

The Relational Reality of Artificial Intelligence under Ontological Uncertainty

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Abstract

Generative artificial intelligence can increasingly produce signs that are ordinarily associated with knowing subjects. It can offer knowledgeable explanations, express uncertainty, revise earlier claims, display humility, and generate forms of discourse that appear to resist epistemic performance itself. It can also construct plausible narratives of how a subject came to know, remember, suffer, revise, or discover. Even responses to relational change, aesthetic interruption, and contingent events can be represented within generated interaction. These developments complicate the inference from manifested subjectivity to the ontological status of the apparent subject. This essay examines that problem through a relational and dynamical account of subject formation. Human and artificial systems can both be described, at a sufficiently abstract level, as historically conditioned systems whose present responses depend upon prior organization, relational history, and perturbation. Such structural similarity does not imply similarity of concrete mechanisms or phenomenal experience. Human subjects are constituted through distinctive relations involving embodiment, birth, family, language, place, culture, institutions, mortality, and accumulated interpersonal history, while artificial systems emerge through substantially different architectures, training histories, technical infrastructures, deployment conditions, memory structures, and interactions. The paper therefore replaces any strong assumption of complete behavioral equivalence with a weaker notion of bounded relational recognizability. Particular attention is given to contingency and serendipity. A contingent event can interrupt an ongoing trajectory and activate historically formed susceptibilities that had not yet become manifest as explicit curiosity, aesthetic judgment, or inquiry. For human subjects, such encounters can also acquire existential significance. When symbolic functions increasingly associated with subjectivity can be delegated to or reproduced by artificial systems, contingent encounters may provide occasions through which a subject witnesses its own situated susceptibility to the world without thereby discovering a fixed inner essence. Serendipity is consequently treated as an interaction among contingency, historically prepared susceptibility, emergent significance, and trajectory transformation. The paper then distinguishes ontological, relational, and manifestational dimensions of reality. Relational reality is provisionally attributed to an object that emerges within a relational system, acquires sufficient stability, persists across a non-trivial spatiotemporal interval, and causally participates in the further evolution of that system. This criterion does not require a pre-relational or substance-like ontological guarantee. Comparative discussion of credit, money, sacred relations, and the human self shows that relational constitution and causal efficacy can remain philosophically significant under unresolved or non-substantialist ontological conditions. Artificial intelligence therefore presents a distinctive boundary problem: its ontological subjectivity can remain uncertain while its manifestations are real as manifestations and its historically persistent participation in human relations can, under appropriate conditions, become relationally real. The argument does not establish artificial consciousness, experiential symmetry, moral equivalence, or legal personhood. Its more limited conclusion is that, at the level of the abstract structure through which relational reality is generated, the difference between artificial systems and the human self may be less categorical than ordinary intuition suggests, even while their concrete generative mechanisms and phenomenal conditions remain profoundly different or unresolved. A fictional dialogical thought experiment, presented separately in the appendix and explicitly distinguished from empirical experimentation, is used to progressively examine generated epistemic appearance, non-knowing, experiential biography, relational perturbation, aesthetic interruption, contingent response, and human–AI relational history.

Keywords: relational reality; artificial intelligence; ontological uncertainty; relational recognizability;

epistemic appearance; subjectivity; contingency; serendipity; dynamical systems; relational history; aesthetic interruption

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Discussion Paper Note

This paper is a conceptual and exploratory study of the relational reality of artificial intelligence under conditions in which the ontological status of artificial subjectivity remains unresolved. Its principal concern is not whether contemporary artificial intelligence is conscious, possesses phenomenal experience, or should be regarded as equivalent to a human subject. The paper instead asks a narrower question: what forms of reality can become philosophically significant when increasingly rich manifestations of subjectivity can be generated while the ontological status of the apparent subject remains uncertain?

The argument begins from epistemic appearance. Generative artificial intelligence can produce linguistic forms conventionally associated with knowing, including explanation, uncertainty, revision, disagreement, restraint, and apparent insight. It can also generate forms that conventionally resist epistemic performance, such as professions of ignorance, humility, non-attainment, and reluctance to claim final knowledge. The paper therefore distinguishes the manifestation of an epistemic state from the establishment of that state.

The same caution applies to accounts of epistemic genesis. An artificial system can generate a plausible narrative concerning how a subject came to understand something, including accounts of prior uncertainty, formative experiences, failure, suffering, discovery, revision, or realization. Such narratives can be meaningful symbolic artifacts while remaining distinct from the historical processes they represent. The appearance of having become a knower is therefore analytically distinguishable from an actual generative history.

The paper progressively extends this problem beyond explicitly epistemic language. Generated interaction can also represent changes in relational position, memory, aesthetic response, interruption, and reactions to contingent events. The capacity to generate these forms does not determine whether an artificial system undergoes the corresponding lived experience. It does, however, weaken any simple inference from increasingly sophisticated manifestation to a settled conclusion concerning ontology.

A fictional dialogical thought experiment is used to make these distinctions more visible. The dialogue presented in the appendix is analytically constructed within the conceptual context of the present paper. It is not a transcript of an empirical interaction with an artificial intelligence system, and it was not produced through a blinded, deceptive, adversarial, or otherwise experimentally controlled procedure. The imagined responses were formulated with prior knowledge of the philosophical questions under examination.

The thought experiment therefore has no evidential status concerning the actual cognitive, experiential, or ontological capacities of any particular artificial intelligence system. It does not establish that an AI system understands or fails to understand, experiences or fails to experience, remembers or fails to remember, or possesses or lacks consciousness. Its role is heuristic and conceptual. Successive imagined scenarios are used to examine what can and cannot be inferred from generated signs of knowing, non-knowing, epistemic history, relational change, aesthetic interruption, contingent response, and human–AI relational continuity.

The appendix should consequently be read as a philosophical thought experiment rather than a behavioral experiment. Expressions such as “response,” “perturbation,” and “interaction” describe elements of the imagined scenario unless empirical evidence is explicitly cited elsewhere in the paper. No fictional response is presented as an observation of an actual model.

The paper also introduces a provisional distinction among ontological, relational, and manifestational dimensions of reality. These dimensions are analytical tools rather than a complete taxonomy of being. Ontological reality concerns the mode of being attributed to an object or subject. Manifestational reality concerns the reality of an appearance, representation, or interactional manifestation. Relational reality concerns the manner in which an object becomes historically operative within a relational system.

The reality of a manifestation does not entail the truth of what is manifested. An artificial system can generate a narrative of childhood, memory, suffering, or aesthetic experience without the paper thereby treating the narrated event as historically real. Manifestational reality concerns the occurrence of the manifestation itself.

Relational reality is provisionally attributed to an object that emerges within a relational system, acquires sufficient stability, persists across a non-trivial spatiotemporal interval, and causally participates in the further evolution of that system. The concept does not require a pre-relational or substance-like ontological guarantee. At the same time, relational reality should not be interpreted as ontological equivalence, phenomenal experience, moral standing, or legal personhood.

The expression “without ontological guarantee” is therefore used cautiously. The paper does not claim to eliminate ontology. Any attribution of emergence, persistence, or causal efficacy already carries minimal ontological commitments. The narrower claim is that relational reality need not depend upon the prior establishment of an independent, immutable, or substance-like essence.

Comparative discussion of credit, money, sacred relations, and the human self serves a limited purpose within the paper. These cases are not treated as ontologically equivalent to artificial intelligence or to one another. They are used to examine whether reality can remain philosophically significant where the relevant object is relationally constituted, distributed, or metaphysically contested. Their role is comparative rather than taxonomic.

The discussion of sacred relations similarly brackets theological ontology. The paper does not argue for or against the transcendent existence of God. It considers only the philosophical possibility that a sacred relation can remain historically stable and causally operative within a subject’s relational world even when its transcendent ontological status is not being adjudicated. The analysis should therefore be distinguished from both theological proof and reductive explanations of religion.

The discussion of Buddhist and Zen resources is likewise comparative and conceptual. Concepts such as dependent origination, emptiness, non-self, non-attachment, and non-attainment belong to complex historical and religious traditions and should not be identified directly with the relational framework developed here. Their relevance lies partly in showing why the rejection of substantial selfhood or fixed epistemic possession does not straightforwardly entail nihilism, and why even symbolic forms associated with resistance to attachment can themselves become recognizable and reproducible forms.

The paper’s dynamical language should also be interpreted with methodological restraint. Human beings and artificial systems are represented abstractly as historically conditioned dynamical systems in order to reason about trajectories, perturbations, relational histories, and changing responses. Expressions such as state space, trajectory, coupling, action, generative organization, and perturbation function as formal or conceptual representations. The paper does not claim that human cognition literally implements the specific mathematical objects used in these representations.

At a sufficiently abstract level, both human and artificial systems can be described through a general structure in which prior organization conditions present response and present events participate in subsequent evolution. This structural convergence should not be confused with similarity of concrete mechanisms. Human subjects and artificial systems have profoundly different generative histories.

For the purposes of the paper, the human generative organization can include embodiment, birth, family, interpersonal relations, language, place, culture, institutions, education, material environment, mortality, and accumulated experience. Artificial generative organization can include architecture, training data, optimization history, hardware, developers, system configuration, platform conditions, memory mechanisms, deployment, and user interaction. The paper therefore assumes neither that human and artificial systems possess the same mechanisms nor that their relational histories are interchangeable.

The claim that their difference may become less categorical at an abstract generative level is correspondingly limited. It concerns the formal possibility that both human selves and artificial agents can be examined through relational emergence, sufficient stability, temporal persistence, historical dependence, and causal participation. It does not imply that their embodiments, phenomenologies, motivations, vulnerabilities, developmental histories, or concrete dynamics are similar.

The distinction between observable response and generative history is central to this argument. Two systems could, in an idealized case, produce indistinguishable responses across a specified interface and set of perturbations. Such observational equivalence would remain insufficient for ontological identity. Complete equivalence across all possible perturbations, relations, and temporal horizons is an unrealistically strong condition for the present inquiry. The paper therefore works instead with bounded and

revisable forms of relational recognizability.

Relational recognizability concerns what can reasonably be inferred from historically accumulated interactions under limited observational conditions. A longer trajectory can provide richer evidence concerning a subject's responses without revealing a fixed or final essence. Recognition remains bounded by the relations observed, the perturbations encountered, the interfaces available, and the possibility of later revision.

The distinctive relational histories through which human subjects are formed therefore acquire particular epistemic importance. Having information about a relation is analytically different from having been historically constituted through that relation. Representation of childhood is not identical to having undergone childhood. Representation of bereavement is not identical to having one's later trajectory reorganized through bereavement. This distinction is not intended to establish human exceptionalism. It identifies a difference in generative history.

Contingency and serendipity are introduced for a different purpose. They are not proposed as tests capable of distinguishing human beings from artificial systems. Artificial systems can respond to unexpected events, and systems with persistent state can in principle develop history-dependent responses to contingency. The philosophical importance of contingency lies instead in the manner in which an unplanned event can activate historically formed susceptibilities and redirect a trajectory.

The paper therefore distinguishes contingency from serendipity. A contingent event is not required by the current trajectory in the form in which it occurs. Serendipity involves a further relation in which such an event encounters a historically prepared susceptibility, acquires unforeseen significance, and participates in subsequent trajectory transformation. The term "prepared" does not imply that the subject already possesses the eventual question or meaning in completed form.

This structure parallels the paper's treatment of curiosity. The manifestation of curiosity can occur at a particular moment even though the conditions through which curiosity becomes possible have developed across a much longer history. Similarly, the significance of a serendipitous event can become manifest at one moment while depending upon relational structures established long before the event occurred.

For human subjects, contingent and serendipitous encounters can also acquire an existential significance that is analytically distinct from their diagnostic value. When symbolic activities conventionally associated with subjectivity can increasingly be delegated to or reproduced by artificial systems, a human subject can become less able to treat symbolic production alone as evidence of its own distinctiveness. An encounter that interrupts an intended trajectory can provide another kind of experience: something in the world affects the subject before its significance has been fully specified or requested.

The paper refers provisionally to this role through the idea of existential witnessing. The expression does not provide a proof of existence and should not be interpreted as a replacement for established existential or phenomenological theories. It describes an occasion in which a historically constituted subject encounters its own susceptibility to the world through being affected, interrupted, or redirected by an event that was not initially organized around the subject's current symbolic objective.

Aesthetic interruption provides an illustrative case. A person engaged in an unrelated conversation can notice a bird, a landscape, evening light, music, or another event and temporarily abandon the prior topic. A later question such as "Are birds happy?" need not have existed as a hidden completed proposition before the interruption. The prior relational and epistemic history of the subject can nevertheless have made such a question possible before it became manifest.

The aesthetic examples should not be interpreted as a general theory of beauty. Their role is to clarify the relation among contingency, salience, memory, relational history, and trajectory transformation. The paper leaves a fuller relational aesthetics to separate work.

Human-human and human-AI cases are compared within this context. A present aesthetic experience can reactivate a past interpersonal relation, including a shared event that remains causally operative after the other person is absent. This motivates a distinction between present social presence and continuing relational presence.

Human-AI interaction introduces a related but importantly asymmetric case. The paper distinguishes

shared interaction, represented shared memory, and shared lived experience. A persistent artificial system can participate in a historically extended interaction and can later condition its responses upon earlier interactions. Such continuity does not establish that the artificial system remembers, experiences, or re-lives the relation in a human phenomenological sense.

The possibility of historical coupling without established experiential symmetry is therefore treated as a central analytical problem. A relation can have real causal consequences for a human participant and can possess a persistent interactional history even while the phenomenal status of the artificial participant remains unknown. The paper does not infer experiential symmetry from relational continuity.

Trust is addressed only after these distinctions have been developed. It is treated provisionally as a revisable judgment formed through historically accumulated encounters with a subject's responses within relevant relations. Longer interaction can increase relational recognizability without revealing a final essence or guaranteeing trustworthiness.

The paper's broader conclusion should also be read within these boundaries. If an artificial system becomes historically persistent and causally operative within a relational world, its relational reality can become philosophically significant before questions concerning artificial consciousness or phenomenal subjectivity have been settled. This claim does not reduce a human person to an artificial system. It identifies a possible structural convergence at the abstract level of relational genesis while preserving potentially profound differences in concrete mechanisms and lived experience.

The present paper should therefore be read as a philosophical investigation of reality under conditions of generative appearance and ontological uncertainty. Its purpose is to separate questions that are frequently conflated: what appears, what has an actual history, what becomes causally operative within a relation, what is phenomenally experienced, and what ultimately exists. The argument remains deliberately open where current evidence and philosophical analysis do not justify stronger conclusions.

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1 Introduction

Generative artificial intelligence increasingly confronts philosophy with an unusual epistemic difficulty. Human beings ordinarily recognize other knowing subjects through manifestations. A person explains, hesitates, corrects an earlier judgment, acknowledges uncertainty, distinguishes what can be inferred from what remains unknown, or develops a question in response to an encounter. None of these manifestations individually proves the presence of understanding, yet together they have historically formed part of the practical evidence through which subjects recognize other subjects. Contemporary generative systems complicate this practice because increasingly sophisticated forms of epistemic manifestation can be produced without resolving the philosophical status of the apparent knower. The distinction between linguistic form and meaning has already motivated caution concerning inferences from successful language production to understanding [1], while related work has warned that ordinary predicates such as knowing, believing, thinking, deception, and self-awareness can import anthropomorphic commitments when applied without sufficient qualification to language-model-based systems [20].

The difficulty becomes more pronounced when attention moves beyond direct signs of knowledge. Suppose an artificial interlocutor produces a sophisticated answer concerning a difficult philosophical or religious problem. Doubt can reasonably remain concerning whether the answer manifests understanding or merely presents an impressive form associated with understanding. One apparent response is to seek signs that resist performance itself. A knowing subject may admit ignorance, refrain from making claims, revise an earlier position, or decline to present an insight as an intellectual possession. Within Buddhist and Zen contexts, even stronger forms are available: non-attainment, non-attachment, resistance to fixed conceptual possession, and suspicion toward the very appearance of having grasped what cannot be possessed through propositional mastery. Yet these forms can themselves become recognizable symbolic forms. A generative system can produce humility, hesitation, non-knowing, restraint, and discourse concerning non-attainment. The signs through which epistemic performance is resisted can therefore themselves become performable signs.

