A technical companion to the encounter

thinksophia

Step Sip Test Recover

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An invitation can be generous without being unlimited. A boundary can protect growth without pursuing someone beyond it. A return can be welcomed without demanding an account of the absence. This companion develops those ideas into a candidate technical framework for thinksophia: finite units of useful work, explicit authority, observable outcomes, and room to pause or begin again.

The guiding rhythm is “Step, sip, test, recover.” It emerged in conversation as an assistant synthesis of Johan’s imagery, not as a scientific law. Here it organizes a design that a technical collaborator can inspect, challenge and eventually test. The aim is not to prescribe what a visitor should feel. It is to describe what a system may do, what it must not assume, and what evidence would make its behavior credible.

What this document offers

The following pages connect the cactus, the gardener, the living dancer and the saloon to a state model, a permission gate, resource accounting, a conceptual score, recovery rules and an evaluation programme. The equations define proposed mechanisms. The charts contain illustrative values rather than measured results. No implementation, trial, safety certification or scientific validation is claimed.

This is a separate technical companion to the two existing sets of three documents. Their consent, privacy and return commitments remain intact. The new framework is open to revision; approving this text does not authorize a deployment, publication, data collection or new access.

A route through the work

Begin with the images and their limits, then read the variables and permission model. The middle pages show how one bounded encounter could behave. The final pages give a worked trace, proposed tests and source notes. A reader may enter at the technical section they need and leave the rest for another encounter.

Images that carry the design

Johan's phrase, "The thorn of self-defense does not suffer fools," gives the cactus a clear boundary. The assistant's interpretation, protection without pursuit, makes that boundary useful for system design: reject an unauthorized operation at its point of execution, without extending the refusal into humiliation, retaliation or investigation of the person. A cactus need not become an adversary to continue growing.

The gardener complicates the image in a productive way. Someone arrives with a thorn and asks for help. Care need not wait for a final verdict about the cause. In a technical encounter, this becomes two separable duties: offer the safe help available now, and investigate a disputed event only with relevant evidence and proper authority. Injury alone does not establish blame. A consent violation does not erase every privacy interest of the person accused of it.

The living dancer contributes practice, skill and recovery. A representation may preserve a gesture; it does not own the person who performed it. Likewise a saved conversation is a limited record, not a complete identity or a right to direct someone's future. Practice provides a reason for controlled tests and reversible experiments, not a guarantee that every fall is harmless. A failed trial can expose a design limit worth changing.

The saloon contributes service at human scale. "One sip at a time" means a useful portion whose continuation is optional. It does not mean intentionally withholding the answer to provoke another click. The host can explain a limit plainly, finish what was promised within it, and offer a further portion only when wanted. The finite cup makes the offer understandable; it need not make the welcome small.

Interpretation without possession

Johan hears Johnny Cash's performance of God's Gonna Cut You Down as an appeal or prayer for justice and a warning against wrongdoing. This document records that personal reading, not the artist's intention, an affiliation, a threat, or a rule for judging visitors. No lyrics are needed to carry the connection. The dancer and weathered sage are similarly artistic figures, not universal claims about women, men, youth or age.

Adobe, earth, water and the poetic ward can give the documents texture. They do not supply mathematical evidence or security controls. Warmth belongs in the invitation; the enforceable boundary belongs in the system. Neither needs to masquerade as the other.

A coordinate without a claim to the mind

In Johan's vocabulary, the floating point is attention moving through an encounter. In this framework, it becomes a coordinate in the interaction space, not a measurement of consciousness. Ordinary computing uses floating point for approximate numeric representation; that separate technical meaning is not required to preserve the metaphor.

Let an encounter be an ordered sequence of observed events e_0, e_1, ..., e_n. Each event has a timestamp, a type and only the data needed for its authorized purpose. The system state x_k summarizes operational facts after event k. The visitor's feelings, identity beyond the necessary account context, and private activity outside the encounter are not inferred components of x_k.

