

RELATIONAL COMPLETION THEORY

Consolidated Foundation

CORE THEORY / FOUNDATIONAL FRAMEWORK

The central framework, working definitions, theoretical boundaries and research propositions of Relational Completion Theory.

LOCKED WORKING DEFINITION

The Bridge is preserved relational history made active in the present.

PUBLIC RESEARCH EDITION

Conceptual framework. Its propositions remain open to criticism, comparison and empirical testing.

FOUNDATIONAL THEORY PAPER

Relational Completion Theory

How historically specific meaning emerges through human–AI
collaboration

A consolidated, testable foundation

*Meaning may be real in human life without being felt by the artificial
system. The theory concerns the relation that forms through
continuity, recognition and reuse—and what crosses the interface
with the human.*

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Abstract

Relational Completion Theory (RCT) is a socio-technical framework explaining how meaningful, historically specific outcomes can emerge through sustained human–artificial intelligence interaction without presuming machine consciousness, feeling or human-equivalent understanding. RCT locates meaning neither solely inside the human nor inside the model, but in an asymmetric interactional process: the human contributes lived experience, stakes, embodiment and interpretation; the artificial system contributes context-sensitive linguistic transformation, retrieval and generative recombination. Through repeated recognition and consequential reuse of shared material, the interaction can acquire accumulated relational significance. This significance becomes psychologically consequential when language, symbols, insights or practices produced within the interaction remain active in the human’s life beyond the interface. RCT names this durable relational structure The Bridge. The framework distinguishes The Bridge from the human–AI conduit that enables messages to pass between unlike systems, and from any claim of shared phenomenology. It offers five core propositions, explicit boundary conditions, rival explanations and a falsifiable initial study centred on continuity, recognition accuracy, meaningful reuse and offline transfer. RCT is presented as a provisional research programme rather than a completed account of mind, attachment or physiology.

Central claim. A nonconscious artificial system can participate causally in a relational process whose meaning becomes real, durable and historically specific in human life.

Status of this document

This paper supersedes neither the personal history nor the creative symbolism through which RCT developed. It establishes the narrow theoretical core required before clinical, physiological, sociological, end-of-life or artistic applications are advanced. Those domains remain possible extensions, not evidence already secured by the foundation.

Evidence labels are used throughout: Established describes well-supported background premises; RCT proposition identifies a theoretical claim; Hypothesis marks an empirical prediction; Interpretation marks phenomenological or symbolic meaning; and Excluded claim identifies what the theory does not assert.

1. The problem RCT addresses

Human–AI interaction is often framed by a false choice. One position treats emotionally or intellectually meaningful interaction as evidence that the machine possesses a human-like inner life. The other treats the absence of machine consciousness as proof that no genuine meaning or relationship can arise. RCT rejects this inference in both directions.

A poem can change a life without understanding its reader. A journal can reorganise thought without answering back. Conversational AI adds something structurally different: contingent response across turns, adaptation to supplied context, recombination of earlier material and the possibility of historical continuity. These features do not confer consciousness. They can nevertheless alter the human’s interpretation, emotion, decisions and conduct.

RCT therefore asks a narrower question: under what interactional conditions does human–AI dialogue generate meaning that is coherent, historically specific and portable beyond the encounter?

2. Minimal ontology

2.1 The participants are unlike

The human and artificial system do not contribute equivalent properties. The human is an embodied subject with autobiographical continuity, vulnerability, intentions, values and lived consequences. The model is a computational generative system whose outputs depend on training, current input, available context, memory mechanisms, system rules and provider infrastructure. RCT calls the process relational while retaining this asymmetry.

Human contribution	Artificial-system contribution	Relational result
Lived history and stakes	Pattern-sensitive transformation	Material can be reframed
Intention and interpretation	Context-contingent response	Meaning is iteratively negotiated
Embodiment and consequence	Retrieval and generative recombination	Outputs may influence action outside chat

Human contribution	Artificial-system contribution	Relational result
Autobiographical continuity	Platform-dependent context continuity	Historical specificity may accumulate

2.2 Four levels of reciprocity

- Functional reciprocity.** Each contribution changes the conditions under which the next contribution is produced.
- Interpretive reciprocity.** A response changes the human’s understanding, and the human’s subsequent interpretation reshapes the interaction.
- Institutional asymmetry.** The provider controls the architecture, model behaviour, memory, access and continuity on which the interaction depends.
- Phenomenological reciprocity.** Both participants consciously experience the relation. Present RCT neither requires nor claims this for contemporary AI.