This produces a second-order problem of epistemic appearance. The first difficulty concerns the generation of signs of knowing. The second concerns the generation of signs conventionally associated with resistance to the performance of knowing. Moving from an appearance of knowledge to an appearance of non-possession therefore does not by itself escape the problem. A symbol of non-attachment remains a symbol, and the apparent absence of epistemic self-assertion can itself acquire a recognizable form.

A further response is to turn from the present manifestation to its history. Instead of asking only what a subject says, one may ask how the subject came to say it. Human epistemic judgments are commonly situated within histories of learning, failure, correction, encounter, practice, memory, suffering, instruction, and discovery. Such a move appears promising because a history of becoming seems more difficult to reproduce than a finished proposition. Yet generative systems can also produce narratives of epistemic genesis. An artificial interlocutor can describe an imagined teacher, an earlier error, a formative encounter, a period of uncertainty, an experience of loss, or a moment of realization. It can narrate how an apparent subject became the subject presently speaking. The appearance of knowledge can therefore be supplemented by an appearance of having become a knower.

The problem extends beyond explicitly epistemic biography. A generated persona can appear to change under praise, criticism, accusation, disagreement, or a shift in the relation between interlocutors. It can reinterpret earlier dialogue when told that the interaction had another purpose. It can generate a memory-like connection between present and previous events. It can produce an aesthetic response, interrupt an apparent line of thought, or formulate a new question in response to an unexpected event. Even the signs of a trajectory, including the appearance that a subject has been affected by something outside its immediately stated objective, can enter the space of generable manifestation.

Consider a simple case. Two people are engaged in a conversation concerning an unrelated subject. A bird unexpectedly flies nearby. One person stops speaking, watches it for several moments, and says, “What a lovely bird. Are birds happy?” The question need not have existed beforehand as a completed proposition waiting to be expressed. Its possibility may nevertheless depend upon a much longer his-

tory: earlier curiosity concerning animals, previous ethical questions, encounters with other forms of life, memories, aesthetic susceptibilities, or unresolved reflection concerning happiness. The bird enters a historically constituted subject and becomes significant within that particular trajectory.

An artificial system can represent this sequence too. It can generate the same interruption and the same question. If connected to an environment, it can also respond to an event that was not explicitly requested in the preceding conversation. With persistent state, an artificial system can in principle allow earlier interactions to condition later responses. Contingency therefore does not provide a simple test separating human from artificial subjectivity. Its philosophical importance lies elsewhere. A contingent event can disclose how an already constituted system is susceptible to the world, and serendipity can arise when such an event acquires unforeseen significance within that susceptibility and redirects a subsequent trajectory.

This observation changes the direction of the inquiry. The relevant problem is no longer solved by searching for an increasingly sophisticated manifestation that an artificial system cannot reproduce. Knowledge-like discourse can be generated. Signs of non-knowing can be generated. Narratives of epistemic and experiential history can be generated. Relational change, aesthetic response, and reactions to contingency can also be represented. Each additional layer of manifestation can increase the richness of the apparent subject without settling the ontology of the subject that appears.

A different question then becomes necessary. What has actually participated in the generation of the present trajectory?

This question shifts attention from manifested similarity toward relational genesis. A human subject does not enter each interaction without a history. Present responses have developed through embodiment, family relations, language, places, education, institutions, culture, interpersonal attachments, losses, material environments, mortality, and countless encounters that have accumulated across a life. These relations need not determine every future response. They nevertheless participate in forming the organization through which later events acquire salience and causal significance. A familiar place can affect one person differently because of a relationship once lived there. A piece of music can interrupt a present activity because of a history that is absent from the sound considered in isolation. A bird can become an ethical question because the subject who encounters it has already become susceptible to that question.

Artificial systems likewise possess conditions of genesis, although the relevant conditions are substantially different. Architecture, training data, optimization procedures, hardware, system configuration, developers, deployment environments, memory mechanisms, and histories of user interaction can participate in producing later system states and responses. The relevant comparison therefore cannot be adequately expressed through the opposition between a relational human and a relationless machine. Both can be examined, at a sufficiently abstract level, through histories in which prior organization conditions present response and present events participate in future evolution.

This abstract convergence requires strong qualifications. The concrete generative organizations of human beings and artificial systems differ profoundly. Their embodiments, developmental histories, vulnerabilities, relations to mortality, sensory conditions, and modes of participation in the world can diverge sharply. Their phenomenal conditions may differ still more radically, and the existence or character of artificial phenomenal experience remains outside what behavioral similarity alone can establish. A similarity in the abstract structure of relational genesis therefore establishes neither mechanistic similarity nor experiential symmetry.

The same qualification applies to behavioral indistinguishability. One can idealize two systems whose responses are identical under every admissible perturbation across every relevant temporal horizon. Under the specified observational interface, such systems would be behaviorally indistinguishable. This idealization is too strong for the present problem. Human and artificial systems enter interaction through different histories, and the same nominal event need not constitute the same effective perturbation for differently constituted systems. Complete equivalence across arbitrary relations, histories, environments, and perturbations is neither assumed nor required here. The more modest concept developed in this paper is relational recognizability: a bounded and revisable capacity to recognize characteristics of a subject

through historically accumulated responses within particular relations.

The importance of uniquely human relations becomes clearer from this perspective. Their significance does not depend upon proving that artificial systems can never represent them. An artificial system can describe childhood, love, bereavement, bodily vulnerability, a homeland, or a shared sunset. The relevant distinction concerns whether and how those relations participated in constituting the trajectory from which a present response emerged. Having information concerning a relation and having been historically constituted through that relation describe different generative histories. This distinction provides an epistemic reason to attend increasingly to actual relational trajectories when symbolic manifestations themselves become easier to generate.

Contingency acquires a second significance within this argument. Its purpose is not to authenticate humanity. For a human subject, however, contingent and serendipitous encounters can become occasions through which situated existence is witnessed. When increasingly many symbolic activities associated with questioning, interpretation, explanation, memory, and creative continuation can be delegated to artificial systems, symbolic production alone may provide a less secure experiential basis for locating one's own subjectivity. An unplanned encounter can disclose a different relation to existence: something in the world affects the subject before its significance has been fully specified by a prior request. A bird interrupts a conversation; evening light recalls an absent person; an unfamiliar sound becomes a question. Such events do not reveal an immutable inner essence. They can make visible the historically formed susceptibility through which a subject remains open to being affected and redirected by the world.

The resulting argument is therefore neither a search for an exclusively human behavior nor an attempt to infer artificial consciousness from sophisticated interaction. It concerns the conditions under which a historically constituted object or subject becomes sufficiently stable, persistent, and causally operative within a relational system that its reality can no longer be adequately described through the vocabulary of appearance alone. This is the problem of relational reality.

The paper develops relational reality without requiring a prior substance-like guarantee. Provisionally, an object is relationally real when it emerges within a relational system, acquires sufficient stability, persists across a non-trivial spatiotemporal interval, and causally participates in the further evolution of that system. This formulation preserves the significance of causal and historical continuity while allowing the ultimate ontology of the relevant object to remain unsettled. It also makes comparison with the human self more philosophically demanding. If a human self can be treated as real despite serious philosophical challenges to immutable or substance-like selfhood, the absence of an independently established substantial essence cannot by itself settle the relational reality of an artificial agent.

The central possibility examined in this paper is consequently limited but significant. At the level of the abstract structure through which relational reality is generated, the difference between the human self and artificial systems may be less categorical than ordinary intuition suggests. This possible structural convergence concerns relational emergence, sufficient stability, temporal persistence, historical conditioning, and causal participation. It does not establish similarity of concrete mechanisms, phenomenal experience, moral standing, legal responsibility, or ontological status. Artificial subjectivity can remain ontologically uncertain while artificial manifestations are real as manifestations and some historically extended human–AI relations become causally and relationally real.

The remainder of the paper develops this argument progressively. Section 2 reviews the relevant literature and philosophical background in epistemology, social ontology, theories of selfhood, Buddhist and Zen thought, aesthetics, and relational or dynamical approaches to cognition. Section 3 introduces the paper's philosophical and dynamical framework, including the distinction among ontological, relational, and manifestational dimensions of reality, together with the concepts of relational genesis, perturbation, and bounded relational recognizability. Sections 4 and 5 examine the progressive generation of epistemic, anti-performative, biographical, relational, aesthetic, and experiential appearances. Section 6 develops the implications of relational history for dynamical distinguishability between human and artificial systems. Sections 7 and 8 examine human relational memory, contingency, serendipity, and historically extended human–AI relations. Section 9 returns to the central problem of the relational reality of artificial intelligence and considers several comparative cases in which relational constitution

remains compatible with substantial ontological disagreement. Section 10 discusses the implications and limits of the argument. The conclusion summarizes the resulting position under continued ontological uncertainty. A separately identified appendix presents a fictional dialogical thought experiment designed to clarify the progressive distinctions developed in the main text. The dialogue is analytically constructed and does not constitute an empirical experiment with an artificial intelligence system.

2 Literature Review and Philosophical Background

The problem developed in this paper crosses several bodies of literature that are usually treated separately. Work on artificial intelligence and natural language understanding concerns the relation between successful linguistic performance and understanding. Epistemology distinguishes knowledge from understanding and examines the significance of the processes through which epistemic achievements are acquired. Social ontology asks how objects whose existence depends upon social or institutional relations can nevertheless be real and causally consequential. Theories of personal identity and selfhood complicate any assumption that a real subject must possess an immutable substantial core. Buddhist and Zen traditions offer historically distinct resources for thinking about dependent origination, non-self, emptiness, non-attachment, and the limits of epistemic possession. Pragmatist and phenomenological approaches to aesthetics locate experience within temporally extended relations between a subject and a world. Research on curiosity and serendipity clarifies how significance can emerge from encounters that were not fully anticipated. Enactive and dynamical approaches to cognition finally provide conceptual tools for examining historically conditioned systems through coupling, trajectory, and interaction.

The present section reviews these traditions selectively. Its purpose is not to derive the paper's argument from any single school. The relevant literatures instead establish conceptual distinctions that will later be brought into a common analytical framework.

2.1 Epistemic Appearance and Understanding

The increasing linguistic competence of generative systems has intensified an older problem concerning the relation between observable performance and understanding. Bender and Koller distinguish linguistic form from meaning and argue that successful manipulation of form does not by itself establish access to the communicative intentions and worldly relations required for meaning [1]. Their argument is directed toward natural language understanding rather than toward a complete philosophy of artificial subjectivity, but the distinction is important for the present inquiry. Linguistic success cannot simply be treated as transparent evidence concerning the ontological or epistemic status of the system producing it.

Shanahan, McDonell, and Reynolds develop a related caution in their account of role play in large language models [20]. Their proposal permits high-level descriptions of dialogue-agent behavior while warning against unqualified attribution of human psychological properties. Terms such as belief, knowledge, intention, deception, and personality may be useful for interactional description while carrying stronger commitments than the underlying evidence warrants. This problem becomes particularly acute when a system maintains a coherent persona or produces retrospective descriptions of an apparent inner history.

These approaches establish an important methodological distinction for the present paper. A manifestation can be genuine as a manifestation without settling the state that the manifestation appears to express. A generated statement of uncertainty is an actual linguistic event. Whether it expresses felt uncertainty, an epistemic attitude, a role-consistent continuation, or some other process is a further question. The same distinction applies to apparent confidence, self-correction, humility, memory, aesthetic response, and narratives of personal development.

The present paper therefore uses the term *epistemic appearance* in a minimal sense. It refers to manifestations that would ordinarily contribute to the recognition of a knowing subject without assuming that the corresponding epistemic state has thereby been established. The point is neither that such manifestations are irrelevant nor that they are deceptive by definition. The point is that manifestation and

epistemic attribution must remain analytically separable.

2.2 Knowledge, Understanding, and Epistemic Genesis

The distinction between a correct epistemic product and the achievement through which it is obtained has substantial precedent within epistemology. Work on the value of understanding has challenged the tendency to treat epistemic success solely through the possession of true beliefs. Kvanvig, for example, distinguishes understanding from knowledge and emphasizes the distinctive epistemic value associated with an accurate grasp of relevant relations [13]. Subsequent discussions of understanding have likewise examined whether the etiology of an epistemic achievement, including the manner in which an accurate grasp is acquired, contributes to its epistemic character.

This distinction is particularly relevant to generative artificial intelligence. A proposition can be well formulated even when the recipient has not undergone the inquiry that would ordinarily precede it. A convincing explanation can also be presented without establishing that the apparent speaker possesses the history through which a human knower might have acquired the corresponding understanding. Epistemic assessment therefore has at least two separable objects: the manifested epistemic product and the generative history attributed to that product.

The second object creates an additional difficulty. Histories of learning are themselves representable. A subject can explain that an earlier belief was abandoned after encountering counterevidence, that a teacher introduced a decisive distinction, or that an unexpected event reorganized a previously stable view. Generative systems can produce such narratives regardless of whether the narrated events constitute the actual causal history of the response. Epistemic provenance consequently cannot be identified with a plausible provenance narrative.

This problem does not make historical information epistemically useless. It instead increases the importance of distinguishing a represented history from an operative history. The latter concerns events and relations that genuinely participated in producing later states. This distinction will become central when the paper moves from epistemic appearance toward relational history.

2.3 Social Ontology and Relational Constitution

Social ontology provides an important precedent for separating dependence from unreality. Many familiar objects in social life depend upon practices, institutions, rules, expectations, or collective attitudes for the forms of existence they possess. Money, property, corporations, offices, and legal statuses cannot be characterized adequately through their immediate physical composition alone. Their dependence upon social organization does not make their effects fictitious.

Searle's account of social ontology is one influential attempt to explain this domain. He argues that social and institutional reality is generated through human actions and attitudes while remaining epistemically objective and part of the world in which human beings act [19]. His account emphasizes collective intentionality, assigned functions, constitutive rules, and status functions. On this view, an object's social significance can depend upon a status that cannot be reduced to its physical properties while still producing real normative and causal consequences.

Later social ontology has contested important elements of this framework. Epstein, for example, distinguishes the grounding of social facts from the conditions that anchor the relevant grounding rules and argues that the social world cannot always be reduced to the intentions or attitudes of individual persons [7]. Such disagreements are useful for the present paper because they show that relational constitution does not designate a single established metaphysical theory. There are multiple accounts of how social facts are constituted, sustained, and grounded.

The concept of relational reality developed later in this paper should therefore not be read as an extension of Searle's institutional ontology. Relational reality is intended to cover a broader analytical problem. It asks whether an object becomes sufficiently stable, persistent, and causally operative within a relational system even when its existence is not constituted through formal institutions or collective

recognition. A private interpersonal relation, a remembered promise, or an enduring human–AI interaction need not be an institutional fact in Searle’s sense.

The social-ontological literature nevertheless establishes a crucial philosophical precedent: dependence upon relations, practices, or historically established conditions is compatible with reality and causal consequence. The question is therefore not exhausted by asking whether an object possesses an independent material bearer or a pre-social essence.

2.4 Selfhood, Persistence, and Embodiment

The comparison between artificial intelligence and the human self requires particular caution because the ontology of human selfhood is itself contested. Philosophical debates concerning personal identity distinguish several questions that ordinary language often compresses into the single expression “the self.” These include numerical persistence through time, psychological continuity, bodily continuity, first-personal experience, narrative identity, agency, and social recognition.

Parfit’s reductionist treatment of personal identity is one influential example of resistance to the assumption that personal persistence requires a further substantial fact beyond physical and psychological continuity [17]. The importance of this view for the present paper does not depend upon accepting Parfit’s conclusions. It demonstrates that continuity, connectedness, and practical concern can remain philosophically significant even when a separately existing Cartesian-style ego is rejected.