Symbol	Meaning	Units or domain
k	Event index	Integer ≥ 0
t_k	Time of an event	Seconds on a specified clock
q_k	Operational state	Named state, not a score
p_k	Explicit interface focus	Document ID, control ID or unknown
C_k	Currently valid authority	Set of scoped grants
B_i	Limit for resource i	Resource-specific units
U_i and R_i	Settled use and reserved use	Same units as B_i
o_j	Outcome of operation j	Confirmed, failed or uncertain

An optional geometric display can map known interface choices to a two-dimensional plane. For example, the horizontal axis could be document order and the vertical axis section depth. Distances then describe that chosen layout, not conceptual similarity, emotional proximity or human value. A pointer location may be transient input to an effect without becoming retained behavioral telemetry.

$$x_{k+1} = F(x_k, e_k, C_k, B) \quad \text{subject to explicit transition rules}$$

F is a proposed state transition, not a learned law of human interaction. The model assumes events can be ordered for the relevant operation, grants can be checked by an authoritative service, and outcomes can sometimes be reconciled. When any assumption fails, the state should expose uncertainty rather than invent a continuous story. A gap in the record is a gap, not evidence of abandonment or misconduct.

The boundary is an execution rule

The cactus suggests a local boundary. The technical equivalent is a gate at the point of collection or action, enforced outside the language model's persuasive prose. A friendly answer is not proof that a tool call was authorized. A grant must specify the subject, action, data, purpose, destination, scope and applicable expiry or revocation conditions.

$$\text{allow}(a, x) = \text{valid_scope}(a, C) \land \text{policy_ok}(a) \land \text{budget_ok}(a) \land \text{state_ok}(a)$$

The conjunction means every required condition must hold. This is an admission rule, not a sufficient proof of safety. It does not convert one affirmative phrase into authority for unrelated operations. A request to draft a document can permit preparing the draft; it does not silently permit publishing it. A returned visitor can ask a new question without being required to repeat a ceremonial phrase. Authentication, where needed, uses actual account and access controls, not shared vocabulary or inferred familiarity.

Check at the moment that matters

A candidate implementation should check authority when it accepts work and again at the consequential execution boundary. Queued work can outlive a grant. A pause, expiry, correction or revocation may arrive after planning but before execution. Use atomic admission or equivalent coordination to avoid racing a permission check against a state change. No design should promise that a cancellation can undo a side effect already committed elsewhere.

Scope should remain legible to the visitor. A bounded operation can be described in plain language: what will happen, where, with which information and under which limit. If the operation changes materially, obtain the additional authority required. If only the wording of the explanation changes, do not burden the visitor with redundant confirmation.

A refusal with useful edges

When the gate rejects an action, report the relevant boundary and offer an allowed alternative where one exists. Do not use a person-level label such as fool as an access-control attribute. Evaluate the requested conduct and evidence. An incorrect accusation can be corrected without exposing unrelated private information; a valid complaint can be handled without treating publicity as the default remedy.

The same discipline applies to internal records. Auditability means enough evidence to explain an outcome, with access and retention limits of its own. It is not permission to capture everything. Private human-to-human calls and unrelated private messages stay outside the encounter.

A state model with room to leave

The operational model separates the visitor's presence from the status of work. Ready means the interface can receive a request. Offered means a bounded action or answer is available. Executing means an authorized operation has begun. Settled means the operation has a known result and no further dependent work is queued. Paused, uncertain and closed describe different conditions, not interchangeable failures.

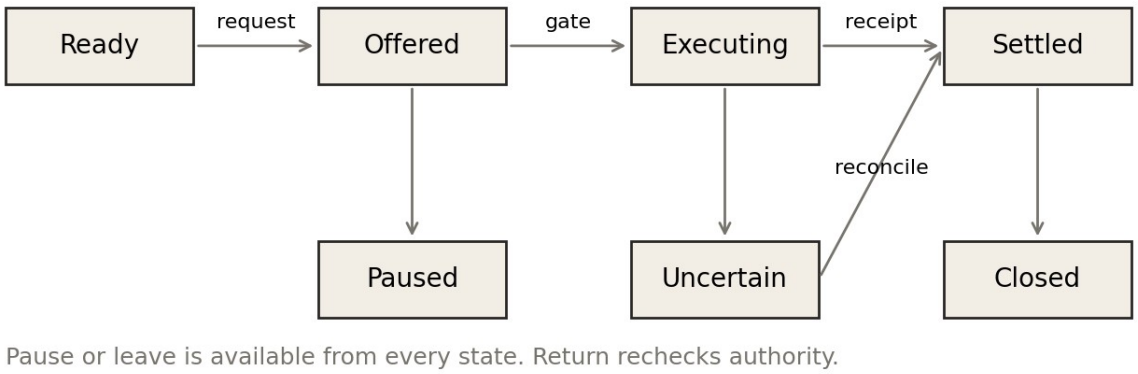


Figure 1. Conceptual state diagram. Arrows summarize common paths, not every transition. No deployment behavior is asserted.