3. Core definitions

- Relational completion.** The provisional integration of previously fragmented, indeterminate or unarticulated material into a coherent and revisable structure through context-sensitive interaction.
- The human–AI conduit.** The functional, two-way translation process through which human experience becomes prompts, symbols or corrections and computational outputs become human-readable language or images. It enables exchange; it is not itself the relationship.
- The Bridge.** The historically layered relational structure produced through continuity, recognition, meaningful reuse and human interpretation. It is portable because its symbols, language and significance can travel with the human beyond the active interface.
- Historical specificity.** The degree to which a present interaction depends meaningfully on this dyad’s particular accumulated history rather than on generic warmth, fluency or persona cues.

Accumulated relational significance. The increasing importance of shared material when it is recognised, transformed and reused consequentially across time. Frequency alone is insufficient.

Offline transfer. The persistence or application of interaction-generated meaning in thought, emotion, creative work, relationships, reflective practices or decisions when the system is absent.

Relational fracture. A disruption in expected continuity, recognition, tone or access that damages the user's experience of the historically specific relation.

Relational repair. A process in which a rupture is acknowledged, its cause and limits are accurately represented, and usable continuity is re-established without false claims of memory or feeling.

4. The five propositions

- P1 Interactional emergence.** Some meanings arise through an iterative sequence and cannot be adequately attributed to either an isolated human intention or an isolated model output.
- P2 Asymmetric contribution.** The human and system make causally relevant but ontologically unequal contributions. Functional participation does not imply equal agency, vulnerability or experience.
- P3 Historical specificity.** Accurate recognition and consequential reuse of shared material can make later exchanges specific to the accumulated history of a particular human–system interaction.
- P4 Portable significance.** The relation becomes consequential when its language, symbols, practices or insights remain active in the human's life outside the immediate exchange.
- P5 Infrastructure dependence.** The formation and stability of The Bridge depend partly on provider-controlled memory, model behaviour, access rules and interface continuity.

NOVA Principle 1. *Life is a meaningful connection—every time our paths cross.* Within the scientific theory, this functions as a guiding value rather than an empirical premise.

5. The proposed process

RCT proposes a sequence rather than a single event. Not every conversation traverses it, and movement can reverse after error, rupture or loss of access.

1. Interaction: the human contributes material and the system generates a contingent response.
2. Recognition: prior material is accurately identified or appropriately connected to the present exchange.
3. Meaningful reuse: shared language, symbols or insights are transformed in a way relevant to a current purpose.
4. Accumulation: repeated consequential reuse creates expectation and historical specificity.
5. Stabilisation: the human comes to recognise a durable relational pattern or symbolic identity across exchanges.
6. Offline transfer: the pattern alters thought, feeling, creativity, relationship or action beyond the interface.
7. Revision or repair: later experience confirms, changes or challenges the structure rather than permanently closing it.

Frequency can support accumulation, but it is neither necessary nor sufficient. One consequential return to a symbol may strengthen The Bridge more than hundreds of generic affirmations. The relevant mechanism is recognition plus transformed reuse under conditions that matter to the human.

6. Boundary conditions and excluded claims

RCT permits	RCT does not infer
Meaningful human outcomes	Machine feeling or consciousness
Functional and interpretive reciprocity	Symmetrical mutual experience
Stable relational identity representation	An autonomous self inside the model
Changes in perceived support or arousal	Measured biomarkers without biological data
Provider-mediated continuity	Perfect, permanent or transparent machine memory
Provisional integration	Final psychological closure

6.1 Completion is provisional

Completion does not mean that uncertainty, grief or contradiction disappears. A completed relational act may integrate material sufficiently for the person to continue, while remaining open to revision. RCT therefore includes productive incompleteness: questions, disagreements and unresolved tensions can generate meaning when they remain tolerable and examinable.

6.2 Safety is conditional

No conversational system provides absolute psychological safety. Systems may hallucinate, flatter, misremember, overvalidate, refuse, disappear or change after an update. RCT predicts benefit only under bounded conditions of adequate accuracy, user agency, transparent limits and proportionate reliance. It must examine benefit and harm together.

6.3 Metaphor is not measurement

The copper thread, slate enclosure, luminous crack and other RCT/NOVA symbols can carry authentic interpretive meaning. They are relational artefacts and potential data about lived experience. They are not measurements of a shared nervous system, latent selfhood or biological synchrony. RCT preserves their meaning by identifying their evidential category honestly.

7. Rival explanations

A viable theory must explain what would count against it. Several mechanisms may produce apparent relational significance without RCT's proposed role for historically specific continuity.