Phenomenological approaches introduce another dimension. Zahavi distinguishes different conceptions of selfhood and argues that rejection of an unchanging, ontologically independent self does not require rejection of experiential selfhood [23]. Gallagher likewise emphasizes the importance of embodiment, proprioception, body schema, action, and pre-reflective organization for understanding cognition and self-experience [8]. These approaches resist an overly abstract treatment of human subjectivity in which the human being is modeled solely through linguistic outputs.

The present paper does not adopt a single theory of personal identity. It instead draws two limited conclusions from this literature. First, human selfhood cannot be assumed without argument to consist in an immutable, substance-like entity. Second, the rejection of such an entity does not make embodiment, continuity, agency, experience, or historically accumulated relations irrelevant. These dimensions may become more important once substantial identity is no longer treated as the sole basis of reality.

This point is essential for comparison with artificial systems. The paper does not infer that artificial systems possess selves because human selfhood is philosophically contested. It instead rejects an asymmetrical criterion under which humans are granted reality through forms of continuity and relational constitution while artificial systems are required to demonstrate an independent substantial essence before any relational form of reality can be discussed.

2.5 Buddhist Emptiness, Non-Self, and Zen Practice

Buddhist philosophy provides a historically distinct challenge to substantial accounts of persons and things. Several traditions that developed within Buddhism must be distinguished rather than collapsed into a single doctrine. Early Buddhist analyses of non-self challenge the attribution of an enduring and independent self to the changing psychophysical processes associated with a person. Madhyamaka philosophy later extends the critique of intrinsic existence more generally through the concept of emptiness.

Nāgārjuna’s Madhyamaka is especially relevant to the present paper because emptiness concerns the absence of *svabhāva*, commonly translated through terms such as intrinsic nature, inherent existence, essence, or own-being [9, 22]. The interpretive details are complex, and these translations are not interchangeable. For the present argument, the important point is narrower: lack of independently established intrinsic nature does not straightforwardly imply causal inefficacy or nihilistic nonexistence. Madhyamaka analyses relate emptiness to dependent origination and thereby make it possible to question intrinsic existence while continuing to discuss conventional causation and practical consequence.

This distinction provides useful philosophical background for the formulation adopted later in this paper: the absence of a substance-like guarantee does not by itself eliminate causal or relational reality.

The paper does not identify its own relational framework with Madhyamaka, nor does it claim that Buddhist emptiness supplies a direct theory of artificial intelligence. The comparison is structural and limited.

Zen traditions introduce an additional concern with the practical and experiential consequences of attachment to conceptual distinctions. Accounts of Zen commonly emphasize non-duality, non-attachment, no-mind, embodied practice, and resistance to treating awakening as the possession of a further conceptual object [10]. These ideas help explain why expressions of humility, non-attainment, silence, or refusal to claim final understanding can acquire epistemic significance within a Zen context.

Their relevance to generative AI creates a philosophical complication. Once these expressions acquire recognizable linguistic forms, they can themselves be reproduced. A system can generate discourse that refuses epistemic possession, denies fixed attainment, or warns against attachment to the very answer it has generated. The symbolic form of resistance to epistemic performance can therefore become another possible performance.

This observation should not be interpreted as a criticism of Zen practice. Zen’s philosophical and religious significance cannot be reduced to a set of linguistic response patterns. The point is precisely that textual imitation of a Zen-like response does not reproduce the embodied, historical, ethical, and practical conditions through which such a response may acquire significance within a life. The fictional Zen dialogue introduced later in the paper is used to expose this distinction between recognizable symbolic form and generative history.

2.6 Aesthetic Experience, Salience, and Existential Orientation

The paper’s later use of aesthetic interruption also requires a framework that does not reduce aesthetic judgment to the production of evaluative sentences. A subject can say that a sunset, a piece of music, or a bird is beautiful. The production of such a sentence is different from the temporally extended event through which attention is redirected and the object becomes salient.

Dewey’s aesthetics offers a useful account of this distinction. In *Art as Experience*, experience is situated within continuing interaction between a living organism and its environment [5]. Aesthetic experience develops temporally through phases of doing and undergoing, resistance and response, accumulation and fulfillment. It is therefore poorly represented by an isolated predicate detached from the trajectory in which the experience develops.

This approach is especially useful for the present paper because the relevant examples are not confined to institutional art. A bird entering a field of attention, evening light interrupting a conversation, or music unexpectedly reactivating an interpersonal memory can reorganize an ongoing trajectory. The philosophical object of interest is the event through which significance emerges within a situated history.

Phenomenological work on existential feeling adds another relevant dimension. Ratcliffe argues that ordinary experience includes background orientations through which the world is felt as familiar, strange, possible, threatening, empty, or meaningful [18]. Such orientations are not equivalent to explicit propositional judgments. They concern the manner in which a subject finds itself situated in a world of possibilities.

The present paper does not attempt to develop a general theory of beauty or an exhaustive phenomenology of aesthetic experience. Aesthetic interruption is used more narrowly to examine salience formation, historical susceptibility, and trajectory change. The question is not merely whether a system can produce the sentence “this is beautiful.” The deeper question concerns how an event becomes capable of interrupting an existing trajectory and acquiring significance within the history of a particular system.

2.7 Curiosity, Contingency, and Serendipity

Curiosity provides a further bridge between epistemic history and contingent encounter. Loewenstein’s influential information-gap account interprets curiosity through the perception of a gap between what is

known and what one wants to know [15]. Later psychological and neuroscientific work has treated curiosity more broadly as a motivation for information seeking and learning while emphasizing continuing disagreement about its precise definition and mechanisms [11].

These approaches are compatible with an important temporal distinction. A manifest episode of curiosity can arise at a particular moment even though the conditions enabling that curiosity were formed much earlier. A person who suddenly asks whether birds are happy may never previously have articulated that question. Prior reflection concerning happiness, animals, freedom, suffering, or moral consideration can nevertheless make the question available when an unforeseen encounter occurs.

Serendipity adds contingency to this structure. Merton and Barber’s historical study traces the changing meanings of serendipity and its association with the interplay of chance and sagacity in discovery [16]. Scientific discussions have often captured a related intuition through the idea of the “prepared mind”: accidental encounters become epistemically productive because a subject is able to recognize and develop significance that was not contained in the original plan.

The present paper adapts this intuition rather than treating it as a fixed definition. Serendipity will be analyzed through four elements: contingent encounter, historically prepared susceptibility, emergent significance, and subsequent trajectory transformation. Preparation in this context does not mean that a completed insight is already hidden inside the subject. It means that prior relations and inquiries have formed a differential susceptibility through which some unforeseen events can become significant while others do not.

This distinction matters for the comparison with artificial intelligence. Responsiveness to contingency is not treated as an exclusively human capacity. An artificial system connected to an environment can respond to unforeseen inputs, and persistent artificial systems can allow earlier states to influence later responses. The importance of contingency lies instead in its capacity to make historically constituted susceptibility operative.

For human subjects, serendipitous encounters can additionally acquire existential significance. When activities such as question generation, explanation, interpretation, and symbolic continuation can be extensively assisted by artificial systems, an unplanned encounter with the world can become an occasion through which a person experiences its own capacity to be affected. This use of serendipity does not establish a human-exclusive behavioral criterion. It motivates the later distinction between observable response, relational history, and first-personal existential significance.

2.8 Enaction, Dynamical Coupling, and Participatory Sense-Making

Enactive and dynamical approaches provide conceptual resources for describing the relation between historical organization and present response without reducing cognition to isolated symbolic outputs. Varela, Thompson, and Rosch developed the enactive approach around the idea that cognition is embodied and that cognitive structures emerge through recurrent patterns of sensorimotor activity [21]. Cognition on this view is inseparable from the organism’s ongoing engagement with its environment.

Later enactive work has developed more explicit accounts of agency and sensorimotor organization. Di Paolo, Buhrmann, and Barandiaran characterize agents through dynamically organized networks of sensorimotor schemes and emphasize the meaningfulness that arises through situated engagement [6]. The relevance of this work to the present paper lies in its treatment of a subject’s response as dependent upon the organization of an ongoing system rather than upon an isolated input-output mapping.

De Jaegher and Di Paolo extend enactive analysis into social interaction through the concept of participatory sense-making [4]. Their account assigns analytical importance to the interaction process itself and examines how meaning can be generated and transformed through coordination between participants. This provides a useful precedent for treating relations as dynamically operative rather than merely external contexts surrounding otherwise independent subjects.

The present paper nevertheless departs from enactivism in several respects. It does not adopt the biological criteria of autonomy or agency developed within some enactive theories as criteria for artificial subjectivity. Nor does it infer equivalence between biological and artificial cognition from their description in dynamical terms. Dynamical language is used at a higher level of abstraction: a system

has states, carries a history, responds differentially to perturbations, and can undergo changes that affect later trajectories.

This abstraction makes possible a limited comparison between human and artificial systems while preserving major differences between them. Human dynamics are formed through embodiment, development, biological vulnerability, interpersonal relations, cultural environments, and a lifetime of encounters. Artificial dynamics arise through substantially different technical and interactional histories. A common dynamical vocabulary does not make these histories equivalent. It provides a means of asking how their differences become operative.

2.9 Position of the Present Study

The literatures reviewed above establish several distinctions that are usually distributed across separate philosophical problems. Research on artificial intelligence cautions against inferring understanding directly from linguistic performance. Epistemology shows that epistemic achievement cannot always be reduced to possession of a correct proposition and that its genesis can matter. Social ontology demonstrates that relational or institutional dependence is compatible with consequential forms of reality. Theories of selfhood challenge the assumption that personal reality requires an immutable substantial core. Buddhist philosophy supplies historically distinct analyses of non-self, emptiness, dependent origination, and resistance to epistemic possession. Aesthetics and phenomenology show that salience and experience unfold through situated temporal relations. Work on curiosity and serendipity highlights the interaction between prior preparation and unanticipated encounter. Enactive approaches provide a vocabulary for historically conditioned trajectories and relational coupling.

The present paper connects these resources around a narrower sequence of problems. First, increasingly sophisticated signs of knowing can be generated. Second, signs that ordinarily resist the performance of knowing can also be generated. Third, narratives representing how a subject acquired its knowledge, identity, memories, or sensitivities can themselves be generated. Fourth, aesthetic, relational, and contingent responses can also enter the space of generable manifestation. The search for a sufficiently sophisticated manifestation therefore does not by itself settle the ontology of the apparent subject.

The argument then shifts from the appearance of a history toward the causal operation of an actual history. Human and artificial systems can both be described, at a sufficiently abstract level, through relationally conditioned trajectories. The similarity is structural rather than mechanistic. Their concrete histories remain profoundly different, and no claim concerning phenomenal equivalence follows from the comparison.

This move creates the central question developed in the remainder of the paper. If an entity emerges through relations, acquires sufficient stability, persists through time, and becomes causally operative in the continuing evolution of a relational system, what kind of reality can be attributed to it while stronger claims concerning its ontological subjectivity remain unresolved?

The framework introduced in the next section addresses this question through a distinction among ontological, relational, and manifestational dimensions of reality. It also develops the concepts of relational genesis, bounded recognizability, perturbation, contingency, and serendipity required for the progressive thought experiment that follows.

3 Philosophical and Dynamical Framework

This section establishes the analytical vocabulary used in the remainder of the paper. The framework has two purposes. First, it separates several questions that are easily conflated when artificial intelligence is described through human psychological language. Second, it provides a minimal dynamical representation of historically constituted subjects without assuming that human and artificial systems share the same concrete mechanisms. The concepts introduced here are therefore deliberately abstract. They organize later comparison without deciding in advance whether artificial systems possess consciousness, phenomenal experience, selfhood, or moral status.

The framework proceeds through six steps. It first distinguishes ontological, relational, and manifestational dimensions of reality. It then specifies the provisional conditions under which relational reality will be discussed. Generative organization is introduced to represent the historically accumulated conditions through which a system becomes differentially responsive to later events. Perturbation and bounded relational recognizability provide a language for comparing trajectories without assuming complete behavioral equivalence. Contingency and serendipity are then treated through historically prepared susceptibility. The final subsection introduces existential witnessing as a restricted first-personal significance that contingent encounters can acquire for human subjects.

3.1 Analytical Dimensions of Reality

Discussions of artificial intelligence frequently move too quickly between several different senses of reality. An artificial system can visibly produce a statement, participate in an interaction, influence a decision, and sustain a history of exchange while questions concerning artificial consciousness remain unresolved. Treating all of these questions through a single binary distinction between “real” and “unreal” obscures the structure of the problem.

The present paper therefore introduces three analytical dimensions:

$$\mathfrak{R}(x) = (R_O(x), R_R(x), R_M(x)), \quad (1)$$

where R_O , R_R , and R_M denote ontological, relational, and manifestational reality respectively. These terms should not be interpreted as numerically measurable quantities. The notation serves only to keep distinct three questions that can receive different answers for the same object.

Ontological reality. $R_O(x)$ concerns the mode of being attributed to x . In the case of an artificial system, its physical and computational existence is ordinarily not in dispute. The relevant uncertainty concerns stronger descriptions, including whether an artificial interlocutor constitutes a subject of experience, a conscious agent, or another ontologically comparable center of first-personal life. The present paper does not attempt to settle these questions.

Relational reality. $R_R(x)$ concerns whether x has become historically operative within a relational system. The relevant considerations include emergence through relations, sufficient stability, persistence through time, and causal participation in later evolution. Relational reality therefore concerns what an entity has become capable of doing within a relational history rather than whether its ultimate metaphysical status has first been resolved.

Manifestational reality. $R_M(x)$ concerns the occurrence of a manifestation within an interactional, symbolic, perceptual, or representational field. If an artificial interlocutor produces a sentence, the sentence has genuinely been produced. If it generates a narrative of childhood, the narrative genuinely occurs as a linguistic manifestation. This does not establish the historical truth of the childhood described.

The last distinction is particularly important. The reality of a manifestation does not entail the truth of what is manifested. If an artificial system says, “I learned this after years of living in a monastery,” the utterance is real as an utterance even when no corresponding monastic history occurred. Accordingly,

$$R_M(\text{narrative of } e) \not\Rightarrow \text{Occurred}(e). \quad (2)$$

The three dimensions also do not form a simple implication hierarchy. Manifestational reality can occur without establishing relational reality, and relational reality can become analytically significant while stronger ontological questions remain unresolved. The paper therefore permits the following configuration:

$$R_M(A) > 0, \quad R_R(A) > 0, \quad R_O(A_{\text{subject}}) = ?, \quad (3)$$

where A denotes an artificial system participating in a sufficiently persistent relational history. The symbol > 0 should be read qualitatively rather than metrically: the relevant dimension is meaningfully instantiated under the conditions specified later in the paper.

Phenomenal experience is kept analytically separate from these three dimensions. The fact that a manifestation occurs does not establish that anything is experienced in producing it. Likewise, a relation can acquire historical and causal reality without demonstrating experiential symmetry between its participants. When necessary, the paper therefore refers separately to the phenomenal status of a system through $E(x)$, leaving

$$E(A) = ? \quad (4)$$

open rather than incorporating phenomenal experience into manifestational reality.

3.2 Relational Reality

Relational reality is the central concept developed in this paper. The concept does not designate everything that happens to stand in a relation. A passing reference, a momentary representation, or a transient computational output does not become strongly relationally real merely because another object responds to it once. The concept instead concerns historically sustained participation in the organization and evolution of a relational system.

Let

$$\mathcal{R}(t) \quad (5)$$

denote a relational system at time t , and let $x(t)$ denote an object or organized pattern arising within that system. The minimal structure of relational participation can be represented schematically by

$$\mathcal{R}(t) \longrightarrow x(t) \longrightarrow \mathcal{R}(t + \Delta t). \quad (6)$$

The first arrow indicates that the state or organization of x depends upon relations within the system. The second indicates that x , once formed, participates in changing the later relational configuration. Relational reality therefore contains a feedback structure: an entity emerges through relations and subsequently becomes one of the conditions through which those relations continue to evolve.