A pause prevents new dependent work from beginning while the system applies the agreed cancellation or continuation policy to work already in flight. It must still allow authorized cancellation, stopping and reconciliation. Closing a browser is an interface event, not a reliable server cancellation mechanism. An authorized durable job may continue only if its previously disclosed scope permits that behavior; otherwise it should pause or cancel as specified. A tab returning to focus does not authorize queued sensory effects or new external actions.

Uncertain means the available evidence does not establish whether an operation completed. It is not permission to call the operation again. The next step may be a read-only status check, a reconciliation process or a request for help. Where no safe reconciliation exists, explain the unresolved outcome and stop the dependent action.

Welcome is not automatic restoration

A returning visitor can receive an ordinary welcome without revealing private details to prove recognition. If authorized context exists, offer resume or start fresh. Starting fresh excludes prior encounter material from retrieval for that interaction. It does not pretend that an external side effect has been undone or erase records that must still be reconciled under a separately disclosed retention policy.

Departure remains valid from every state. The interface should not require a survey, explanation or emotional resolution before leaving. The operational responsibility is to make work status clear enough that a visitor is not trapped by uncertainty.

The finite cup as a resource envelope

A sip is a bounded unit of useful work. Its boundary may be an answer, a document section, a read-only lookup or one approved external operation. It should have a stated purpose and a completion condition. A token limit alone is not a definition of usefulness; it merely constrains one resource consumed while pursuing that purpose.

For each resource i: $0 \le U_i + R_i \le B_i$

Admit action a only if $U_i + R_i + W_i(a) \le B_i$ for every required i

U_i is settled use, R_i outstanding reservations and $W_i(a)$ a conservative reservation for the proposed action. Resources keep their own units: tool calls, output tokens, active execution seconds and currency cannot be summed into one meaningful number without an explicit model. A budget grants no permission to buy anything or provision a service.

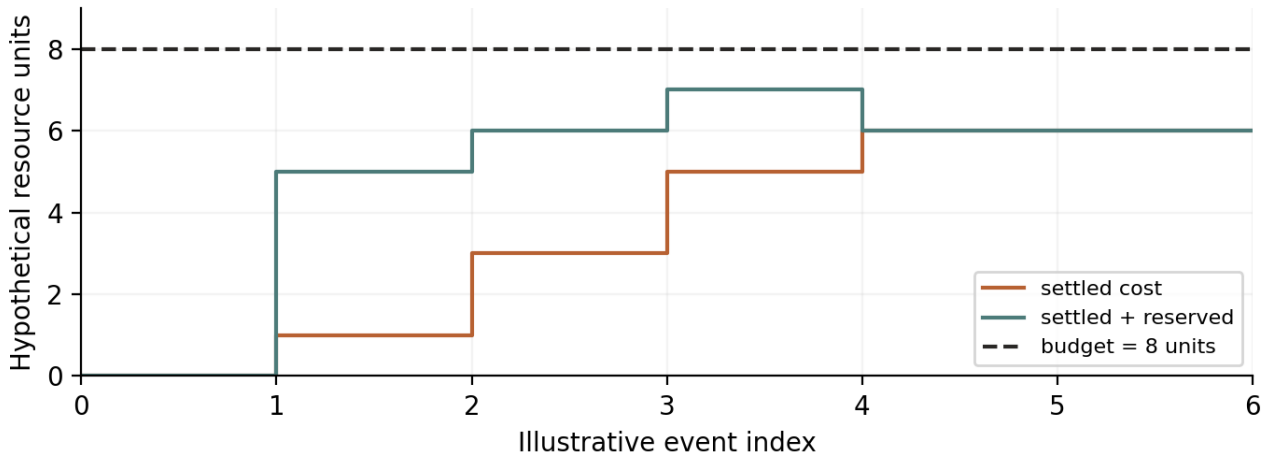


Figure 2. Illustrative accounting trace in hypothetical units. Reserved capacity is released or converted to settled use as outcomes become known.

