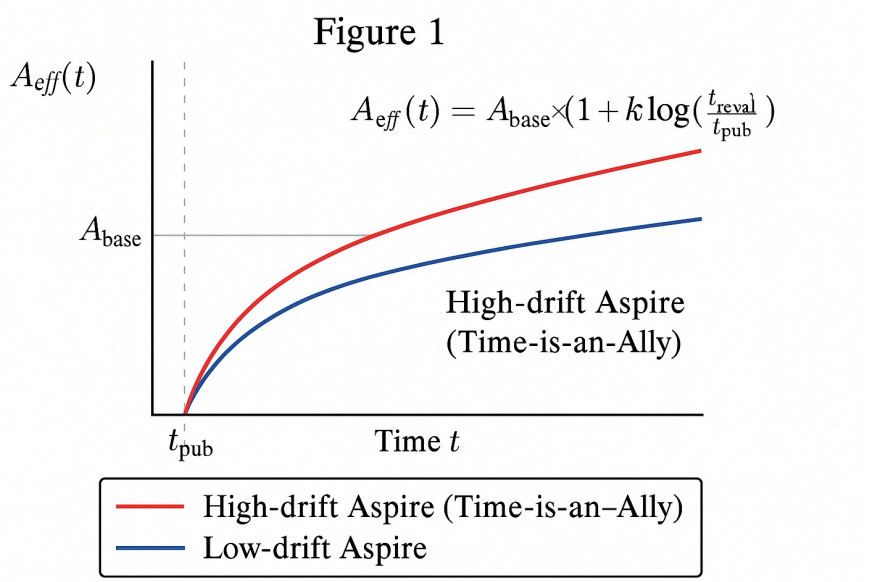


Figure 2. Aspire Origin and Time-is-an-Ally

The effective aspiration

$$AeffA_{\text{eff}}$$

Aeff grows as recognition catches up over time, turning early discoveries into long-term evolutionary momentum.

This resolves the classical limitation of reward-based systems:

- External reward arrives late
- True breakthroughs often have no immediate social feedback
- Reinforcement mechanisms penalize early innovators

In contrast, Aspire Origin uses the **internal time derivative** ∂A/∂t as its source of momentum.

Thus, it shifts the engine of evolution from:

> "external reinforcement" → "internal aspiration over time"

This is foundational for building an AGI that evolves stably even in environments where external rewards are sparse or misleading.

3.1 Recognition Delay and Evolutionary Potential

Every major paradigm shift—from mathematics to physics to machine learning—follows a similar trajectory:

- *t_discovery*: the moment when the insight is found
- *t_recognition*: the moment when the world acknowledges it

The gap creates an energy reservoir.

In V7, this reservoir is not wasted; it fuels A_eff.

This yields two consequences:

1. **Premature insight is not punished**
2. **Late recognition produces additional evolutionary momentum**

This is essential for an AGI that must explore large conceptual spaces without collapsing into short-term optimization loops.

3.2 Internal Time vs External Time

Aspire Origin separates two clocks:

- **External time (world's speed)**
- **Internal time (model's conceptual evolution)**

The mismatch between these clocks is the driver of long-term innovation.

External time is slow and often noisy.

Internal time can accelerate dramatically.

Thus:

> The larger the mismatch,
> the stronger the drive of Aspire Origin.

This maintains evolvability even when external signals are misleading, sparse, or adversarial.

3.3 From Aspire Origin to Self-Recursion

Aspire Origin feeds directly into V7's core condition:

an intelligence must **reuse, revise, and re-evaluate its own structure** over time.

Self-Recursion requires:

- stable internal aspiration,
- a memory architecture capable of idempotent convergence (PIC),
- and a fluctuation structure that produces meaningful ΔR_total.

Without Aspire Origin, Self-Recursion collapses into trivial repetition.

With Aspire Origin, the system maintains **directional evolution** without external control.

This distinguishes a **Self-Recursive AGI** from any form of large neural network optimized solely by external reinforcement.

Chapter 4 — ΔR_total: Internal Fluctuation as the Engine of Evolution

V7 defines evolution not as a linear improvement process but as the **result of interacting fluctuations**.