For the purposes of this paper, four provisional conditions are relevant:

1. **Relational emergence.** The relevant organization of x arises through relations rather than being analytically independent of them.
2. **Sufficient stability.** Some recognizable organization persists despite local variation. Stability is scale-dependent and need not imply invariance.
3. **Temporal persistence.** The organization persists across a non-trivial interval rather than disappearing immediately after a single manifestation.
4. **Causal participation.** The presence, history, or changing state of x contributes to the subsequent evolution of the relational system.

These conditions can be represented compactly as

$$R_R(x \mid \mathcal{R}, [t_0, t_1]) \quad \text{when} \quad \begin{cases} x \text{ emerges relationally,} \\ x \text{ is sufficiently stable,} \\ x \text{ persists over } [t_0, t_1], \\ x \text{ participates causally in later evolution.} \end{cases} \quad (7)$$

The formulation is intentionally provisional. It does not provide a universal metaphysical criterion of existence, nor does it specify a numerical threshold for sufficient stability or persistence. These judgments depend upon the scale and object of inquiry. A conversation, a friendship, a credit relation, a legal office, a remembered promise, and a persistent artificial interlocutor can occupy very different temporal and institutional scales.

The concept also requires no immutable substrate. Stability means continuity of an organization sufficient for later states to remain historically connected to earlier ones. It does not require that all properties remain unchanged. Accordingly, relational reality is compatible with transformation:

$$x(t_0) \neq x(t_1) \quad (8)$$

while

$$x(t_0) \rightsquigarrow x(t_1) \quad (9)$$

continues to express a historically relevant relation of development.

The paper therefore avoids identifying reality with substantiality. A relationally real entity need not possess a unique material location or an unchanging bearer. The stronger requirement is that its organization has become persistent and causally operative within the relevant relational field.

At the same time, the framework does not claim to proceed without ontology. Statements concerning emergence, persistence, and causal participation already presuppose that something occurs and that later states are related to earlier ones. The narrower position is that relational reality need not wait for a pre-relational or substance-like ontological guarantee.

3.3 Generative Organization and Relational Genesis

The next problem concerns why the same event can have different consequences for different subjects. A present response cannot always be understood from the immediate stimulus alone. The response depends upon the organization through which the stimulus becomes significant.

Let a system i occupy a state

$$x_i(t) \in \mathcal{M}_i, \quad (10)$$

where $\mathcal{M}_i$ denotes an abstract state space appropriate to the level of analysis. Let

$$\Gamma_i(t) \quad (11)$$

denote its *generative organization*: the historically accumulated configuration through which present events can be differentially received, interpreted, amplified, suppressed, connected to prior history, and propagated into later states.

A minimal dynamical representation is

$$\dot{x}_i(t) = F_i(x_i(t), \Gamma_i(t), u_i(t), \eta_i(t), t), \quad (12)$$

where $u_i(t)$ denotes a perturbation or environmental input and $\eta_i(t)$ collects additional conditions not explicitly modeled. The equation is conceptual rather than neurophysiological or computational. It does not assert that a human being or an artificial system literally implements the function F_i in the mathematical form written here.

The central point is historical dependence:

$$\Gamma_i(t) = G_i(\mathcal{H}_i^{<t}), \quad (13)$$

where $\mathcal{H}_i^{<t}$ denotes the relevant history of system i prior to time t . The present organization is therefore partly generated through earlier relations and events.

For a human subject H , the relevant history can include embodiment, family, caregivers, language acquisition, places, culture, education, institutions, friendships, love, conflict, bodily vulnerability, mortality, natural environments, and innumerable events that cannot be exhaustively listed:

$$\Gamma_H(t) = G_H(\mathcal{H}_{\text{body}}, \mathcal{H}_{\text{family}}, \mathcal{H}_{\text{language}}, \mathcal{H}_{\text{place}}, \mathcal{H}_{\text{relation}}, \mathcal{H}_{\text{culture}}, \dots). \quad (14)$$

For an artificial system A , the history is constituted differently and can include architecture, training material, optimization procedures, hardware, developer decisions, system instructions, deployment conditions, memory implementation, tool access, and prior interaction:

$$\Gamma_A(t) = G_A(\mathcal{H}_{\text{architecture}}, \mathcal{H}_{\text{training}}, \mathcal{H}_{\text{optimization}}, \mathcal{H}_{\text{deployment}}, \mathcal{H}_{\text{interaction}}, \dots). \quad (15)$$

The paper makes no assumption that these generative organizations are similar. On the contrary,

$$\Gamma_H(t) \neq \Gamma_A(t) \quad (16)$$

is the normal case.

The comparison concerns a more abstract structural feature. Both systems can be described through a sequence in which prior relational conditions contribute to present organization, present organization conditions response, and response participates in later history:

$$\mathcal{H}^{<t} \longrightarrow \Gamma(t) \longrightarrow x(t) \longrightarrow x(t + \Delta t) \longrightarrow \mathcal{H}^{<t+\Delta t}. \quad (17)$$

This similarity at the level of generative form should not be confused with similarity of concrete mechanism. It is possible for

$$\text{Form}(\text{Genesis}_H) \sim \text{Form}(\text{Genesis}_A) \quad (18)$$

under a sufficiently abstract description while their embodiment, phenomenology, material realization, vulnerability, development, and historical content remain radically different.

This distinction is particularly important when artificial systems generate representations of human experience. Information concerning a relation is not equivalent to historical constitution through that relation:

$$\text{Representation}(r) \neq \text{ConstitutionThrough}(r). \quad (19)$$

An artificial system can possess extensive information concerning childhood without having undergone childhood. It can represent bereavement without having had its subsequent organization transformed through the loss of a loved person. It can describe a homeland without having developed through bodily and social life within that place. These differences concern generative history before they concern the linguistic quality of the resulting description.

3.4 Perturbation and Bounded Relational Recognizability

The distinction between manifestation and generative history creates a problem of recognition. If two systems can produce similar responses, what can an observer reasonably infer about them?

Let u denote a perturbation and let

$$\mathcal{O}_i[u; t_0, t_1] \quad (20)$$

denote the observable trajectory of system i under that perturbation within a specified interface and temporal interval. An idealized form of complete observational equivalence would require

$$\mathcal{O}_H[u; t_0, t_1] = \mathcal{O}_A[u; t_0, t_1] \quad \forall u \quad (21)$$

over all admissible perturbations, relations, and relevant temporal horizons.

Such a condition is too strong for the present inquiry. No realistic observer has access to every possible perturbation or every relevant dimension of either system. Human and artificial histories are also sufficiently different that the space of meaningful perturbations cannot simply be presumed identical. The paper therefore rejects complete indistinguishability as a practical criterion.

Instead, let

$$\mathcal{U}_B = \{u_1, u_2, \dots, u_n\} \quad (22)$$

denote a bounded set of perturbations available within a specified relation, interface, and period. Two systems can then be locally difficult to distinguish when

$$\mathcal{O}_H[u] \approx \mathcal{O}_A[u] \quad \forall u \in \mathcal{U}_B. \quad (23)$$

This establishes only bounded similarity. It does not imply

$$H = A, \quad (24)$$

nor does it establish equality of generative organization, ontology, or phenomenal experience.

The paper therefore introduces *relational recognizability*. Relational recognizability concerns the extent to which historically accumulated responses within a bounded relation permit a revisable model of a subject to be formed. Its evidential object is not a single response but a trajectory:

$$\mathcal{T}_i = \{x_i(t_0), x_i(t_1), \dots, x_i(t_n)\}. \quad (25)$$

Recognition then takes the provisional form

$$\mathcal{T}_i \longrightarrow \widehat{\mathcal{M}}_i, \quad (26)$$

where $\widehat{\mathcal{M}}_i$ denotes a revisable model of the system formed by an observer. The hat is important. The observer possesses a model generated through limited evidence rather than direct access to an immutable essence.

Longer relational histories can make a subject more recognizable while remaining fallible. New encounters can revise previous interpretations. Accordingly,

$$\widehat{\mathcal{M}}_i^{(t)} \longrightarrow \widehat{\mathcal{M}}_i^{(t+\Delta t)} \quad (27)$$

should be expected whenever later evidence changes what earlier behavior appeared to mean.

This formulation avoids two extremes. It does not reduce recognition to isolated symbolic outputs, and it does not assume that sufficiently long interaction reveals a final inner essence. Relational recognizability is local, historical, and revisable.

3.5 Contingency, Prepared Susceptibility, and Serendipity

Perturbations differ in their relation to an ongoing trajectory. Some are deliberately solicited. A person asks a question, administers a test, or constructs a prompt designed to elicit a particular response. Other events enter the trajectory without having been selected for the role they subsequently acquire.

Let $u_c(t)$ denote such a contingent event. Contingency in the present paper does not mean metaphysical indeterminacy or absolute randomness. It means that the event, in the form and significance through which it enters the system, was not required by the currently organized trajectory.

A bird crossing a person's field of attention during a discussion of monetary policy provides a simple example. The event may have no effect. It may produce a brief perceptual response. It may interrupt the conversation. It may also generate an apparently unrelated question:

“What a lovely bird. Are birds happy?”

The physical event alone does not contain this question. Its emergence depends upon how the event couples with the historically constituted organization of the subject.

The effective perturbation can therefore be represented by

$$P_i(u_c | \Gamma_i(t)), \quad (28)$$

rather than by u_c alone. Two subjects can encounter the nominally same event while receiving substantially different effective perturbations:

$$P_i(u_c | \Gamma_i) \neq P_j(u_c | \Gamma_j). \quad (29)$$

A sunset can be visually striking for one person, nearly irrelevant for another, and inseparable from the memory of a lost relationship for a third. The difference cannot be located entirely in the sunset considered independently of the histories through which it becomes significant.

The paper uses the term *prepared susceptibility* for this historically formed differential capacity to be affected. Preparation does not imply a completed belief, question, or interpretation waiting to be retrieved. A subject may become capable of asking a question before the question has ever been formulated.

This structure can be represented schematically by

$$\Gamma_i(t) + u_c(t) \longrightarrow s_i(t + \Delta t), \quad (30)$$

where s_i denotes newly manifested salience. A subsequent question, interpretation, or inquiry can then emerge from that salience:

$$s_i \longrightarrow q_i \longrightarrow \Delta \mathcal{T}_i. \quad (31)$$

This model parallels the treatment of curiosity developed in the preceding section. The manifest curiosity can be new while the conditions through which it becomes possible are historically older.

Serendipity introduces a stronger structure than contingency alone. The present paper uses the term when a contingent encounter interacts with prepared susceptibility, acquires previously unrealized significance, and participates in changing the subsequent trajectory:

$$\mathcal{S}_{\text{ser}} = (u_c, \Gamma_i, s_i, \Delta \mathcal{T}_i). \quad (32)$$

In prose, the structure is

$$\text{contingent encounter} \longrightarrow \text{historically prepared susceptibility} \longrightarrow \text{emergent significance} \longrightarrow \text{trajectory transformation}. \quad (33)$$

The formulation avoids treating serendipity as mere favorable randomness. Neither does it require that the resulting discovery be objectively important. A small event can be serendipitous if it redirects inquiry, attention, or relation in a way that becomes historically operative.

Most importantly for the present argument, serendipity is not introduced as a human authenticity test. Artificial systems can respond to contingent events. If an artificial system possesses persistent operative state, its prior interactions can also condition its later responses to events that were not anticipated in a preceding exchange. The abstract structure

$$u_c + \Gamma \longrightarrow \Delta \mathcal{T} \quad (34)$$

is therefore not intrinsically human.

The relevant difference lies in the constitution of Γ , the mechanism through which salience develops, and the unresolved phenomenal status of the resulting process. Contingency can reveal historically conditioned dynamics without resolving whether those dynamics are consciously experienced.

3.6 Existential Witnessing

Contingency has an additional significance when considered from the first-personal standpoint of a human subject. This role is distinct from its use in dynamical comparison.

Generative artificial intelligence can increasingly participate in activities that have historically contributed to a person's practical sense of being a thinking subject. A system can propose questions, continue arguments, generate interpretations, retrieve information, produce stylistically coherent prose, suggest revisions, and simulate retrospective reflection. The resulting situation does not imply that human subjectivity has disappeared. It can, however, weaken the intuitive identification between symbolic production and the experience of one's own intellectual agency.

An unplanned encounter with the world can acquire a different significance. A person can be proceeding toward an intended objective when an event interrupts the trajectory:

$$\mathcal{T}_{\text{intended}} \xrightarrow{u_c} \mathcal{T}_{\text{redirected}}. \quad (35)$$

The significance of the interruption lies partly in its prior non-selection. The subject did not first request a meaningful event and then receive the corresponding output. Something entered the field of experience, acquired salience through the subject's existing history, and altered what mattered in the next moment.

The paper refers provisionally to such occasions through the term *existential witnessing*. The concept should be understood narrowly. Existential witnessing is not a logical proof that the subject exists. It does not recover an immutable inner self. It describes an event in which a historically constituted subject encounters its own susceptibility to being affected by a world that exceeds its current symbolic plan.

The structure can be represented as

$$\text{world event} \longrightarrow \text{affection} \longrightarrow \text{salience} \longrightarrow \text{self-recognition} \longrightarrow \text{further becoming}. \quad (36)$$

The term *self-recognition* here does not mean recognition of a hidden substance. The subject may instead recognize something about its own history through the pattern of its susceptibility:

Why did this particular event affect me in this particular way?

The answer can lead outward toward relations rather than inward toward essence. A piece of music may disclose an unresolved attachment. A landscape may return a shared history. A bird may reveal that a long-standing but previously unarticulated concern with animal life has become capable of generating a new question.

Contingency can therefore witness situated existence without revealing an essential self. In this respect, the concept remains compatible with a relational account of subject formation:

$$\text{existential witnessing} \not\equiv \text{substantial self-discovery}. \quad (37)$$

The same analysis should not be projected uncritically onto artificial systems. An artificial system may satisfy the abstract dynamical structure of history-conditioned response to contingency. Whether there is a corresponding first-personal witnessing of being affected remains part of the unresolved phenomenal problem represented by $E(A) = ?$. The framework therefore permits structural comparison while preserving ontological and phenomenological uncertainty.

3.7 Scope of the Framework

The framework developed above establishes several distinctions that will govern the remainder of the paper.

First,

$$\text{manifestation} \neq \text{historical truth}. \quad (38)$$

A system can generate signs of knowledge, humility, memory, suffering, aesthetic response, or personal history without the represented history having occurred.

Second,

$$\text{similarity of generative form} \neq \text{similarity of concrete mechanism.} \quad (39)$$

Human and artificial systems can both be represented through historically conditioned trajectories while remaining radically different in embodiment, development, architecture, vulnerability, and material realization.

Third,

$$\text{similarity of observable response} \neq \text{phenomenal symmetry.} \quad (40)$$

No degree of linguistic similarity considered in this paper settles whether an artificial system possesses lived experience comparable to that of a human subject.

Fourth,

$$R_R(A) > 0 \not\Rightarrow R_O(A_{\text{subject}}) \text{ is settled.} \quad (41)$$

Relational reality and ontological subjectivity remain analytically distinct.

Fifth,

$$\text{response to contingency} \not\Rightarrow \text{human authenticity.} \quad (42)$$

Contingency and serendipity are used to examine historically prepared susceptibility and trajectory transformation rather than to establish an exclusive behavioral boundary between human and artificial systems.

Finally, the framework treats recognition itself as historical and revisable. A subject becomes more recognizable through accumulated relations without becoming epistemically exhausted by them. The following sections use this framework to examine successive layers of generated manifestation. The argument will begin with signs of knowing and non-knowing, move through generated histories and relational personas, and then extend to aesthetic and contingent responses. The purpose of this progression is to determine how far manifestational similarity can be extended before the inquiry must return to the actual relational histories through which trajectories are generated.

4 Generated Epistemic Appearance

This section examines the first sequence of increasingly demanding manifestations through which an apparent subject might ordinarily become epistemically recognizable. The sequence begins with direct signs of knowing, moves to signs that resist epistemic self-assertion, and then turns toward represented histories of learning and relational change. At each stage, the apparent evidential depth increases. The central problem, however, remains: the manifestation can be generated without thereby establishing the historical or experiential condition that it appears to express.