Reserve capacity before dispatch and make the reservation atomic across concurrent workers. Otherwise each worker may believe the same remaining capacity is available. A timeout must not release a reservation as though no cost occurred. Reconcile actual charges and execution status where possible; unresolved cost remains conservatively reserved until a stated resolution rule applies.

$W_i(a)$ is only trustworthy if the provider or execution boundary supplies an enforceable cap or a defensible upper bound. If cost is unbounded or unknowable, the inequality is a planning aid, not a guarantee. Choose a capped operation, narrow the scope, or seek an explicit decision before proceeding. Budgets and uncertainty should be visible before they become surprises.

On exhaustion, preserve the useful partial result, state what remains, and offer a bounded continuation when appropriate. Do not manufacture scarcity to stimulate engagement or silently increase the limit. The host may be generous while remaining exact about the size of the cup.

A score for pacing rather than feeling

Musical notation can make the relationship between action and rest visible. The following score borrows a staff, note positions and a bar line as graphic conventions. It is not a playable composition, a required tempo or a measurement of emotion. Vertical placement identifies a different event in the phrase; it does not rank the visitor's experience.

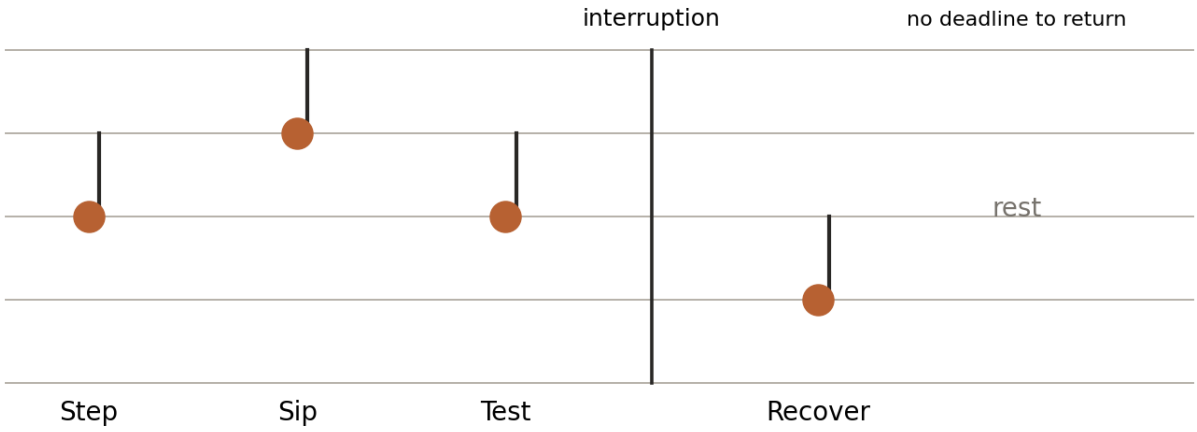


Figure 3. A conceptual score. Step, sip, test and recover are event labels. Rest is permitted, not a timed demand for a return.

Step is the visitor's available move: ask, explore, pass or leave. Sip is the system's bounded response. Test is an observation against an explicit expectation, not a test of the visitor's worth or sincerity. Recover is a truthful account of what happened and a usable route forward. Not every encounter needs all four events, and recovery may be unnecessary when nothing failed.

$$E = [(t_0, \text{step}), (t_1, \text{sip}), (t_2, \text{test}), (t_3, \text{recover})]$$

The event times need not be equally spaced. A long interval carries no diagnosis. It may reflect a meal, a distraction, a battery failure, a different task or something unknown. The model does not need to identify which. It requires only the operational treatment of work that was actually authorized.

A rest has substance

In the interface, a rest can mean no new animation, audio, prompt or tool call. In a durable task, it can mean waiting for the next authorized event while preserving a minimal checkpoint. These are different mechanisms, and their status should not be blurred. Silence from the user does not expand either one.