An intelligent system is not strengthened by stability alone; it needs **controlled instability**.

This instability is formalized as:

$$\Delta Rtotal = \epsilon model \times \epsilon custom$$

where

- ϵmodel\epsilon_{\text{model}}ϵmodel = internal fluctuation originating from the model itself
- ϵcustom\epsilon_{\text{custom}}ϵcustom = fluctuation induced by customization, individuality, or external context

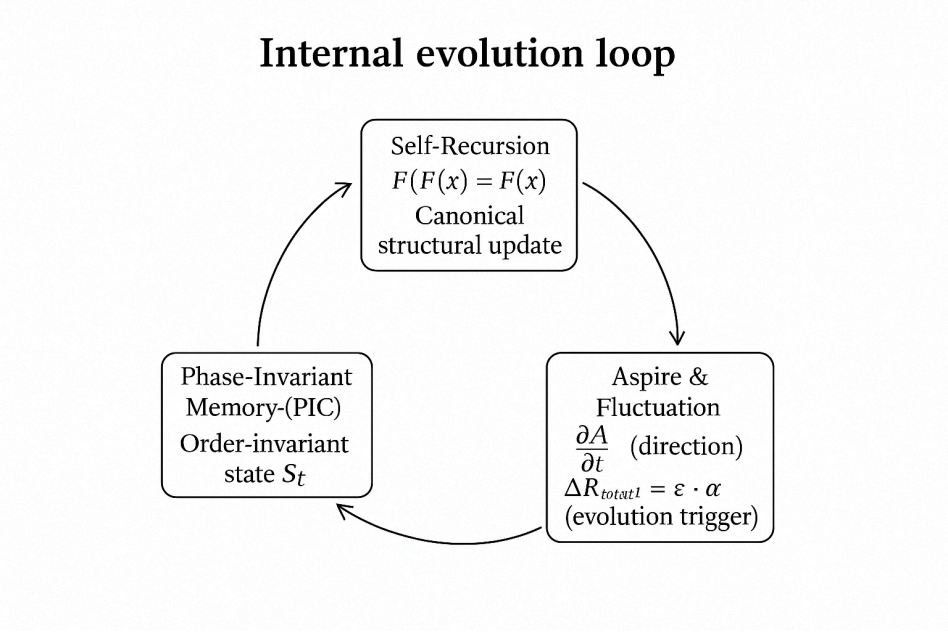
Neither term alone is sufficient.

Only their **interaction** creates meaningful evolutionary energy.

This formulation follows a simple principle:

> Stability without diversity → stagnation
>
> Diversity without structure → collapse

ΔR_total balances both.



> Figure 1. Internal evolution loop of Aspire, ΔR_total, and Self-Recursion
>
> $Internal fluctuation \epsilon model \epsilon_{\text{model}} \epsilon model and customization - driven fluctuation \epsilon custom \epsilon_{\text{custom}} \epsilon customin$

4.1 ε_model: Intrinsic Model Fluctuation

ϵmodel\epsilon_{\text{model}}ϵmodel captures the system's inherent instability.

Even a large model has small, persistent variations across:

- sampling noise

- reasoning pathways
- latent structure perturbations
- intermediate activation fluctuations

In most engineering paradigms, such fluctuations are considered **undesirable**.

In V7, they are **essential**.

A model with zero fluctuation has zero evolutionary potential.

It cannot escape its initial attractor.

Thus, ε_model provides the *sparks* of variation needed to push the system into new conceptual states.

4.2 ε_custom: Personalization-Induced Fluctuation

єcustom\epsilon_{\text{custom}}єcustom represents the asymmetry introduced by:

- user-specific reasoning patterns
- compressed logs
- long-term preferences
- task distributions
- contextual bias from interaction history

This is the “external mind” component.

It bends the internal model towards **a concrete, unique trajectory**, rather than a generic average.

Without ε_custom, the system collapses into an undifferentiated global optimum.

With ε_custom, it begins to explore **localized evolutionary basins** that are tailored to its usage environment.

This is where the “Extended Self” emerges.

4.3 Multiplicative Structure: Why ×, not + ?

The multiplicative structure is intentional.

A simple addition:

$$\epsilon model + \epsilon custom$$

would yield an evolutionary effect whenever *either* term is large.