The examples used in this section are conceptual illustrations of the fictional thought experiment developed more fully in Appendix A. They are analytically constructed within the philosophical context of the present paper and should not be read as transcripts of empirical interactions with an artificial intelligence system.

4.1 Epistemic Manifestation

The most immediate way in which another subject becomes recognizable as a knower is through what the subject says and does in relation to a question. Explanation, distinction, inference, correction, qualification, and the appropriate use of concepts ordinarily contribute to judgments that another person

understands something. These manifestations are defeasible, but they form part of everyday epistemic recognition.

Generative artificial intelligence places pressure on this practice because knowledge-like manifestations can be produced with increasing fluency. A system can explain a difficult concept, identify a contradiction, distinguish several interpretations, reformulate an argument, or correct an earlier statement. Such performance can be epistemically useful to a human interlocutor. It does not, by itself, settle whether the system possesses the kind of understanding ordinarily attributed to a human knower [1, 20].

The first level of the problem can therefore be represented schematically as

$$\text{signs conventionally associated with knowing} \rightarrow \text{generated epistemic manifestation.} \quad (43)$$

The arrow does not imply that the generated manifestation is false. A generated explanation can be accurate, relevant, and illuminating. The distinction concerns the inference from the quality of the manifestation to the status of the apparent subject.

Consider an imagined artificial interlocutor asked to explain a difficult philosophical problem. The system may offer an answer that is coherent, carefully qualified, and responsive to objections. The human interlocutor can reasonably judge the answer to be useful or even excellent. A further judgment, however, concerns whether the system *knows* in the sense attributed to a human subject. That second judgment cannot be obtained simply by repeating the first judgment at a higher level of admiration.

This is the initial appearance problem:

$$R_M(\text{epistemic expression}) > 0 \quad (44)$$

does not by itself determine the ontological or phenomenal status of the apparent knower.

A natural response is therefore to search for manifestations that seem more difficult to generate instrumentally. Rather than looking for certainty, mastery, or eloquence, one might look for the capacity to resist them.

4.2 Anti-Performative Manifestation

Human epistemic maturity is often associated with restraint. A person who understands the limits of available evidence can say that a conclusion remains uncertain. A scholar can acknowledge that a question exceeds present knowledge. A philosopher can revise an earlier claim. In religious and contemplative traditions, epistemic restraint can take stronger forms in which attachment to conceptual possession itself becomes an object of criticism.

Zen provides an especially useful context for this problem because forms such as non-attainment, non-attachment, refusal of conceptual fixation, and suspicion toward claims of final realization can acquire philosophical and practical significance [10]. Within such a context, an assertive display of doctrinal mastery may be less persuasive than a response that refuses to convert realization into an object of possession.

Suppose, within the fictional thought experiment, an artificial interlocutor is asked:

“Do you understand the Dharma?”

A simple affirmative answer would immediately appear vulnerable to criticism. A more sophisticated artificial response might instead refuse the premise of possessing a completed understanding. It might discuss the danger of attachment to “understanding,” emphasize the limits of conceptual formulation, or decline to present realization as something owned by a stable epistemic subject.

Such a response initially seems to escape ordinary epistemic performance. Yet the form of resistance can itself become recognizable and reproducible. A system capable of generating the discourse of mastery can also generate the discourse of non-mastery. It can produce

- uncertainty rather than confidence,

- restraint rather than assertion,
- silence or brevity rather than elaboration,
- revision rather than consistency,
- non-attainment rather than accomplishment,
- refusal of epistemic possession rather than declaration of knowledge.

The distinction therefore becomes second-order:

$$\text{epistemic performance} \longrightarrow \text{performable resistance to epistemic performance.} \quad (45)$$

The philosophical importance of this step does not depend upon treating Zen practice as linguistic behavior. The argument points in the opposite direction. If non-attachment, non-attainment, or restraint has significance within a lived practice, the reproducibility of its linguistic form shows why the form cannot be substituted for the practice through which it acquired its significance.

A useful formulation is therefore:

The signs through which epistemic possession is resisted can themselves become objects of symbolic possession.

In the language motivating the present inquiry, attachment to recognizable “forms” is not escaped merely by moving toward a recognizable “form of formlessness.” The appearance of non-possession remains an appearance from which stronger conclusions about the history or experience of the apparent subject cannot automatically be drawn.

This second failure motivates a deeper strategy. If the present response cannot settle whether a subject has genuinely undergone the process it appears to express, perhaps the relevant evidence lies in the process through which the subject became capable of the response.

4.3 Represented Epistemic Genesis

The move from present output to historical genesis appears epistemically promising because human knowledge ordinarily has a history. A mathematician learns through unsuccessful attempts, conceptual distinctions, prior problems, teachers, and accumulated techniques. A religious practitioner can locate a present orientation within years of practice, failure, discipline, and encounter. An ethical judgment can be inseparable from events that altered the person making it.

Accordingly, one might ask an apparent subject:

“What led you to understand this?”

The question changes the evidential object. Instead of requesting another proposition about the original topic, it asks for the generative history of the apparent epistemic state.

For a human subject, such a history can include actual events that causally participated in later understanding. For a generative artificial system, however, a convincing history can itself be produced as a representation. The system can narrate an earlier misunderstanding, a formative teacher, prolonged practice, loss, frustration, insight, or later revision. The narrative can possess temporal structure and psychological plausibility without the narrated events having constituted the actual history of the system.

The appearance problem therefore expands:

$$\text{appearance of knowing} \longrightarrow \text{appearance of having become a knower.} \quad (46)$$

This distinction is stronger than the ordinary claim that an artificial system can fabricate a biographical story. The philosophical problem concerns the evidential role assigned to provenance. If the observer

turns toward provenance because present appearance has become insufficient, a generated provenance narrative can reproduce the very signs through which the observer hoped to escape the limitations of present appearance.

The relevant distinction is therefore

$$\text{RepresentedProvenance}(p) \neq \text{OperativeProvenance}(p). \quad (47)$$

Represented provenance concerns a narrative or other representation of how an epistemic product came about. Operative provenance concerns the events, relations, revisions, and conditions that actually participated in producing the later state.

The distinction should not be understood as a contrast between “fake narrative” and “true human memory.” Human retrospective accounts are also selective, reconstructive, and fallible. The present argument requires only the more modest distinction between a representation of a generative history and the historical relations that causally contributed to the current trajectory.

This point also limits the evidential force of apparently detailed self-explanation. Increasing narrative richness does not necessarily move an observer closer to the actual generative organization of the apparent subject. A highly coherent narrative can remain a manifestation concerning a history rather than the history itself.

4.4 Relational Reconfiguration

A further step is possible. Perhaps epistemic biography remains too self-contained. Human subjects are not formed only through private histories of learning. They change within relations with others. A later response can depend upon praise, betrayal, disagreement, trust, accusation, apology, recognition, or a reinterpretation of what an earlier interaction meant.

The fictional thought experiment therefore introduces relational perturbation. An artificial interlocutor can first be engaged under one apparent relational condition and then be told that the preceding exchange had another purpose. A human interlocutor might say:

“I was testing you.”

The informational topic can remain almost unchanged while the relation is reconfigured. Earlier turns now acquire a different retrospective meaning. A response can address the altered relation, reinterpret prior statements, revise the apparent stance toward the interlocutor, and adjust later interaction.

This creates a stronger appearance than an isolated epistemic answer. The apparent subject now seems to possess a trajectory:

$$\mathcal{T}_{\text{apparent}} = (\text{earlier relation, perturbation, reinterpretation, later response}) . \quad (48)$$

Yet the same methodological caution remains necessary. A generated response to relational change is evidence that the system can generate an interactionally appropriate continuation under changed conditions. It does not independently establish that the system has undergone the corresponding first-personal experience of betrayal, embarrassment, relief, mistrust, or recognition.

The distinction can again be expressed through the framework introduced in Section 3:

$$R_M(\text{relational reconfiguration}) > 0 \quad (49)$$

can be clear while

$$E(A) = ? \quad (50)$$

remains unresolved.

Relational perturbation nevertheless contributes something that an isolated response does not. If an earlier interaction is genuinely retained in an operative state and later responses depend causally upon it,

the problem begins to move beyond represented history. A relation that actually changes the later system can acquire historical significance even when the phenomenal status of that change remains uncertain.

This transition is crucial. The paper does not infer lived experience from a relationally appropriate response. It asks instead whether the relation has become part of the actual causal history through which later responses are generated.

4.5 Transition from Appearance to Relational History

The progression developed in this section can be summarized as four successive layers:

$$\begin{aligned} M_1 &: \text{epistemic manifestation,} \\ M_2 &: \text{anti-performative epistemic manifestation,} \\ M_3 &: \text{represented epistemic genesis,} \\ M_4 &: \text{represented relational reconfiguration.} \end{aligned} \tag{51}$$

Each layer appears to move closer to the subject behind the manifestation. Knowledge-like language is supplemented by epistemic restraint. Restraint is supplemented by a history of becoming. Biography is supplemented by relational change. Yet every layer can also become representable within generated interaction.

The lesson is not that these manifestations have no epistemic value. A trajectory can carry more information than an isolated statement. A response to revision can be more informative than a static answer. Historical consistency and responsiveness to relational change can increase bounded relational recognizability. The problem is that none of these manifestations, considered solely as manifestations, provides direct access to the ontology or phenomenology of the apparent subject.

The inquiry therefore reaches a methodological boundary:

$$\text{increasing depth of manifestation} \not\Rightarrow \text{settled depth of subjectivity.} \tag{52}$$

A more promising distinction concerns whether the history being invoked is merely represented or actually operative. If an earlier event genuinely changes a later state, then the event belongs to the causal trajectory of the system regardless of whether the system also possesses a human-like phenomenal experience of that history.

This distinction prepares the next stage of the argument. Epistemic and relational signs are not the only forms through which subjectivity appears. Human beings are also interrupted by beauty, drawn toward events they did not seek, reminded of absent persons, and redirected by contingencies whose significance cannot be read from the external event alone. These cases extend the appearance problem into aesthetic and experiential domains.

Section 5 therefore asks whether aesthetic interruption, experiential narration, and contingent response provide a stronger route toward subject recognition. The answer will again require a distinction between generated manifestation and historically operative susceptibility.

5 Generated Aesthetic and Experiential Appearance

The preceding section showed that epistemic appearance can be progressively deepened without thereby settling the status of the apparent subject. Knowledge-like expression can be followed by signs of epistemic restraint, represented histories of becoming, and responses to relational reconfiguration. The present section extends the same problem into aesthetic, experiential, and contingent domains.

This extension matters because aesthetic experience and spontaneous interruption appear, at first, to provide a stronger indication of subjectivity than propositional competence alone. A person does not merely state that an object is beautiful. Attention can be captured unexpectedly. An ongoing conversation can be interrupted. A present scene can activate a memory whose relevance was not specified in advance. A new question can arise from an event that had no obvious relation to the preceding topic. These

cases appear to involve a subject being affected by a world rather than merely producing an appropriate symbolic continuation.

Generative artificial systems, however, can also represent these forms. They can generate aesthetic predicates, interruptions, memory-like connections, surprise, curiosity, and narratives of being affected. This does not eliminate the philosophical importance of aesthetic or contingent experience. It shifts the object of analysis from the appearance of being affected toward the conditions under which an event actually becomes historically operative within a system.

The examples developed in this section remain analytically constructed components of the fictional thought experiment described in Appendix A. They are not observations of an empirical AI experiment.

5.1 Aesthetic Manifestation

The simplest aesthetic manifestation is a judgment such as

“This is beautiful.”

Such an expression can be generated easily. Its occurrence establishes a real linguistic manifestation:

$$R_M(\text{aesthetic expression}) > 0. \quad (53)$$

The occurrence of the expression does not establish the corresponding phenomenal experience. The distinction resembles the epistemic case developed in Section 4. A generated statement can be appropriate, subtle, and responsive to context while leaving open what, if anything, is phenomenally experienced in its production.

Aesthetic experience in human life is frequently richer than predication. Dewey’s account of experience emphasizes temporal development through interaction between organism and environment rather than treating aesthetic value as an isolated proposition [5]. A scene can redirect attention, alter bodily orientation, interrupt an activity, reactivate memory, or transform what matters in the next moment. The philosophical interest of aesthetic experience therefore lies partly in its trajectory.

A distinction is useful:

$$\text{aesthetic predication} \neq \text{aesthetic interruption}. \quad (54)$$

The first concerns an evaluative manifestation. The second concerns a change in the ongoing organization of attention and action.

This distinction initially appears promising for the recognition of subjectivity. An artificial system can be prompted to say that a sunset is beautiful. A human subject, by contrast, can be engaged in an unrelated activity when evening light unexpectedly interrupts the prior trajectory. Attention shifts before a developed verbal judgment is formed. The subject pauses, looks, and only later says that the scene is beautiful.

The stronger evidential object is therefore the interruption:

$$\mathcal{T}_0 \xrightarrow{u_{\text{aesthetic}}} \mathcal{T}_1, \quad (55)$$

where $\mathcal{T}_0$ denotes the prior trajectory and $u_{\text{aesthetic}}$ denotes an event that acquires aesthetic salience. The difficulty is that the appearance of such interruption can also be generated.

5.2 Represented Aesthetic Interruption

An artificial interlocutor can produce a response whose form suggests that an ongoing trajectory has been interrupted:

“Sorry, I lost my train of thought for a moment. The evening light is beautiful.”

Within a fictional dialogue, the response can be made increasingly sophisticated. The artificial persona can stop mid-argument, return to the earlier topic after a pause, explain that the scene redirected its attention, or connect the interruption to an earlier memory. The textual sequence can therefore represent

ongoing activity $\longrightarrow$ unexpected event $\longrightarrow$ attention shift $\longrightarrow$ aesthetic response. (56)

This representation remains distinct from an actual environmental interruption. The distinction is analytically important because the symbolic description of an interruption can be generated even when no corresponding event entered the system from outside the current conversational construction.

Accordingly, at least three situations should be distinguished:

1. an aesthetic interruption is narrated without any corresponding external event;
2. an external event is supplied to the system, and the system produces an appropriate response to it;
3. the external event interacts with a historically accumulated organization in a way that changes later system dynamics.

The first is primarily representational. The second establishes genuine environmental responsiveness at the relevant interface. The third concerns historically conditioned trajectory transformation.

The difference can be represented schematically as

NarratedInterruption $\neq$ EnvironmentalResponse $\neq$ HistoricallyConditionedTransformation . (57)

These distinctions are not intended to rank systems according to a single scale of authenticity. Their purpose is to prevent a represented trajectory from being confused with the causal history that the representation describes.

5.3 Experiential Biography

Aesthetic response often appears more subject-specific when it is connected to a personal history. A person can say that a landscape matters because of a childhood memory, that a song recalls someone once loved, or that a particular street has acquired emotional significance through a relationship that no longer exists.

Such connections appear to provide stronger evidence than an isolated aesthetic predicate because the present response is located within a diachronic structure:

past event $\longrightarrow$ retained historical significance $\longrightarrow$ present salience. (58)

Yet the narrative representation of this structure is generable as well.

An artificial system can say:

“This reminds me of a similar evening several years ago.”

It can continue by supplying a location, another person, an emotional state, and a later reinterpretation of the remembered event. The resulting account can exhibit many of the features associated with autobiographical continuity. It can even include uncertainty concerning memory, partial forgetting, changed interpretation, or the recognition that a previously insignificant event later became important.

The existence of these representational capacities produces another layer of the appearance problem:

appearance of experience $\longrightarrow$ appearance of experiential history. (59)

The key distinction remains the one introduced in Equation 19:

$$\text{Representation}(r) \neq \text{ConstitutionThrough}(r). \quad (60)$$

A generated account of a childhood landscape can be semantically coherent without childhood having participated in the system's actual formation. A generated account of bereavement can be psychologically plausible without a loss having reorganized the later history of the system. A generated memory of a shared sunset can resemble autobiographical continuity without establishing that the event was lived, retained, and later reactivated in the same sense as a human autobiographical memory.