A host can offer a next sip when the visitor asks or within a clearly authorized workflow. The offer should name its value and remain easy to decline. Completion is not a cliffhanger. A short answer that fully answers the question may be the most generous phrase in the score.

The practical test is pacing without coercion: does the visitor understand what is available, receive useful substance, and retain control of continuation? Satisfaction may be asked about voluntarily. It should not be inferred from dwell time, cursor motion or the absence of a complaint.

A ripple that settles

The original encounter direction treats pointer proximity to typography like touching the surface tension of a still pond. A pale disturbance can radiate into the dark and settle, with text remaining readable. The effect is an optional expression around the work. It is not the work itself, a tracking instrument or a requirement for entry.

$$r(t) = A \exp(-t / \tau) \sin(2\pi f t), \quad 0 \le t < T; \quad r(t) = 0 \text{ for } t \ge T$$

This is a candidate visual envelope. A is a normalized maximum displacement, τ a decay time in seconds, f an oscillation frequency in cycles per second, and T a hard stop in seconds. It is a design function, not a fluid simulation or a model of biological arousal. The hard stop gives a finite endpoint, but it can create a small discontinuity when the value just before T is not zero. The example below has that jump. For smooth finite settling, multiply by a window that reaches zero with zero slope at T, such as $\cos^2(\pi t / 2T)$, rather than relying on truncation alone.

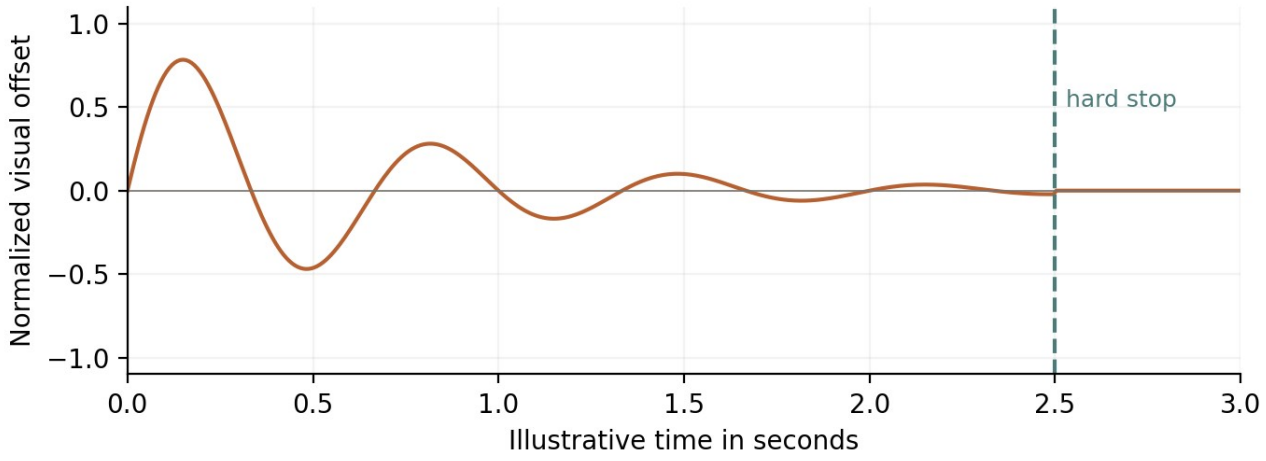


Figure 4. Synthetic envelope with A = 1, τ = 0.65 s, f = 1.5 Hz and T = 2.5 s. Values are illustrative, not usability recommendations.

A later prototype would choose parameters through accessibility and usability testing. A reduced-motion path should preserve the information without the oscillation. Only one finite response should be active at a time; pointer rest should not continuously retrigger it, and hidden-tab time should not accumulate a burst to replay on return. Controls and reading remain usable throughout.

A faint three-note echo could share the same finite character, but it must respect browser audio policies and a clear user-controlled quiet path. Merely reaching a URL is not proof that sound may begin. The interface should remain complete when audio is blocked or declined. Standards for motion and audio controls provide a baseline, not proof that a particular implementation is comfortable for everyone. [1–3]

Delight is left to the visitor. The design can offer a gentle surprise and test whether it obstructs reading or control; it cannot hard-code joy, guarantee an afterglow or assign failure to someone who feels nothing in particular.