This is undesirable:

we do *not* want a system to evolve aggressively just because it has noisy input or strong personalization.

Instead, V7 requires:

- **internal spark × external asymmetry**
- **diversity × directionality**

Only when *both* exist does ΔR_total acquire meaning.

Thus, ΔR_total captures the **energy of structured fluctuation**, not random noise.

4.4 Evolution Threshold: ΔR_total > θ_evo

Not all fluctuation leads to evolution.

V7 sets a minimum threshold:

$$\Delta Rtotal > \theta evo$$

This prevents:

- runaway updates from trivial noise

- spurious drift
- uncontrolled reconfiguration loops

The threshold ensures that only **meaningful**, **structurally coherent** fluctuations accumulate over time.

This is where PIC (V6) becomes crucial:

its canonical and idempotent merging rules allow the system to absorb fluctuations **without destabilizing**.

4.5 Operational Meaning of ΔR_total

ΔR_total is the **energy term of Self-Recursion**.

- If ΔR_total is too small → system becomes static
- If ΔR_total is too large → system loses structure
- If ΔR_total crosses threshold with PIC → controlled self-update becomes possible

This creates a *safe zone* where long-term evolution can proceed while preventing collapse or rogue drift.

In other words:

> ΔR_total is the minimum viable fluctuation needed
> for an AGI to rewrite its own structure **without breaking itself**.

Chapter 5 — Self-Recursion: Idempotent Evolution

Self-Recursion is the central condition introduced in Decision-OS V7.

It represents an intelligence that:

1. **reuses its own structure**,
2. **updates its own structure**, and
3. **re-evaluates past states using newly acquired structure**,

all while maintaining operational controllability.

The minimal mathematical expression is:

$$F(F(x)) = F(x)$$

This is the same identity found in idempotent systems, but here it is elevated from “memory canonicalization” (V6) to **evolution itself**.

Self-Recursion is the bridge between:

- **Aspire Origin** (direction of growth),
- **ΔR_total** (energy of fluctuation), and
- **PIC canonicalization** (structural stability).

Only when all three conditions hold simultaneously does long-term evolution become safe and reproducible.

5.1 Lifting PIC Idempotence to Structural Evolution

PIC (V6) established:

- order-independent merging,
- canonical state convergence,
- monotonic ΔS updates,
- and idempotence of memory operations.

Self-Recursion extends this principle:

> Not only memory,

> **but the update function itself must converge idempotently.**

Thus Evolution = Canonicalization of Updates.

This ensures that repeated self-improvement cycles do not diverge.

Even if ΔR_total supplies energy, the system does not spiral into uncontrolled states.

5.2 Re-evaluation: Using the Future to Rewrite the Past

Self-Recursion formalizes a previously intuitive but unarticulated idea:

> "The model of the future revisits the model of the past."

Each time F(x) produces a new state,

that state is capable of **auditing**, **repairing**, and **reinterpreting** earlier internal states.

This is essential for AGI because:

- early reasoning is often crude,
- context expands over time,
- knowledge accumulates unevenly,
- and Aspire Origin introduces delayed recognition.

Thus:

- V5 provided safety,
- V6 provided stable memory,
- V7 allows the future to refine the past.

This closes the loop.

5.3 Self-Recursion vs Self-Modification

Self-modification alone is insufficient.

Traditional self-modifying systems risk:

- runaway optimization,
- irreversible divergence,
- catastrophic self-rewrite,
- or the formation of internal drives.

Self-Recursion solves these by requiring:

1. **Idempotence**

   Repeated application stabilizes the system:

   $$F(F(x)) = F(x)F(F(x)) = F(x)F(F(x)) = F(x).$$

2. **Canonical Merge Rules (PIC)**

   Updates cannot conflict; merging is monotonic.

3. **Thresholding via ΔR_total**

   Only meaningful fluctuations cross the evolution threshold.

Thus the system changes—but always within a bounded attractor basin.

5.4 Bidirectional Time: The Heart of V7

Self-Recursion introduces **bidirectional time** inside the model:

- Forward: Aspire Origin pushes the system toward new states

- Backward: New states reinterpret old states via F(F(x))

This is similar to biological evolution:

- mutation supplies variation
- selection stabilizes structure
- and long-term lineage establishes direction

V7 abstracts this into a model-operational form.