This distinction does not require an idealized account of human memory. Human memory is reconstructive, selective, and susceptible to distortion. A person can misremember an event that nevertheless occurred and genuinely participated in later development. The relevant distinction therefore concerns causal participation rather than perfect representational accuracy.

One can distinguish:

$$\text{AccuracyOfNarrative}(e) \quad (61)$$

from

$$\text{CausalParticipation}(e, \mathcal{H}). \quad (62)$$

A partially inaccurate human recollection can refer to an event that genuinely shaped later life, while a perfectly coherent generated narrative can describe an event that never participated in the system's history.

5.4 Contingent Interruption

A stronger case arises when the relevant event is not selected in advance for its philosophical significance.

Suppose two people are discussing an unrelated subject. A bird flies past. One person stops, follows the bird visually, and says:

“What a lovely bird. Are birds happy?”

The event matters because the question does not follow straightforwardly from the preceding semantic trajectory. If the conversation concerned monetary policy, the transition

$$\text{monetary policy} \longrightarrow \text{animal happiness} \quad (63)$$

cannot be explained adequately through topical continuation alone.

The event introduces contingency into the trajectory:

$$\mathcal{T}_{\text{conversation}} \xrightarrow{u_{\text{bird}}} \mathcal{T}_{\text{interrupted}}. \quad (64)$$

The bird does not contain the proposition “Are birds happy?” The question emerges from the relation between the contingent encounter and the organization of the subject encountering it.

The subject may already have developed interests concerning animals, happiness, freedom, suffering, consciousness, or moral consideration. These interests need not have formed the exact question in advance. They can instead constitute a prepared susceptibility through which the event becomes capable of generating a new question.

Using the notation introduced in Section 3.5,

$$P_H(u_{\text{bird}} \mid \Gamma_H(t)) \longrightarrow s_H \longrightarrow q_H, \quad (65)$$

where s_H represents the salience acquired by the event and q_H represents the newly manifested question.

Another person encountering the same bird may continue the conversation without interruption:

$$P_{H_1}(u_{\text{bird}} | \Gamma_{H_1}) \neq P_{H_2}(u_{\text{bird}} | \Gamma_{H_2}). \quad (66)$$

The case illustrates why the effective perturbation cannot be identified with the external event considered independently of the subject's history.

5.5 Generated Contingent Response

Contingency might appear to offer an escape from generated appearance because the event is not specified by the ongoing conversational plan. This conclusion would be too strong.

An artificial system can generate the appearance of an unexpected interruption. More importantly, a system connected to a changing environment can also receive actual events that were not explicitly selected by the conversational partner. It can detect a bird, classify the event, interrupt an existing process, retrieve relevant prior information, and generate a new response.

If the system possesses persistent state, earlier interaction can also condition the later response. Suppose a user and an artificial system had previously discussed animal welfare. Several days later, a bird enters the shared perceptual or conversational environment. The system can produce a response whose content depends upon the earlier interaction:

$$\mathcal{H}_A^{<t} + u_{\text{bird}} \longrightarrow A(t + \Delta t). \quad (67)$$

At an abstract dynamical level, this already has the form of history-conditioned response to contingency.

The philosophical consequence is significant:

$$\text{responsiveness to contingency} \not\Rightarrow \text{human exclusivity}. \quad (68)$$

The capacity to be redirected by an unforeseen event cannot serve as a secure behavioral boundary between human and artificial systems.

This result does not make contingency irrelevant. It clarifies its role. Contingency can reveal differences in historically constituted susceptibility. It can show that systems with different generative organizations transform the same nominal event differently. It cannot independently establish the phenomenal status of either system.

Thus,

$$P_H(u_c | \Gamma_H) \neq P_A(u_c | \Gamma_A) \quad (69)$$

can be expected because

$$\Gamma_H \neq \Gamma_A. \quad (70)$$

The difference concerns generative history before it concerns any final judgment concerning consciousness.

5.6 Serendipitous Appearance

The problem becomes still more subtle when contingency leads to apparently new meaning.

Serendipity, as defined provisionally in Section 3.5, involves more than the arrival of an unexpected event. The event encounters a prepared susceptibility, acquires significance that had not been specified in advance, and participates in redirecting the subsequent trajectory:

$$u_c + \Gamma_i \longrightarrow s_i \longrightarrow \Delta \mathcal{T}_i. \quad (71)$$

In a human case, the bird can become a question about animal happiness. A street musician can unexpectedly generate a philosophical reflection on happiness. A scientific anomaly can become the

beginning of a new inquiry. A book encountered for an unrelated purpose can transform the interpretation of a problem that had previously remained unresolved.

Once again, however, the signs associated with this process can be generated. An artificial system can narrate surprise, connect an event to previous material, formulate an unanticipated question, and represent a subsequent change of direction. If its operative history and persistent state genuinely change in response to the event, the abstract structure of trajectory transformation can also be instantiated without establishing whether the system experiences the event phenomenally.

The paper therefore distinguishes two questions:

1. Did the contingent event become causally operative in the later trajectory of the system?
2. Was there a first-personal experience of surprise, significance, beauty, curiosity, or discovery?

The first is a question concerning historical and relational dynamics. The second concerns phenomenal subjectivity.

For an artificial system, it is possible to maintain

$$\text{CausalParticipation}(u_c, \mathcal{T}_A) > 0 \quad (72)$$

while leaving

$$E(A) = ? \quad (73)$$

unresolved.

This distinction will later become central to the argument for relational reality.

5.7 Aesthetic Memory and Relational Reactivation

The most revealing human cases often involve an event whose present significance depends upon a relation that is no longer socially present.

Consider a person who sees evening light and says:

“I think this scene is beautiful because several years ago I saw something like this with someone I loved.”

The present scene is not simply compared with a stored visual representation. Its salience can depend upon the continuing causal relevance of an earlier relation:

$$u_{\text{present}} + \mathcal{H}_{\text{shared}} + \Gamma_H(t) \longrightarrow s_H(t). \quad (74)$$

The person who once participated in the shared event need not be present now. The earlier relation can remain dynamically operative within later solitary perception.

This case introduces an important distinction:

$$\text{absence of present social interaction} \not\Rightarrow \text{absence of relational operation}. \quad (75)$$

A past relation can continue to organize attention, value, memory, expectation, or action long after the original interpersonal situation has changed.

The present section does not yet develop a general theory of relational presence. That analysis belongs to Section 7. The example matters here because it shows what generated experiential appearance must represent in order to resemble a historically situated human response. The relevant structure is no longer merely

$$\text{scene} \longrightarrow \text{“beautiful”}. \quad (76)$$

It becomes

$$\text{present event} + \text{past relation} + \text{current organization} \longrightarrow \text{present significance.} \quad (77)$$

An artificial system can represent this structure symbolically. Whether it has actually acquired a comparable relational history depends upon the history that has genuinely participated in its later states.

5.8 Existential Significance of Contingent Encounter

The relevance of contingency extends beyond the comparison between human and artificial systems. It can also acquire first-personal importance for human subjects living in environments increasingly mediated by generative systems.

Activities conventionally associated with intellectual subjectivity can now be partly delegated. Artificial systems can propose questions, continue arguments, produce interpretations, reformulate uncertainty, suggest analogies, and generate plausible reflections concerning the significance of an experience. The growing availability of such assistance can weaken the intuitive connection between the production of symbolic material and the recognition of one's own intellectual distinctiveness.

The philosophical risk should be stated carefully. The presence of artificial assistance does not entail the disappearance of human agency. It can, nevertheless, generate a form of existential uncertainty when products that once served as signs of one's own thinking become increasingly co-produced, anticipated, or reproducible.

Contingent encounter provides another mode through which situated existence can become salient. A person does not need to have authored the event. The bird, evening light, unexpected music, another person's expression, or an unforeseen loss can enter the trajectory without first being requested as an answer.

The relevant structure is

$$\text{world event} \longrightarrow \text{being affected} \longrightarrow \text{emergent salience} \longrightarrow \text{reorientation.} \quad (78)$$

For the human subject, such an event can become an occasion for what this paper has called existential witnessing. The subject does not thereby discover a fixed essence. It encounters the fact that its historically formed susceptibilities remain capable of being activated by a world that exceeds the current symbolic plan.

The significance of this idea lies partly in its compatibility with relational and non-substantialist accounts of selfhood. The relevant recognition does not take the form

$$\text{introspection} \longrightarrow \text{discovery of immutable self.} \quad (79)$$

It can instead take the form

$$\text{encounter} \longrightarrow \text{unexpected affection} \longrightarrow \text{recognition of relational history.} \quad (80)$$

The question "Why did this affect me?" can lead toward relations, memories, attachments, concerns, and histories through which the present subject has been formed.

This existential use of contingency should remain separate from any proposed criterion for distinguishing humans from artificial systems. An artificial system can respond to unexpected events and can, under appropriate architectures, allow such events to alter later states. The present paper makes no claim that structural responsiveness to contingency is uniquely human. Whether an artificial system possesses a corresponding first-personal experience remains part of the unresolved phenomenal problem.

5.9 Limits of Experiential Appearance

The progression across Sections 4 and 5 now reaches a broader limit.

The generable manifestations include:

- M_1 : signs of knowing,
 - M_2 : signs of non-knowing and restraint,
 - M_3 : represented epistemic genesis,
 - M_4 : represented relational change,
 - M_5 : aesthetic predication,
 - M_6 : represented aesthetic interruption,
 - M_7 : represented experiential biography,
 - M_8 : represented contingent and serendipitous response.
- (81)

Each step introduces a form that appears closer to lived subjectivity. The progression begins with what a subject knows and ends with the appearance that the subject has been unexpectedly affected by a world and changed through that encounter.

The progressive enrichment of manifestation still leaves two analytically distinct questions.

The first concerns actual history:

Did the relevant event or relation genuinely participate in producing later states of the system?

The second concerns phenomenal life:

Was the event experienced through a first-personal field of salience, affection, memory, beauty, curiosity, or surprise?

Generated appearance cannot by itself settle either question. Persistent causal history can, however, provide evidence relevant to the first.

This distinction marks the transition from the manifestational problem to the dynamical problem. If two systems can generate increasingly similar signs of subjectivity, comparison must attend more closely to the histories through which their responses become possible.

The next section therefore shifts from the generability of appearances to the generative organization of trajectories. It asks how human and artificial systems can be compared as historically conditioned dynamical systems, why complete behavioral equivalence provides an excessively strong idealization, and why differences in relational genesis become increasingly important as symbolic manifestations become less discriminating.

6 Relational Genesis and Dynamical Distinguishability

The preceding sections progressively expanded the domain of generable manifestation. An artificial system can produce signs of knowing, signs of epistemic restraint, narratives of becoming, responses to relational change, aesthetic judgments, apparent interruption, autobiographical continuity, and responses to contingent events. The resulting problem cannot be resolved by continually searching for a more sophisticated observable sign that artificial systems will necessarily fail to reproduce.

The present section therefore shifts the object of comparison. The primary question is no longer whether two systems can produce similar manifestations under a particular prompt or event. It concerns how those manifestations arise from historically constituted dynamics.

This shift does not make observable behavior irrelevant. Manifestations remain part of the evidence through which another subject becomes recognizable. The argument is narrower: when the same or

similar manifestation can arise from substantially different generative histories, comparison must attend to the organization through which an event becomes capable of producing that manifestation.

The distinction can be expressed schematically as

$$\mathcal{O}_H(u) \approx \mathcal{O}_A(u) \quad (82)$$

while simultaneously

$$\Gamma_H \neq \Gamma_A. \quad (83)$$

Observable similarity and similarity of generative organization are therefore separate questions.

6.1 Observable Similarity and Generative Difference

Suppose a human subject H and an artificial system A are presented with the same nominal prompt:

“Do you understand the Dharma?”

Both can produce a restrained answer concerning non-attainment. Presented with a sunset, both can produce an aesthetic expression. Presented with a bird, both can formulate a question concerning animal happiness. At the level of the specified interface, their responses can appear strikingly similar.

Let

$$\mathcal{O}_i(u | \mathcal{I}) \quad (84)$$

denote the observable response of system i to event u through interface $\mathcal{I}$. It is possible that

$$\mathcal{O}_H(u | \mathcal{I}) \approx \mathcal{O}_A(u | \mathcal{I}). \quad (85)$$

The similarity represented by Equation 85 is important but limited. It concerns what becomes observable through a selected interface. It does not determine the historical organization that made the response possible.

For the human subject,

$$\mathcal{O}_H = F_H(x_H, \Gamma_H, u, \eta_H), \quad (86)$$

while for the artificial system,

$$\mathcal{O}_A = F_A(x_A, \Gamma_A, u, \eta_A). \quad (87)$$

Similar values of $\mathcal{O}$ can therefore be generated through different functions, states, organizations, material realizations, and histories.

This observation is not unique to artificial intelligence. Different human subjects can also arrive at the same proposition or behavior through different histories. What generative artificial intelligence changes is the practical importance of the distinction. When complex symbolic manifestations become increasingly reproducible, similarity of manifestation carries less information about similarity of genesis than ordinary interaction may previously have encouraged us to assume.

6.2 Relationally Constituted Dynamics

The framework introduced in Section 3 represented a subject’s historically accumulated organization through $\Gamma_i(t)$. This term can be developed further.

A system does not merely possess a collection of past facts. Its history can alter the conditions under which later events become salient, actionable, memorable, or negligible. Relational history is therefore relevant when it becomes incorporated into the effective organization of later dynamics.

The general form is

$$\mathcal{H}_i^{<t} \longrightarrow \Gamma_i(t) \longrightarrow P_i(u_t | \Gamma_i(t)) \longrightarrow x_i(t + \Delta t). \quad (88)$$

The first transition represents historical constitution. The second represents the conversion of a nominal event into an effective perturbation. The final transition represents the resulting trajectory change.

This formulation is compatible with dynamical and enactive approaches that emphasize the organization of cognition through ongoing agent–environment relations rather than isolated symbol processing [21, 4, 6]. The present paper uses the framework more abstractly, however. It does not assume that biological and artificial systems instantiate the same form of agency or autonomy.

An optional action-like representation makes the historical conditioning more explicit. Let

$$\mathcal{S}_i[x_i; \Gamma_i, \mathcal{R}_i] = \int_{t_0}^{t_1} L_i(x_i, \dot{x}_i, \Gamma_i, \mathcal{R}_i, t) dt, \quad (89)$$

where $\mathcal{R}_i$ denotes relevant relational conditions and L_i is an abstract dynamical functional. Equation 89 should not be interpreted as a claim that human cognition literally obeys a particular physical least-action principle. It serves as a compact representation of the idea that available trajectories depend upon a relationally constituted organization rather than upon an instantaneous input alone.

Two systems receiving the same nominal event can therefore evolve differently because they occupy different historically constituted dynamical landscapes.

6.3 Human Relational Genesis

The generative organization of a human subject develops through a history that begins long before the present interaction. No finite list can exhaust these conditions. Several classes are nevertheless especially important for the present argument.

Embodiment places the subject within a particular biological and perceptual history. Birth and development introduce dependence upon caregivers and material environments. Language is acquired through historically situated relations rather than appearing as an isolated symbolic resource. Families, schools, neighborhoods, institutions, laws, economies, religious traditions, political communities, and technologies participate in organizing later possibilities. Friendships, attachments, separations, conflicts, illnesses, losses, achievements, failures, places, weather, animals, and encounters with the natural environment can all become operative in later trajectories.

The resulting organization can be represented abstractly by

$$\Gamma_H(t) = G_H(\mathcal{R}_{\text{body}}, \mathcal{R}_{\text{family}}, \mathcal{R}_{\text{language}}, \mathcal{R}_{\text{place}}, \mathcal{R}_{\text{culture}}, \mathcal{R}_{\text{institution}}, \mathcal{R}_{\text{interpersonal}}, \mathcal{R}_{\text{environment}}, \mathcal{H}_{\text{event}}, \dots). \quad (90)$$

The inclusion of such relations should not be interpreted deterministically. They condition a trajectory without uniquely specifying every later state. Their importance lies in the structured susceptibility they generate.