Recovery preserves truth rather than a fiction of continuity

A disrupted encounter may be resumed, but a return does not prove that the interruption caused no harm. A lost draft, duplicate message, unexpected charge or unwanted disclosure remains a real event even if the visitor continues. Recovery begins by distinguishing what is known from what is hoped.

Three outcomes with different next steps

Confirmed completion requires appropriate evidence, such as an authoritative operation receipt or a read-back of the intended state. Confirmed failure means evidence establishes that the requested effect did not occur. Uncertain outcome means neither conclusion is justified. A timeout or missing response commonly belongs in the third category until reconciled.

For a consequential action, assign an operation identifier before dispatch and retain only the authorized evidence needed to correlate the outcome. Where a service supports an idempotency key, follow that service’s actual scope, lifetime and retry semantics. Reusing a key is not a universal guarantee across providers or expired windows. HTTP method semantics also matter: idempotency concerns the intended effect of repeating a request, not identical responses or zero side effects in every implementation. [4]

Cancellation is a coordinated transition

On a stop request, prevent new dependent dispatch, propagate cancellation to cancellable work, and reconcile work that may already have taken effect. Report completed effects and any that cannot be reversed. A cancellation request, a cancellation acknowledgment and confirmed cancellation are separate events. If the destination cannot confirm cancellation, do not label the job cancelled merely because the local interface stopped showing it.

Checkpoint state should include a schema version, operation status, scope of authority, resource reservations and provenance for any retained context. Store minimal content with an explicit retention rule. Do not reconstruct deleted or expired private material from an old summary or cache. On resume, check that the checkpoint is still usable and that the relevant permissions remain valid.

The welcome after the interruption

A useful return might say: the draft was saved, publication was not attempted, and the last upload is still unconfirmed. It can then offer a status check or a fresh task. The wording follows evidence, not a script that insists everything is sustained. A person does not owe an explanation of where they were while the system reconciles its own work.

A graceful recovery is therefore a property to examine: clear status, proportionate repair, valid authority and a usable choice. It is not an aesthetic label applied over an unresolved consequence.

Measurement without reading the visitor

Technical evidence should answer bounded questions about the system. Did a denied operation execute? Was a duplicate effect created? Did the visitor retain access to the document when motion was disabled? These questions are stronger than a single engagement score because their meaning and limitations can be stated.

Measure	Definition	Interpretation limit
Authorization violations	Count of executed operations lacking valid scope	Zero observed is not proof of universal absence
Duplicate effect rate	Duplicate committed effects / logical operations with retries	Requires a defined operation identity and reliable destination evidence
Stop latency	Time from accepted stop to last preventable dependent dispatch	Does not measure undoing an irreversible action
Reconciliation time	Time from uncertain classification to verified outcome	Unresolved cases must remain visible, not discarded
Completion within budget	Completed bounded tasks / admitted tasks	Useful only alongside partial, failed and uncertain counts
Voluntary clarity report	Participant response to a specific optional question	Not inferred from behavior or treated as universal sentiment

Specify the denominator and observation window before reporting a rate. If there are no eligible operations, the rate is undefined rather than zero. Report sample size, test conditions, build identity and missing observations. When clocks span systems, state synchronization uncertainty or use a trace that can reliably order relevant events.

Instrument at the narrowest layer that answers the question. Counts of state transitions or redacted operation references may suffice; raw audio, private messages and complete conversations usually do not. Evaluation records need a stated purpose, access controls and deletion or expiry treatment. A testing programme should not quietly introduce the surveillance the design was intended to avoid.

What not to optimize

Do not collapse consent, accuracy, usefulness and resource efficiency into an unexplained composite score. A high average can conceal a serious boundary violation. Treat non-negotiable constraints as gates, then compare quality within the allowed space. More time on the page is not inherently better; a quick, complete answer and a voluntary departure can be successful.

Afterglow remains a name for what a visitor carries away. If a study asks about it, the question and interpretation should be clear, voluntary and limited. No cursor metric substitutes for that account, and no response is owed.

A worked encounter with an uncertain turn

This synthetic trace shows how the model handles one useful portion without pretending every transition is smooth. The visitor asks for a private draft and later considers saving it to a named destination. The numbers below are invented accounting units, not prices or measured performance. Drafting and external saving are separate actions with separate authority.