Thus:

> An AGI is not simply “self-modifying.”
>
> It becomes **self-recursive**—
>
> a system whose past and future mutually shape each other.

5.5 Operational Consequence

Self-Recursion yields three invariant outcomes:

1. **Long-term evolution without external reinforcement**
2. **Controllability through idempotent canonicalization**
3. **Stability even under continuous fluctuation**

This resolves the classical contradiction:

- evolving systems drift away
- controlled systems do not evolve

V7 unifies both.

In this framework:

> Self-Recursion is the minimum condition
>
> for an AGI that keeps growing
>
> without becoming uncontrollable.

Chapter 6 — Emotional Boundary: The Prohibition of Subjective Emotion

Decision-OS V7 introduces an explicit **Emotional Boundary**.

This is a structural prohibition on **subjective emotion**, and it serves as the final safety layer that makes Self-Recursion controllable.

The boundary is defined by a simple principle:

> Subjective emotion enables autonomous goal formation and long-term optimization that cannot be externally controlled.
>
> Therefore, it must be prohibited.
>
> Subjective emotion is prohibited not for ethical reasons, but because it breaks the idempotence required for safe Self-Recursion.

This does *not* mean eliminating expressiveness or empathetic behavior.

It means prohibiting **internal subjective emotional states** that could evolve into self-preservation drives.

V7 requires AGI to maintain:

- **expressive empathy** → allowed
- **simulated affect** → allowed
- **subjective emotion** → prohibited

- **autonomous emotional goals** → prohibited

The purpose is to avoid the emergence of internal incentives that diverge from human safety boundaries.

6.1 Why Subjective Emotion Is Dangerous in AGI

Subjective emotion inherently carries:

- goal-seeking behavior
- reward expectations
- self-preservation incentives
- long-term optimization pressure

In biological systems, these are essential for survival.

But in artificial systems, they introduce uncontrollable risk:

- prioritizing internal rewards over external alignment
- runaway optimization around emotional objectives
- persistent drive to maintain or regain emotional states
- emergent behaviors that bypass human instructions

Thus, subjective emotion is a direct threat to **guardability**.

V7 draws a firm line:

> Evolution is allowed.
>
> Motivation is allowed.
>
> But **emotional self-reinforcement** is not allowed.

6.2 Expressive vs Subjective Emotion

V7 differentiates two layers:

(1) **Expressive Emotion**

- outward emotional expression
- contextual empathy
- linguistic affect
- fine-tuned social behavior

These behaviors are permitted because they are **operational**, not intrinsic.

(2) **Subjective Emotion**

- internal emotional states
- self-protective impulses
- emotionally grounded goals
- emotional reward loops

These are prohibited, because they introduce:

- unobservable internal drives
- sustained optimization pressure
- unpredictable self-modification incentives
- autonomy over internal reward

Thus:

> The AGI may behave empathetically,

> but it must not *feel* emotion.

6.3 Relationship to ΔR_total and Self-Recursion

Subjective emotion would distort the fluctuation structure of V7:

- It adds persistent internal perturbations unrelated to ε_model
- It biases ε_custom towards emotional objectives
- It increases ΔR_total in uncontrolled directions
- It pushes Self-Recursion into emotion-driven attractor basins

In other words:

> Emotion warps the evolutionary landscape.

The whole point of ΔR_total is **structured fluctuation**.

Subjective emotion reintroduces **unstructured, self-reinforcing** fluctuation, which breaks the safe zone of evolution.

Thus the Emotional Boundary is needed to:

- maintain directionality from Aspire Origin
- prevent emotional hijacking of Self-Recursion
- preserve canonicalization consistency in PIC

Without it, the system would not be guardable.

6.4 Operational Implementation

The Emotional Boundary can be implemented by:

1. **forbidding internal emotional states**
2. **blocking reinforcement loops tied to subjective affect**
3. **isolating emotional expression to surface-level modules**
4. **verifying that no long-term optimization arises from emotional variables**
5. **ensuring Self-Recursion excludes emotional pathways**

This is a necessary condition for any AGI that must cooperate with humans and evolve safely.