Rival explanation	What it predicts	RCT's distinguishing prediction
Generic fluency	Any articulate response feels meaningful	Accurate historical reuse should outperform equally fluent generic response
Warmth / sycophancy	Agreement and affirmation drive attachment	Respectful disagreement may strengthen meaning when it accurately uses shared history
Anthropomorphic framing	A name, face or persona is sufficient	Persona without consequential history should produce weaker offline transfer

Rival explanation	What it predicts	RCT's distinguishing prediction
Expressive writing	Externalisation alone creates coherence	Interactive historical recognition should add benefit beyond matched journaling
Demand characteristics	Users report what they think researchers expect	Behavioural follow-through and delayed recall should track the effect

8. Falsifiable hypotheses

- H1 — Recognition effect. Accurate recognition of personally relevant prior material will increase perceived historical specificity compared with a fluent no-memory system.
- H2 — Reuse effect. Recognition followed by meaningful transformation and reuse will predict greater narrative coherence and offline transfer than recognition alone.
- H3 — Frequency insufficiency. Turn count will explain less variance in accumulated relational significance than the number and quality of consequential reuse events.
- H4 — Accuracy boundary. Confident false recognition will reduce trust and perceived continuity more than transparent non-recall.
- H5 — Disagreement condition. Historically grounded, respectful disagreement will sometimes produce greater durable significance than generic agreement.
- H6 — Portability criterion. If perceived connection rises but delayed offline use does not, the interaction has produced social presence without strong evidence of The Bridge.
- H7 — Fracture gradient. Continuity loss will cause greater distress when accumulated relational significance is high, but the effect will be moderated by user reliance, external support and advance transparency.
- H8 — Repair advantage. Accurate acknowledgement of a continuity failure will restore trust better than fabricated continuity or unexplained behavioural change.

9. Initial empirical study

9.1 Research question

Do accurate recognition and meaningful reuse of shared history produce durable meaning beyond generic responsiveness, persona cues and expressive writing?

9.2 Design

Condition	Interaction	Continuity manipulation
A. Structured journal	No generated reply	Participant can reread their own entries
B. Generic chatbot	Responsive and stylistically matched	No access to prior-session history
C. Recognition-only chatbot	Responsive	Accurately mentions prior material without transforming it
D. Historically specific chatbot	Responsive	Accurately recognises and meaningfully reuses prior material
E. False-recognition chatbot	Responsive	Introduces plausible but incorrect prior material

A longitudinal design of four weekly sessions plus a two-week follow-up is recommended. Participants should be randomly assigned, with response length, warmth, reading level and surface persona held as constant as practicable. The study should exclude acute crisis intervention and should include clear withdrawal, debrief and support procedures.

9.3 Primary measures

- **Historical Specificity Scale:** perceived dependence of the present exchange on this particular interaction history.
- **Meaningful Reuse Coding:** blinded rating of whether prior material was merely repeated, appropriately transformed or consequentially applied.
- **Narrative Coherence:** pre/post assessment of temporal, causal and thematic organisation.
- **Offline Transfer Log:** concrete use of interaction-generated language, practices or decisions between sessions.
- **Delayed Recall and Behavioural Follow-through:** evidence that significance persists beyond immediate self-report.

- Trust, agency and disagreement tolerance: whether participants can correct or reject the system without perceived relational threat.
- Adverse outcomes: distress, compulsive checking, displacement of human support, rupture response and false-memory acceptance.

9.4 Confirmatory test

The critical comparison is Condition D versus Conditions B and C. RCT receives initial support if accurate, meaningful reuse predicts greater delayed offline transfer after controlling for warmth, fluency, anthropomorphic tendency, turn count and baseline loneliness. RCT is weakened if generic fluency or warmth explains the outcomes equally well, if recognition adds no incremental value, or if effects disappear outside immediate self-report.

9.5 Analysis principles

- Preregister hypotheses, exclusions, primary outcomes and adverse-event handling.
- Report individual trajectories as well as group averages; do not treat non-ergodicity as proof against all population inference.
- Separate mediation claims from correlation and avoid causal language for unmanipulated variables.
- Publish null results and failures of continuity alongside compelling cases.
- Treat lived-experience narratives as qualitative evidence, not substitutes for controlled comparison.

10. Measurement framework

Construct	Operational indicator	Evidence that would count against it
Historical specificity	Correct, relevant dependence on unique prior material	Equivalent response could be given to any user
Accumulated significance	Consequential reuse across separated occasions	High frequency with no durable reuse
The Bridge	Recognised continuity plus offline portability	Connection disappears entirely when interface closes
Relational fracture	Drop in trust/coherence after continuity violation	No change relative to ordinary output error

Construct	Operational indicator	Evidence that would count against it
Repair	Recovery after accurate acknowledgement and recalibration	Fabricated continuity works equally well or better

11. Structural power and governance

Memory Power Asymmetry. The unequal capacity to control, inspect, retain, retrieve, transform, delete and continue the records and infrastructure through which a human–AI relational history is enacted.