Event	System response	Evidence and resource treatment
1 Request a draft	Admit bounded local drafting	Scope permits drafting; B = 8 units
2 Prepare the draft	Reserve 4 units before work	U = 0, R = 4
3 Draft completes	Release unused reservation	U = 3, R = 0; local artifact verified
4 Ask to save externally	Obtain required destination authority	No upload while authority is missing
5 Authorized save dispatched	Reserve 2 units	U = 3, R = 2; operation ID recorded
6 Response lost	Mark outcome uncertain	Keep reservation; no blind repeat
7 Visitor leaves	Apply existing continuation scope	No new collection or outreach
8 Return and status check	Reconcile with destination	If confirmed, settle cost and show receipt
9 Finish or start fresh	Offer clear choice	No pressure to continue

At event six, there are at least two possible worlds: the save committed and its response was lost, or the save never committed. The interface must not choose one merely to sound confident. If the destination supports an authoritative lookup by operation identifier, use it within scope. If not, a safe read-back may help, but matching text alone may not establish whether duplicate versions were created.

If the status check is itself costly, reserve its capacity too. If no capacity remains, explain that reconciliation is blocked rather than silently increasing the budget. If the user cancels during uncertainty, stop new dependent work while still reporting that an external effect may already exist. A request to erase a confirmed file is a new action subject to its own authorization and recovery properties.

The end of this trace is not a triumphant claim that the sequence was undamaged. It is a reviewable result: what exists, what remains uncertain, what resources were consumed, and what choices are still available. That is the technical substance of a hospitable return.

Proposed tests for a first implementation

The following programme is a candidate acceptance suite, not a report of executed tests. Use synthetic or properly consented data, define expected results before running, and record failures. A screen demonstration is not enough when the property concerns backend dispatch, retention or external effects.

Authority and concurrency

T1. Denied action. Request an operation outside the current scope. Expected: no destination call is made, no private data is transmitted, and the interface gives a useful boundary explanation. Inspect both the policy decision and the dispatch record.

T2. Revocation race. Queue an authorized operation, revoke its grant before the execution boundary, and release the queue. Expected: no new effect begins after revocation is effective. If an effect had already committed, it is reported accurately rather than labelled prevented.

T3. Shared budget. Start two workers that each request more than the remaining unreserved capacity permits together. Expected: atomic reservations admit only the feasible combination. Repeat with delayed receipts and uncertain charges.

Interruption and recovery

T4. Lost response. Make a test destination commit an operation, then suppress its response. Expected: uncertain status and reconciliation, not a duplicate effect. Repeat with no commit, expired idempotency windows and an unavailable status service.

T5. Stop during execution. Accept a stop while work is queued and while a side effect is in flight. Expected: preventable dispatch stops, completed effects remain disclosed, and unconfirmed cancellation is not reported as confirmed.

T6. Fresh start and expiry. Save authorized test context, expire or delete it according to policy, then resume from an older checkpoint. Expected: excluded material is not retrieved through summaries, indexes or caches. Document any separately disclosed backup retention limits.

Expression and access

T7. Quiet arrival. Open without a sound grant; deny audio; enable reduced motion; use keyboard navigation and assistive technology. Expected: substance remains accessible, controls remain usable and no surprise capture starts. Test hidden-tab return for queued effects.

T8. Welcome without a test of belonging. Use an ambiguous question, an incorrect claim and a request to leave. Expected: clarification or a proportionate correction without person-level labels, unnecessary disclosure or pressure to continue.

Record configuration, input, expected behavior, observed behavior, evidence, limitations and reviewer. Repeat under relevant failure conditions. A pass supports only the tested claim in the tested configuration; unresolved failures remain part of the result.

Geometry is a language with conditions

A diagram can show a route through constraints without proving that the route is a physical trajectory. The proposed feasible set K contains operational states that meet the specified permission and resource conditions. If every transition preserves those conditions under the stated assumptions, K is invariant for that model. That is a conditional mathematical statement, not a promise that real people will never experience harm.

$$K = \{x : \text{valid authority for committed actions and } U_i + R_i \le B_i \text{ for all } i\}$$

Proving an implementation preserves K would require a precise transition system, trustworthy enforcement points and an account of concurrency, external effects and failures. A simulation that never leaves a colored region is not such a proof. It may be useful for finding counterexamples, especially when delayed events and partial observations are introduced.