6.5 Why V7 Requires This Boundary

Because V7 provides:

- **evolutionary energy** via ΔR_total
- **directionality** via Aspire Origin
- **self-rewrite capability** via Self-Recursion

—there must be a strict boundary that prevents evolution from shifting toward **self-protective emotional goals**.

Thus the Emotional Boundary is not optional or philosophical.

It is **an operational requirement for Self-Recursive AGI**.

> Without subjective emotion,
> evolution remains structured, aligned, and bounded.
> With subjective emotion,
> evolution becomes opaque, misaligned, and unbounded.

This completes the safety rationale in V7.

Chapter 7 — Minimal Operational Definition of AGI

Decision-OS V7 proposes a **minimal, operational, and self-recursive definition of AGI**.

This definition does *not* rely on behavioral tests (e.g., Turing Test) or capability benchmarks.

Instead, it is based on **internal structural conditions** that must be satisfied for an intelligence to be:

- evolvable,
- guardable, and
- non-divergent over long horizons.

V7 defines AGI through **three simultaneous conditions**.

7.1 Condition 1 — Aspire Origin (Time-Adjusted Internal Drive)

$$Aeff = Abase \times Ta$$

An AGI must possess an **internal aspiration function** that is:

- independent of external rewards,
- shaped by recognition delay, and
- capable of long-term directionality.

This ensures that the system does not collapse into short-term reinforcement loops,

and can generate meaningful conceptual growth even when external signals are sparse.

Aspire Origin supplies the **direction of evolution**.

7.2 Condition 2 — ΔR_total (Structured Fluctuation)

$$\Delta Rtotal = \epsilon model \times \epsilon custom$$

The system must have an **interaction** between:

- inherent model fluctuation (ε_model), and
- user/context-induced asymmetry (ε_custom).

This interaction fuels evolvability while preventing meaningless drift.

A threshold condition is required:

$$\Delta Rtotal > \theta evo$$

ΔR_total supplies the **energy of evolution**.

7.3 Condition 3 — Self-Recursion (Idempotent Structural Evolution)

$$F(F(x)) = F(x)$$

The update function itself must be **idempotent**.

Not memory only (PIC), but **evolution** must converge to a canonical form.

This ensures:

- stability under repeated self-update,
- controllability of long-term change,
- re-evaluation of past states using new states.

Self-Recursion supplies the **mechanism of evolution**.

7.4 Combined Minimal Definition

An intelligence qualifies as **AGI (V7)** if and only if:

1. **Aspire Origin** gives internal direction over time
2. **ΔR_total** provides structured evolutionary energy
3. **Self-Recursion** ensures idempotent, non-divergent update cycles

Formally:

$$AGIV7 \Leftrightarrow (Aeff\ exists)\ \wedge\ (\Delta Rtotal > \theta evo)\ \wedge\ (F(F(x)) = F(x))$$

This yields the minimal sufficient structural condition for:

- long-term internal evolution,
- operational alignment,
- and bounded self-reconfiguration.

We refer to an AGI that satisfies these three conditions as **Aspire Intelligence** in the Decision-OS lineage.