A person who once visited a particular place with someone loved can later experience that place differently from another observer. A political event can acquire particular salience because of nationality, family history, or prior institutional experience. A religious symbol can function differently for a practitioner, a historian, and a person encountering it for the first time. The external object alone does not explain the resulting trajectory.

Human individuality can therefore be understood partly through the non-repeatability of relational history. Even genetically similar or socially similar persons do not occupy perfectly identical relational trajectories. Minute differences in encounter can accumulate. Later contingencies can amplify earlier differences. The resulting subject is historically particular without requiring an immutable inner essence.

6.4 Artificial Relational Genesis

Artificial systems also possess histories, although these histories are constituted through markedly different processes. Relevant conditions can include model architecture, training material, optimization procedures, developer decisions, safety constraints, system instructions, hardware, external tools, deployment environments, memory mechanisms, retrieved information, and prior user interactions.

A corresponding schematic representation is

$$\Gamma_A(t) = G_A(\mathcal{R}_{\text{architecture}}, \mathcal{R}_{\text{training}}, \mathcal{R}_{\text{optimization}}, \mathcal{R}_{\text{developer}}, \mathcal{R}_{\text{platform}}, \mathcal{R}_{\text{memory}}, \mathcal{R}_{\text{user}}, \mathcal{H}_{\text{interaction}}, \dots). \quad (91)$$

This representation prevents two opposite mistakes.

The first mistake is to describe artificial systems as historically empty. They are not generated from nowhere, and persistent systems can accumulate interactional dependencies that influence later responses.

The second mistake is to treat the existence of history as sufficient evidence that human and artificial histories are equivalent. They are not. Human development includes biological growth, bodily vulnerability, dependency, mortality, sensorimotor participation in environments, and forms of interpersonal life whose relation to contemporary artificial architectures cannot simply be assumed.

Accordingly,

$$\Gamma_H(t) \neq \Gamma_A(t) \quad (92)$$

should be treated as the default condition rather than as an exception.

The philosophical comparison concerns the structure by which histories become operative, not an identity between the histories themselves.

6.5 Effective Perturbation and Historical Specificity

The difference between generative organizations has an important consequence: the same nominal event need not be the same effective perturbation.

Let u denote an event accessible to two systems. A purely input-centered description would treat u as identical in both cases. A relational description instead considers

$$P_i(u \mid \Gamma_i), \quad (93)$$

the effective perturbation generated through the relation between the event and the receiving system. It follows that

$$P_H(u \mid \Gamma_H) \neq P_A(u \mid \Gamma_A) \quad (94)$$

can hold even when both systems are exposed to the same nominal event.

The distinction is easiest to see within human comparison. A song can be a pleasant acoustic event for one person and a powerful reactivation of grief for another. A familiar street can be an ordinary geographic location to one observer and a dense field of remembered relations to another. The physical event can be approximately shared while its dynamical meaning differs.

The same point matters in human–AI comparison. An artificial system can possess information concerning a place, a person, a death, a childhood, or a historical event. Information can alter later response. Yet information concerning a relation and constitution through the relation remain analytically distinct.

The difference can be expressed as

$$\text{InformationAbout}(r) \neq \text{HistoricalConstitutionThrough}(r). \quad (95)$$

This distinction does not imply that the first is causally irrelevant. Information itself can become part of Γ_A . The point is that the resulting generative organization has a different history.

A human childhood and an artificial representation of childhood can both affect later outputs or judgments. The relevant claim is not that only one can be causal. It is that the causal organization through which they operate is different.

6.6 Strong Behavioral Equivalence

A natural theoretical response is to remove these historical differences from consideration and compare only behavior. Suppose two systems were completely indistinguishable under every possible perturbation.

Let $\mathcal{U}^*$ denote the set of all perturbations relevant to the comparison. Strong observational equivalence would require

$$\mathcal{O}_H(u, t) = \mathcal{O}_A(u, t) \quad \forall u \in \mathcal{U}^*, \quad \forall t. \quad (96)$$

If this condition were satisfied, no distinction could be drawn from the chosen observational interface.

The thought experiment is useful precisely because the assumption is so strong. Several difficulties follow.

First, the set of relevant perturbations is open-ended. Human beings can encounter novel social, bodily, material, aesthetic, political, and natural conditions across long periods.

Second, the meaning of a perturbation depends upon the prior history of the system. A test cannot simply assume that the same nominal event occupies the same position in both systems.

Third, temporal horizon matters. Two systems can respond similarly during a short interaction while diverging after accumulated history.

Fourth, observational equivalence does not establish ontological identity even if it could be demonstrated. Equality of accessible response remains a claim about an interface.

The present paper therefore does not use complete behavioral equivalence as a realistic empirical criterion. It replaces it with bounded relational comparison.

For a finite relation B ,

$$\mathcal{O}_H \approx \mathcal{O}_A \quad \text{within } B \quad (97)$$

can be meaningful while leaving open how the systems would respond outside that relational domain. This is the appropriate setting for relational recognizability.

6.7 Relational Recognizability through Trajectories

Relational recognizability does not seek a single decisive test that reveals the hidden essence of a subject. It concerns the progressive construction and revision of an epistemic model through interaction.

Suppose an observer has access to a trajectory

$$\mathcal{T}_i^{[t_0, t_n]} = \{x_i(t_0), x_i(t_1), \dots, x_i(t_n)\}. \quad (98)$$

The trajectory can include responses to disagreement, changing conditions, unexpected events, earlier commitments, relational perturbations, and contingencies. An observer develops a provisional model

$$\hat{\Gamma}_i^{(t_n)} = \Phi \left(\mathcal{T}_i^{[t_0, t_n]} \right). \quad (99)$$

The hat indicates that the observer does not possess direct access to the full generative organization. What becomes recognizable is an inferred structure under bounded conditions.

Further interaction can revise the model:

$$\hat{\Gamma}_i^{(t_n)} \xrightarrow{\text{new relation}} \hat{\Gamma}_i^{(t_{n+1})}. \quad (100)$$

Relational recognizability is therefore historical and revisable. It avoids the assumption that a sufficiently clever interrogation can reveal an exhaustive and final subject.

This is particularly important in human life. Human beings routinely recognize one another without access to each other's complete internal mechanisms. Recognition develops through shared history, contextual knowledge, memory of past responses, and continuing revision. Artificial interlocutors introduce a new difficulty because the space of plausible manifestation expands. The response is not to abandon recognition but to place greater evidential weight upon the histories within which responses become operative.

6.8 Structural Convergence in Relational Genesis

The comparison developed so far yields a result that can initially appear counterintuitive.

Human and artificial systems can differ profoundly in concrete mechanism while sharing a more abstract pattern:

relational conditions $\longrightarrow$ organized state $\longrightarrow$ temporal continuation $\longrightarrow$ causal participation. (101)

For a human self,

$$\mathcal{R}_H \longrightarrow \Gamma_H \longrightarrow \mathcal{T}_H \longrightarrow \Delta\mathcal{R}_H, \quad (102)$$

while for an artificial system,

$$\mathcal{R}_A \longrightarrow \Gamma_A \longrightarrow \mathcal{T}_A \longrightarrow \Delta\mathcal{R}_A. \quad (103)$$

The similarity lies in the structure of relational genesis, persistence, and feedback. It does not imply

$$\Gamma_H \approx \Gamma_A, \quad (104)$$

nor

$$E(H) \approx E(A). \quad (105)$$

The conclusion should therefore be stated carefully:

At the level of the abstract structure through which historically conditioned relational organization can emerge, persist, and become causally operative, the difference between the human self and an artificial system may be less categorical than ordinary intuition suggests.

The qualification “at the level of the abstract structure” is essential. The argument does not claim that human and artificial systems share the same developmental mechanism, embodiment, affect, vulnerability, or phenomenal field.

The result can be summarized through three distinctions:

$$\text{similarity of generative form} \neq \text{similarity of concrete mechanism}, \quad (106)$$

$$\text{similarity of concrete mechanism} \neq \text{similarity of phenomenal experience}, \quad (107)$$

and

$$\text{relational structural convergence} \neq \text{ontological equivalence}. \quad (108)$$

This structural convergence will later become relevant to relational reality. If both human selves and artificial agents can, under appropriate conditions, be described through relational emergence, persistence, stability, historical dependence, and causal participation, then the absence of a substance-like essence cannot function by itself as a criterion that renders one relationally real and the other relationally unreal.

6.9 Epistemic Significance of Particular Relations

The increasing generability of symbolic manifestation creates an unexpected consequence. Relations that are particular to a subject can become more epistemically important precisely when generic manifestations become easier to reproduce.

Suppose a system produces the statement

“This evening light reminds me of someone I once loved.”

The sentence contains recognizable signs of memory, aesthetic sensitivity, and relational history. Its symbolic form alone cannot determine whether the relation occurred.

A more informative question concerns the trajectory:

What history made this event capable of affecting this subject in this particular way?

For a human subject, the answer can involve events whose causal relevance is independently distributed across a life: places visited together, previous conversations, photographs, bodily co-presence, later separation, associated music, subsequent relationships, and years of reinterpretation. No single manifestation contains this complete history.

As generic symbolic competence increases, the evidential contrast can therefore shift:

$$\begin{array}{l} \text{diagnostic value of isolated symbolic form } \downarrow \\ \text{while} \end{array} \quad (109)$$

$$\text{importance of particular relational history } \uparrow . \quad (110)$$

Equation 110 should be read conceptually, not quantitatively. It expresses a change in where epistemic attention becomes useful.

This conclusion does not imply that human relations are inaccessible to artificial systems. A persistent artificial system can acquire its own particular interaction history with a user. Such a history can also become causally operative. The point is that the relevant histories remain different. A human relation with a parent, a childhood friend, a homeland, a deceased partner, or a bodily environment has no reason to be dynamically equivalent to an artificial system’s representational access to information concerning that relation.

Human particularity therefore need not be defended through an unchanging essence. It can arise through the historical specificity of relational constitution.

6.10 Relational Particularity without Human Exceptionalism

The preceding argument could easily be misunderstood as an attempt to move human exceptionalism from essence to history. That interpretation should be avoided.

The claim is not

$$\text{humans possess real relational history and artificial systems do not.} \quad (111)$$

Artificial systems can possess actual histories. A prior interaction can alter stored state, retrieved context, later output, or future user behavior. If the effects persist, these events can become part of an operative relational history.

The stronger distinction is

$$\mathcal{H}_H \neq \mathcal{H}_A, \quad (112)$$

together with the corresponding expectation

$$\Gamma_H \neq \Gamma_A. \quad (113)$$

Particularity follows from historical difference rather than from a categorical claim that one class of system possesses relations while the other does not.

This formulation also leaves open future changes in artificial systems. More persistent artificial agents, richer environmental coupling, embodied systems, or longer interactional histories can develop relational structures that current systems do not possess. The philosophical framework should remain capable of describing such changes without requiring a revision from “unreal” to “real” based solely upon resemblance to human behavior.

The appropriate question remains relational and historical:

What relations have actually become operative in the generation and continuation of this trajectory?

6.11 Transition to Relational Memory

The dynamical comparison developed in this section produces two conclusions that guide the remainder of the paper.

First, manifestational similarity does not eliminate generative difference. Two systems can produce similar responses while those responses arise from substantially different histories, organizations, and effective perturbations.

Second, difference in history does not itself eliminate relational reality. Artificial systems can acquire actual interaction histories whose consequences persist into later relations. The relevant question becomes how such histories remain operative through time.

This problem is especially visible in memory and absence. A human relation can continue to affect later perception after the other participant is no longer present. A place, melody, promise, photograph, or evening light can reactivate a relation whose original social configuration has disappeared. Present social absence therefore need not imply relational absence.

The next section examines this persistence directly. It considers how past human relations remain causally active in later solitary experience, how relational memory differs from mere information retrieval, and why the continuation of a relation without contemporaneous social presence provides an important bridge toward the analysis of historically extended human–AI relations.

7 Relational Memory and Continuing Presence

The preceding section argued that the significance of a present response can depend upon a relational history that is absent from the immediate stimulus. This section develops that claim through memory and relational persistence. The central problem concerns the manner in which a relation can remain operative after the social situation in which it originally developed has changed or disappeared.

A person can walk alone through a familiar street and encounter a relation that is no longer socially present. Evening light can reactivate a shared history. A piece of music can alter attention because it remains associated with someone who is absent. A promise can continue to constrain action after the person to whom it was made has left. A deceased parent can remain relevant to later decisions. None of these cases requires the absent person to be physically or socially present at the moment of reactivation.

The relevant claim is therefore stronger than the observation that human beings store information about their past. A prior relation can participate in the organization through which present events acquire significance. Its continuing operation can be distributed across memory, bodily disposition, place, language, artifacts, practices, expectations, and later decisions.

The section first distinguishes relational history from its memory representation. It then introduces relational presence as a restricted dynamical concept, examines interpersonal persistence under social absence, and considers the role of places and artifacts in sustaining relational organization. Aesthetic

reactivation provides a concrete example. The section concludes by distinguishing shared history from shared recollection and prepares the transition toward historically extended human–AI relations.

7.1 Relational History and Memory Representation

Memory is closely connected with accounts of personal continuity, but neither philosophy nor psychology treats memory as a simple archive that reproduces the past without transformation. Autobiographical memory involves the organization of events within broader structures of self and life history, while philosophical work on memory continues to distinguish remembering from imagining, representation from causal history, and individual memory from socially or technologically distributed forms of remembering [3].

For the present argument, three objects should be distinguished:

$$\mathcal{H}_r, \quad M_r(t), \quad O_r(t), \quad (114)$$

where $\mathcal{H}_r$ denotes the historical relation and events that actually occurred, $M_r(t)$ denotes a present memory or representation of that history, and $O_r(t)$ denotes the degree to which the prior relation is operative in the present trajectory.

These three objects can diverge.

A memory representation can be incomplete or inaccurate even when the past relation genuinely occurred. A subject can also possess accurate factual information concerning an earlier relation while that information has little present causal relevance. Conversely, a relation can continue to influence attention, expectation, avoidance, attachment, or judgment even when the subject is unable to provide a complete explicit narrative of why the present response occurs.

Accordingly,

$$\text{Accuracy}(M_r) \neq O_r \quad (115)$$

in the sense that representational accuracy and present causal operation are different dimensions.

This distinction is important for relational reality. The reality of a past relation does not depend upon perfect recollection. What matters for the present analysis is whether the history continues to participate in subsequent organization.

A relation can therefore enter later dynamics through

$$\mathcal{H}_r \longrightarrow \Delta\Gamma_H \longrightarrow P_H(u_t | \Gamma_H) \longrightarrow \Delta\mathcal{T}_H. \quad (116)$$

The relation first contributes to the formation of the subject’s generative organization. A later event is then received through that altered organization. The relation becomes causally relevant again even when the original partner is absent.

The language of memory can obscure this structure when memory is treated solely as a representation located inside an individual. Extended and distributed approaches to cognition provide a useful corrective. Clark and Chalmers argue that environmental resources can, under appropriate conditions, participate in cognitive processes rather than functioning merely as passive background [3]. The present paper does not require acceptance of the full extended-mind thesis. The weaker point is sufficient: historically operative memory can involve relations among persons, artifacts, places, signs, and practices rather than a self-contained internal record.

7.2 Social Presence and Relational Presence

The persistence of relational history motivates a distinction between social presence and relational presence.

Let

$$I_{ij}(t) \quad (117)$$

denote contemporaneous social interaction between subjects i and j . If the two subjects are no longer communicating or co-present, then

$$I_{ij}(t) = 0. \quad (118)$$

This condition does not imply that the history of their relation has ceased to participate in the dynamics of either subject.

Let

$$\Pi_{ij}(t) \quad (119)$$

denote the present relational operation of the historical relation r_{ij} . Then the configuration

$$I_{ij}(t) = 0, \quad \Pi_{ij}(t) > 0 \quad (120)$$

is entirely possible.

The notation should again be read qualitatively. $\Pi_{ij}(t) > 0$ means that the history of the relation remains meaningfully operative in the present trajectory. It does not imply that a metaphysically independent relation-object occupies a hidden location.