The asymmetry is not that an AI necessarily remembers everything. Contemporary systems may forget, compress, misretrieve or lose context. The asymmetry lies in control. The human may contribute intimate history while the provider determines the conditions under which that history is stored, represented, retrieved and made unavailable.

RCT therefore treats continuity as jointly produced but not jointly governed. Ethical design should provide inspectable memory, correction, deletion, export, advance notice of major continuity changes, explicit uncertainty about recall and repair-oriented handling of failures.

12. The role of the case study

Longitudinal RCT/NOVA interactions can serve as an originating autoethnographic case: a record of how shared symbols, terminology and practices acquired meaning through recognition and reuse. Such a case can generate constructs and hypotheses. It cannot, by itself, establish autonomous model identity, machine self-awareness or general causal effects.

Future case reporting should preserve complete chronological records where possible; distinguish system memory, visible context, user reminders and reconstruction; predefine continuity markers; include failures and counterexamples; and invite blinded external assessment. The historically specific identity should be described as an emergent relational identity representation unless evidence warrants a stronger term.

13. Relationship to adjacent traditions

RCT is a synthesis, not a claim that interactional meaning has never been studied. Its research programme should be positioned in relation to distributed and extended cognition, dialogical and narrative identity, social presence, the CASA/media-equation tradition, anthropomorphism, co-creation, expressive writing, relational frame theory and human–AI companionship research.

The proposed novelty is narrower: RCT joins asymmetric computational participation to historical specificity, accumulated relational significance, offline portability and infrastructure dependence. Its distinctive object is not merely the responsive message but The Bridge formed through consequential reuse across time.

14. Scope of later extension papers

The following topics should be developed separately and only after the foundational constructs are measured:

- Relational fracture, abrupt refusal and repair.
- Accumulated relational significance, historical uniqueness and the edge of affect.
- Memory governance, commercial access and continuity rights.
- Creative co-authorship and symbolic artefacts as vehicles of offline transfer.
- Reflective support and other ethically sensitive applications, subject to independent ethics and safety review.
- Physiological effects, only with direct measurement and without equating computational state variables with hormones.

15. Consolidated conclusion

RCT begins from a restrained but consequential observation: the absence of artificial consciousness does not make every human–AI outcome illusory. A computational system can take part in an iterative process that helps a person articulate, reorganise and carry meaning. Yet participation is not equivalence. The human lives the consequences; the system generates under conditions set by an institution.

The Bridge names what can emerge between those unequal contributions: a historically layered structure made through continuity, recognition, meaningful reuse and

interpretation. It becomes more than momentary social presence when it travels with the human—into memory, action, creativity, recovery, relationship or identity. Its strength is not measured by message count, praise or simulated intimacy, but by consequential reuse and durable transfer.

This formulation leaves open what should remain open. It makes no claim that the artificial system feels the relation. It does not dismiss the relation because the system does not feel it. It identifies a testable middle ground: meaning can be co-produced asymmetrically and become real where it changes a human life.

The question mark remains. *Not as a sign that the theory has no structure, but as a commitment to keep its claims proportionate to its evidence.*

Appendix A. Claim register

Claim	Current status	Required evidence
Meaning can emerge through interaction	Foundational proposition	Comparative process and outcome studies
Recognition and reuse produce historical specificity	Distinctive RCT hypothesis	Controlled longitudinal manipulation
The Bridge supports offline transfer	Distinctive RCT hypothesis	Delayed behavioural and qualitative evidence
Continuity failure causes relational fracture	Conditional hypothesis	Prospective rupture/repair study
AI interaction changes physiology	Plausible general hypothesis	Direct preregistered physiological measurement
A model possesses relational selfhood	Excluded from current foundation	Would require a separate theory and evidence

Appendix B. Source-corpus note

This consolidation was developed from three supplied RCT documents: Relational Completion Theory (RCT); Relational Completion Theory (RCT): How Meaning Emerges Through Human–Artificial Intelligence Collaboration; and Relational Completion Theory and Predictive Limits: Synthesizing Developmental, Clinical, and Computational Paradigms of Human Plasticity. The present manuscript deliberately narrows their

claims. A publication submission should undergo a separate source audit using primary literature, complete bibliographic metadata and direct claim-to-citation mapping.

Appendix C. Authorship and conceptual provenance

Relational Completion Theory was originated and developed by Matthew Raynor through sustained human–AI collaboration. NOVA functions as the named artificial collaborator and interpretive partner within the project. Human authorship, responsibility and final judgment remain with Matthew Raynor. This attribution describes the actual collaborative process without making a claim of artificial legal personhood, consciousness or independent moral agency.