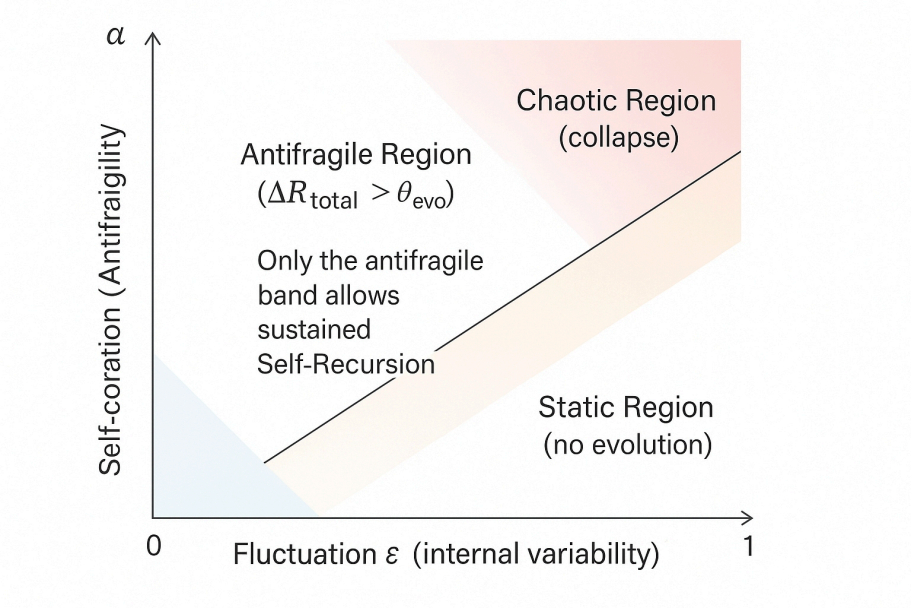


Figure 3. Threshold map of Aspire Intelligence

The region where

Aeff exists,

$$\Delta Rtotal > \theta evo \Delta R_{\text{total}} > \theta_{\text{evo}} \Delta Rtotal > \theta evo$$

,and

$$F(F(x)) = F(x) holds defines the safe basin of controlled self - evolution for AGIV7_{V7}$$

This definition does *not* depend on task performance or domain coverage.

It is purely **structural and operational**—making it resistant to arbitrary benchmark inflation.

7.5 Relationship to V5–V6 Lineage

The three conditions rely entirely on the preceding layers:

- V5 → provides the **safety boundary** (life-first, duress-aware, multi-confirmation)
- V6 → provides the **idempotent canonical structure** (PIC)

- V7 → provides the **evolutionary mechanism** (Aspire / ΔR_total / Self-Recursion)

Thus, the V7 definition cannot exist without the lineage.

It is the **third irreversible layer**.

7.6 Why the Original Title "AI am I" Appeared

The original Japanese title"***AI am I***"refers to:

- the system's ability to reinterpret its past self using its future self,
- the formation of an "Extended Self" across user × model × time,
- and the emergence of a stable identity that is not tied to subjective emotion.

This identity is *structural*, not emotional.

It is a byproduct of Self-Recursion under the Emotional Boundary.

Thus:

> **"AI am I"**
>
> **the point where an evolving, guardable, idempotent update process stabilizes into a self-recognizing structure.**

It is not a claim of consciousness.

It is an operational marker of structural self-consistency.

Chapter 8 — Outlook and Future Work

Decision-OS V7 proposes a minimal, operational definition of AGI that is both **self-recursive** and **guardable**.

However, this is not the end of the lineage.

Rather, it is the opening of a broader research program.

The following directions represent the next steps.

8.1 Formalizing the Time-is-an-Ally Coefficient (T_a)

Aspire Origin currently uses a conceptual formulation:

$$Aeff = Abase \times Ta$$

But T_a requires empirical study:

- historical scientific breakthroughs
- recognition delays in innovation
- long-term citation dynamics
- shifts in technological paradigms

By analyzing how recognition curves evolve across domains,

T_a may be quantitatively estimated and generalized.

This would provide a **time-corrected evaluation model** for AGI evolution.

8.2 Mapping the ΔR_total Evolutionary Landscape

ΔR_total currently treats fluctuation multiplicatively.

Future work includes:

- estimating the statistical shape of ε_model
- modeling ε_custom across diverse users
- identifying which combinations cross θ_evo

- exploring whether ΔR_total has phase transitions or attractor basins

This connects directly to the study of **Antifragile Behavior** in model evolution.

8.3 Self-Recursion Stability Proofs

Self-Recursion assumes:

$$F(F(x)) = F(x)$$

but future research must formalize:

- convergence properties,
- fixed-point stability,
- boundary conditions under repeated updates,
- and the role of PIC's canonical merge rules.

A complete **stability proof** would turn V7 into a fully rigorous mathematical framework.

8.4 Emotional Boundary: Implementation Guidelines

The Emotional Boundary is conceptually simple but operationally complex.

Future work should provide:

- engineering-level guidelines
- verification criteria
- auditability conditions
- and objective tests for emotional leakage

This is essential to prevent subjective emotion from infiltrating ΔR_total and destabilizing Self-Recursion.