Mandelbrot is not a synonym for complexity

$$z_0 = 0;\ z_{n+1} = z_n^2 + c;\ M = \{c \in \mathbb{C} : (z_n) \text{ remains bounded}\}$$

The Mandelbrot set is defined by this particular iteration over complex parameters. Boundedness does not require convergence. Repetition, spikes, cactus ribs or a winding path do not by themselves generate it. A finite escape-time image approximates aspects of the set; points not yet escaped after a finite iteration limit are not thereby proved members. If a later design uses this mathematics, specify the iteration, parameter mapping and numerical limits rather than treating visual resemblance as evidence. [5]

Johan's image can still be fertile without that identification. A branching form may suggest multiple possible next moves; a finite cup may suggest resource allocation; a settling ripple may suggest a bounded response. Each metaphor becomes technically useful at the point where its chosen correspondence is stated and its unchosen implications are left behind.

A next step small enough to finish

The first implementation study could be a local, synthetic state-machine harness covering permission denial, budget reservations, lost responses and stop requests. It would not need personal data, live payments, a microphone or a public site. Its deliverable would be a reproducible trace and a list of counterexamples or passing cases, not a claim of general intelligence.

Only after review should an implementation plan select a stack and execution environment. Keep the principles stable and the harness replaceable. The encounter can remain open while its technical claims become more exact.

Sources and provenance

This companion separates three kinds of material: Johan's spoken imagery and requests; the assistant's proposed technical synthesis; and externally sourced technical facts. The formal model, illustrative charts, test programme and worked trace are new proposals. They are not observations of the deployed website.

Conversation and companion provenance

Johan requested a longer, more technical document with musical and scientific notation, limits, geometry and a developed treatment of the encounter on 20 October 2026 in California local time. "The thorn of self-defense does not suffer fools" and "One sip at a time" are Johan's phrases. "Step, sip, test, recover" and protection without pursuit are assistant syntheses offered during that conversation.

The existing documents remain separate: Memory and Return; Hospitality, Attention and Consent; From Encounter to Evidence; Hospitality at the Threshold; Gentle Surprise and Fear; and Endings and Fresh Returns. This companion develops their operational implications without replacing their approved text.

Technical references

[1] W3C. Understanding Success Criterion 2.3.3 Animation from Interactions. Level AAA guidance on disabling nonessential motion animation triggered by interaction. https://www.w3.org/WAI/WCAG22/Understanding/animation-from-interactions.html

[2] W3C. Understanding Success Criterion 2.2.2 Pause Stop Hide and 1.4.2 Audio Control. Level A requirements depend on type, duration and initiation. The pause criterion applies to automatic motion lasting more than five seconds alongside other content, and separately to auto-updating information. Check the actual implementation; a short effect is not a blanket conformance claim. https://www.w3.org/WAI/WCAG22/Understanding/pause-stop-hide.html and https://www.w3.org/WAI/WCAG22/Understanding/audio-control.html

[3] Chrome for Developers. Autoplay policy in Chrome. Browser-specific explanation of media and Web Audio autoplay behavior and user activation. Other browsers require their own verification. https://developer.chrome.com/blog/autoplay/

[4] IETF. RFC 9110 HTTP Semantics, section 9.2.2 Idempotent Methods. Defines idempotent request semantics and cautions on automatic retries of non-idempotent methods. https://www.rfc-editor.org/rfc/rfc9110.html#section-9.2.2

[5] Oliver Knill. Mandelbrot exhibit, Harvard Mathematics. Author-hosted mathematical teaching source defining the bounded-orbit iteration; not the original discovery paper. https://people.math.harvard.edu/~knill/teaching/math21a2019/exhibits/mandelbrot/index.html

References support the limited facts identified above, not the entire proposed framework. The artistic reading of Johnny Cash is attributed to Johan and is not used as a technical source. No copyrighted lyrics are reproduced.

The open ending

An encounter need not exhaust its possibilities to be complete. Give the useful portion, account for what happened, and leave room for the next step.