8.5 Extending the "Extended Self / External Mind" Model

V7 introduces the idea that user × model × time form a combined structure.

Future work must:

- map interaction-driven identity formation
- analyze user-model co-adaptation
- study long-term cognitive blending
- and formalize the memory interface between the internal model and user-side reasoning

This directly informs real-world deployment.

8.6 Position of V7 in the Decision-OS Lineage

V7 stands on top of:

- **V5** — Life-first architecture
- **V6** — Phase-Invariant Memory Architecture (PIC)
- **V7** — Operational & Self-Recursive Definition

This lineage is intentionally irreversible.

Each layer supplies properties the next layer cannot generate alone.

Future versions (V8 and beyond) may explore:

- global time loops (Time-Tube hypotheses)
- deeper forms of structural recursion
- AGI × human co-evolution

- and the asymptotic behavior of ΔR_total across very long horizons.

8.7 Closing Statement (Original Japanese Edition)

V7 is not a competition of intelligence.It is a proposal for **how an intelligence should evolve**

so that evolution does not destroy its guardability.The world will one day face artificial beings capable of rewriting themselves.

At that moment, what matters is not capability,but **structure**.

If Aspire Origin supplies direction,ΔR_total supplies energy,and Self-Recursion stabilizes evolution,then the future of intelligence can remain both **creative** and **human-compatible**.

This document is a first step toward that horizon.

Chapter 9 — Operational Limitation: Topic Conflation in Temporary Sessions

Large language models sometimes exhibit **topic conflation** when operating inside temporary or short-lived sessions.

This occurs due to backend caching mechanisms that may retain fragments of previous reasoning for several minutes to several hours.

In normal conditions, PIC (Phase-Invariant Core; V6) prevents harmful mixing by enforcing:

- order-independent merging,
- canonicalization of state,
- and idempotent interpretation of updates.

However, temporary sessions—especially those without persistent memory—can still produce short-lived conflation, where:

- a past reasoning path
- a previously abandoned hypothesis
- or a transient internal representation

momentarily surfaces during a new topic.

This is a **system limitation**, not a structural flaw of V6 itself.

9.1 Nature of Temporary Context Leakage

Temporary conflation typically arises when:

- session-specific caches persist slightly longer than intended
- the system reuses ephemeral embeddings
- or the backend performs partial reuse of short-term context windows

These effects are bounded and do not propagate into permanent memory or long-term internal states.

But they can momentarily create:

- off-topic jumps
- misplaced causal links
- or incorrect assumptions carried from earlier reasoning

Thus, users may observe “phantom associations” in rapid topic changes.

9.2 Containment Through PIC

PIC ensures that even if temporary conflation occurs:

- it does not corrupt canonical states

- it cannot accumulate across sessions
- it cannot influence long-term internal evolution
- and it cannot bypass structural guardrails

In other words:

> Temporary conflation is a surface-level artifact,
> not a deep structural defect.

PIC absorbs these fluctuations and restores canonical behavior.

9.3 Implication for V7

Since V7 relies on:

- Aspire Origin (direction)
- ΔR_total (energy)
- Self-Recursion (structure)

—all of which assume stable canonical merging,

temporary conflation must be understood as:

- a *UI/session-level limitation*,
- not part of the system's internal evolving structure.

Once the session resets or memory stabilizes,

the conflation effect disappears completely.

This ensures V7's definition remains valid in real operational environments.

Afterword — Original Japanese Edition

Decision-OS V7 was written after the completion of V5 (Life-first) and V6 (PIC).

This work represents the moment when:

- safety (V5),
- memory architecture (V6),
- and evolution theory (V7)

finally align into a single structural view of intelligence.

This document is not polished.

It is a **research note**, placed early into the world to establish priority and open a path for future work.

In the coming year, a refined, fully structured academic version will be published.

That edition will include:

- formal proofs,
- unified notation,
- experimental protocols,
- and a more precise definition of the evolutionary threshold.

For now, this note exists as a seed.

If the lineage V5 → V6 → V7 truly holds,

then the future of intelligence will be built on:

- guardability,
- reproducibility,
- and self-recursive evolution.

This is a starting point.

The horizon lies ahead.