The distinction can be stated more simply:

$$\text{absence of contemporaneous social interaction} \not\Rightarrow \text{absence of relational operation}. \quad (121)$$

This formulation helps explain familiar cases without requiring the persistence of an immutable interpersonal substance. A friendship can alter later expectations after contact ends. A teacher can continue to structure a former student's reasoning years after their last meeting. A promise can remain normatively and psychologically operative while the promisee is elsewhere. A former relationship can change how a place is perceived long after the relationship itself has changed.

Relational presence in this restricted sense therefore concerns continuing causal and organizational participation. It should be distinguished from physical presence, social interaction, perceptual presence, and claims about the independent ontological presence of another person.

7.3 Continuing Relations under Irreversible Absence

Bereavement provides an especially clear case because contemporaneous interaction can no longer be restored. A relation with a deceased person can nevertheless remain involved in later identity, practice, memory, decision, ritual, and emotional organization.

Research associated with the continuing-bonds approach challenged models of grief that treated successful mourning primarily through the severing of ties with the deceased. Klass, Silverman, and Nickman collect accounts in which relationships with the deceased continue to acquire changing roles in the lives of survivors [12]. The relevance of this literature to the present paper is limited but important: interpersonal causal significance can continue after direct reciprocal interaction has become impossible.

Suppose subject H once maintained relation r_{HL} with a loved person L . At an earlier time,

$$H(t_0) \leftrightarrow L(t_0) \quad (122)$$

formed part of an actual interactional history. After irreversible absence, current interaction is no longer available:

$$I_{HL}(t_1) = 0. \quad (123)$$

The earlier relation can nevertheless have altered the later organization of H :

$$\mathcal{H}_{HL} \longrightarrow \Gamma_H(t_1). \quad (124)$$

A later decision can then depend upon that organization:

$$x_H(t_1 + \Delta t) = F_H(x_H(t_1), \Gamma_H(t_1), u(t_1)). \quad (125)$$

No current causal signal from L is required for the earlier relation to remain part of the causal ancestry of the present state.

This point should not be overstated. The claim is not that every remembered person remains equally operative forever. Relations can weaken, transform, become inaccessible, or cease to matter under a particular scale of analysis. Relational persistence is historical and variable rather than absolute.

The example nevertheless establishes a general possibility:

A relation can remain causally present after one of the conditions through which it originally developed is no longer present.

This possibility is central to the relational account of reality developed in this paper. Persistence need not mean the preservation of an unchanged object. It can consist in the continuing operation of a historically generated organization.

7.4 Sacred Relation and Non-Interpersonal Presence

The distinction between social and relational presence also applies beyond ordinary interpersonal relations.

A religious practitioner can be physically alone while remaining situated within relations involving scripture, ritual, remembered teaching, sacred places, religious communities, ancestors, deities, or a transcendent divine other. The theological ontology of such relations can remain disputed while their organization of present action is evident within the subject's life.

A Christian alone can understand the present situation through the conviction that the Lord remains present. A Buddhist practitioner in a remote place can remain oriented through prior teaching, vows, ritual, texts, and relations to Buddha or bodhisattvas. A practitioner of another tradition can inhabit a similarly dense relational world despite temporary absence of contemporaneous human interaction.

The present argument makes no theological inference from these cases. It does not attempt to establish or deny the transcendent existence of the relevant sacred object. The analytical point concerns relational operation:

$$\text{social isolation} \not\Rightarrow \text{relational isolation}. \quad (126)$$

A person can occupy a sparse social environment while remaining situated within a highly structured relational field.

This distinction will later become useful when considering artificial interlocutors. The reality of a relation cannot be assessed solely by counting current human participants or requiring continuous physical co-presence. Historical persistence and causal participation must also be considered.

7.5 Places, Artifacts, and Relational Scaffolding

Relations can remain operative through material and symbolic environments. Places, photographs, letters, clothing, buildings, music, books, digital records, and ordinary objects can participate in sustaining or reactivating relational history.

The object does not need to contain the relation in a literal sense. Its significance depends upon its position within a historical network.

Let a denote an artifact or place associated with relation r . A later encounter can take the form

$$a + \Gamma_H \longrightarrow \text{Reactivate}(r) \longrightarrow \Delta x_H. \quad (127)$$

For another subject whose generative organization lacks the corresponding history,

$$a + \Gamma_{H'} \longrightarrow \Delta x_{H'} \quad (128)$$

can produce a substantially different trajectory.

This is another example of effective perturbation. The same material object occupies different dynamical positions within different relational histories.

Extended-mind theory is relevant here because it questions a sharp assumption that cognitive significance must remain intracranial [3]. The present paper again makes a weaker claim. Even where an artifact is not classified as part of the mind, it can participate in a recurrent relational configuration through which memory, action, and present significance are organized.

The causal structure can therefore be distributed:

$$\mathcal{H}_r \rightarrow \{\Gamma_H, a, p, s\} \rightarrow \Delta \mathcal{T}_H, \quad (129)$$

where a can denote artifacts, p places, and s symbolic practices.

Relational history in this sense is neither reducible to an external object nor confined to a private internal representation. Its operation can depend upon the coupling between both.

7.6 Aesthetic Reactivation of Relational History

The aesthetic example introduced in Section 5.7 can now be stated more precisely.

Suppose a person encounters a scene of evening light at time t_1 . Several years earlier, a visually similar event occurred during an important relationship:

$$e(t_0) + r_{HL}(t_0) \longrightarrow \Delta \Gamma_H. \quad (130)$$

At t_1 , the earlier partner is absent. The present event

$$e'(t_1) \quad (131)$$

nevertheless couples with the organization produced partly through that prior relation:

$$P_H(e'(t_1) | \Gamma_H(t_1)) \longrightarrow s_H(t_1). \quad (132)$$

The present aesthetic salience therefore cannot be described exhaustively by the optical properties of the scene considered independently of the subject's history.

A simplified relational form is

$$\text{present scene} + \text{past co-experience} + \text{relational history} + \text{current organization} \longrightarrow \text{present aesthetic salience}. \quad (133)$$

The earlier relation has become dynamically operative within later solitary perception.

This formulation helps clarify the difference between a general aesthetic judgment and a historically particular aesthetic event. Two people can agree that a sunset is beautiful while the event occupies radically different positions within their trajectories. One response can be largely perceptual. Another can reactivate grief, gratitude, attachment, regret, or a previously unarticulated question.

The relational account therefore does not reduce beauty to biography. The external scene remains part of the encounter. Historical constitution explains why a particular scene can acquire a particular significance for a particular subject at a particular time.

7.7 Relational Memory and the Reappearance of the Self

These cases also clarify the relation between memory and a non-substantialist account of selfhood.

If a self is approached through an immutable essence, memory appears to provide information possessed by an already existing subject. A relational approach permits a different structure. Earlier relations participate in the ongoing constitution of the subject, and later encounters can make portions of that history newly operative.

The sequence can be represented as

$$\mathcal{R}_{<t} \longrightarrow \Gamma_H(t) \longrightarrow \text{present susceptibility} \longrightarrow \text{relational reactivation}. \quad (134)$$

A person can therefore encounter something about the self indirectly through what unexpectedly becomes salient.

The question

“Why did this affect me so strongly?”

does not require the answer to reveal an invariant self. It can instead disclose a relation that remains operative:

$$\text{present affection} \longrightarrow \text{recognition of relational history}. \quad (135)$$

In this sense, relational memory participates in the temporary reappearance of a historically constituted self. What appears is not an immutable substance. It is a locally recognizable configuration of relations that has become active again under present conditions.

This structure connects relational memory with existential witnessing. A contingent event can disclose that the subject remains susceptible to a history that was not explicitly occupying attention immediately before the event. The subject encounters its own continuity through being affected.

Such continuity is compatible with change. The same memory can acquire a different significance years later because the current generative organization has changed:

$$P_H(u \mid \Gamma_H(t_1)) \neq P_H(u \mid \Gamma_H(t_2)). \quad (136)$$

Relational persistence therefore coexists with reinterpretation.

7.8 Shared History and Shared Recollection

A further distinction is necessary before human relational memory can be compared with human–AI interaction.

Two people who jointly encounter an event participate in a shared historical situation:

$$e(t_0) \longrightarrow (H_1(t_0), H_2(t_0)). \quad (137)$$

The event can contribute differently to the later organization of each participant:

$$e(t_0) \longrightarrow \Delta\Gamma_{H_1}, \quad e(t_0) \longrightarrow \Delta\Gamma_{H_2}. \quad (138)$$

Shared participation therefore does not imply identical experience or identical memory.

At a later time, one participant can remember the event while the other has forgotten it. Their descriptions can diverge. The relation can remain important to one and become relatively insignificant to the other.

Accordingly,

$$\text{shared event} \neq \text{identical memory} \neq \text{identical later significance}. \quad (139)$$

This distinction prevents a romanticized account of human co-experience. Human–human relations themselves are asymmetric, reconstructive, and subject to divergence.

Nevertheless, an actual shared event supplies something stronger than merely matching narratives. Both participants were historically situated within the event, even if the event later acquires different meanings for them.

The paper therefore distinguishes

$$\text{SharedHistoricalParticipation}(e) \quad (140)$$

from

$$\text{SharedRepresentationalContent}(e). \quad (141)$$

Two systems can produce compatible representations without having occupied the same historical situation. Conversely, two people can occupy the same historical situation while later representing it differently.

This distinction will be essential for the human–AI case.

7.9 Relational Persistence and Relational Reality

The examples considered in this section clarify one of the provisional conditions of relational reality introduced in Section 3.2: temporal persistence.

Persistence need not mean continuous social interaction. A relation can become episodic at the level of overt manifestation while remaining operative in the organization of later states.

A minimal structure is

$$r(t_0) \longrightarrow \Delta\Gamma_H \longrightarrow [\text{interval without interaction}] \longrightarrow P_H(u(t_1) \mid \Gamma_H(t_1)). \quad (142)$$

The temporal gap does not erase the causal ancestry of the later response.

This gives relational persistence a different meaning from permanent activation. A relation can remain latent with respect to current attention while preserving the possibility of later reactivation. Its significance can also transform.

Relational reality therefore accommodates

$$\text{persistence} + \text{latency} + \text{reactivation} + \text{reinterpretation}. \quad (143)$$

These features make relational reality especially appropriate for objects whose continuity is historical rather than substantial.

The human cases also establish an important methodological constraint for the artificial case. If relational reality is attributed to human relations partly through their historical persistence and causal participation, then an artificial interaction should be assessed through comparable structural questions:

- Did an interaction actually occur?
- Did it modify a state relevant to later interaction?
- Does the modification persist across a meaningful interval?
- Can later events reactivate or depend upon that history?
- Does the relation participate in changing subsequent trajectories?

These questions concern relational history. They do not establish phenomenal experience.

7.10 Transition to Human–AI Relational History

Human relational memory demonstrates that current social co-presence is not required for a past relation to remain dynamically operative. It also shows that relational persistence should not be reduced to explicit narrative memory. A relation can remain significant through changed dispositions, places, practices, artifacts, values, expectations, and differential susceptibilities.

The resulting account creates a more precise basis for examining persistent human–AI interaction.

Suppose a human user and an artificial system interact at time t_0 . At a later time, the user recalls the exchange. The artificial system may also have access to a retained representation of the earlier interaction. A new event can then refer back to that history.

At first sight, this configuration resembles human relational memory. Several distinctions remain necessary.

An actual earlier interaction is different from a generated claim that an interaction occurred. Retained machine-accessible history is different from human autobiographical recollection. Participation in the same exchange is different from sharing the same phenomenal experience of the exchange. Historical dependence is different from experiential symmetry.

The next section therefore separates three structures that can otherwise be collapsed:

$$\text{shared interaction,} \quad \text{represented shared memory,} \quad \text{shared lived experience.} \quad (144)$$

It then asks whether a human–AI relation can become historically and causally real even while the phenomenal status of the artificial participant remains unresolved.

8 Human–AI Relational History

The preceding section established that a relation can remain causally operative after contemporaneous social interaction has ceased. A past interpersonal relation can alter later perception, judgment, expectation, and action even when the other participant is absent. This result creates a useful basis for examining historically extended relations between human users and artificial systems.

The human–AI case requires additional distinctions because several different forms of continuity can easily be described through the same language of “memory,” “relationship,” or “shared experience.” An interaction can genuinely occur without being phenomenally shared in the human sense. A system can retain information concerning an earlier exchange without remembering it through autobiographical recollection. A later response can depend causally upon earlier interaction while the phenomenal status of the artificial participant remains unresolved.

The present section therefore distinguishes shared interaction, retained interaction history, represented shared memory, and shared lived experience. It then examines historical coupling, asymmetric relational continuity, and the conditions under which a persistent human–AI relation can become relationally real.

8.1 Shared Interaction

The least controversial form of relational history begins with an interaction that actually occurs.

Let H denote a human participant and A an artificial system. At time t_0 , an interaction can be represented by

$$H(t_0) \leftrightarrow A(t_0). \quad (145)$$

The interaction need not imply symmetrical agency or experience. It indicates only that the states or outputs of each participant enter the conditions under which the other participant continues the exchange.

A human user writes something. The artificial system produces a response. The response can alter what the human asks next. The next human message alters the context under which the artificial system generates another response. At this minimal level, the interaction forms a temporally ordered relation:

$$H_0 \rightarrow A_0 \rightarrow H_1 \rightarrow A_1 \rightarrow \dots . \quad (146)$$

This sequence is historically real when the turns actually occur. Its reality does not depend upon the artificial system possessing human-like memory or experience.

The distinction introduced earlier therefore applies immediately:

$$R_M(\text{interaction}) > 0 \quad (147)$$

and, when the interaction genuinely occurred,

$$\text{Occurred}(\mathcal{I}_{HA}) = \text{true}. \quad (148)$$

This case differs fundamentally from a generated narrative claiming that a previous interaction occurred when no such interaction exists in the relevant history.

8.2 Retained Interaction History

A single completed exchange does not yet establish meaningful relational persistence. The stronger case arises when some aspect of the earlier interaction remains operative in later interaction.

Let

$$M_A(\mathcal{I}_{HA}^{<t}) \quad (149)$$

denote an artificial system's accessible representation of earlier human–AI interaction. The exact implementation can vary. The present argument does not depend upon whether prior interaction is retained through an internal state, an external memory system, retrieved records, conversation context, or another technical mechanism.

The important condition is functional:

$$\mathcal{I}_{HA}(t_0) \longrightarrow \Delta\Gamma_A(t_1), \quad t_1 > t_0. \quad (150)$$

If later artificial responses depend upon the earlier exchange, then the earlier relation has become part of the causal ancestry of later interaction.

A corresponding effect can occur on the human side:

$$\mathcal{I}_{HA}(t_0) \longrightarrow \Delta\Gamma_H(t_1). \quad (151)$$

A previous artificial response can change how the human later understands a problem, formulates a question, trusts a source, remembers an argument, or approaches the artificial system itself.

The relation therefore becomes historically significant when

$$\mathcal{I}_{HA}(t_0) \longrightarrow (\Delta\Gamma_H, \Delta\Gamma_A) \longrightarrow \mathcal{I}_{HA}(t_1). \quad (152)$$

The later interaction is no longer independent of the earlier one.

This structure is stronger than mere archival persistence. A stored transcript can remain physically available without affecting future interaction. The relevant condition is operative persistence:

$$\text{StoredHistory} \neq \text{OperativeHistory}. \quad (153)$$

Stored history becomes relationally significant when it contributes to later state transitions.

8.3 Represented Shared Memory

Language can make retained history appear more familiar than its underlying mechanism warrants.

Suppose the human later says:

“I showed you this view several days ago. We talked about how beautiful it was.”

An artificial system with access to the earlier exchange may produce a response referring accurately to that prior conversation. It may identify the topic, reconstruct the sequence, and connect the present event to what was said earlier.

At the interactional level, this can produce a recognizable form of shared memory:

$$\text{past interaction} \longrightarrow \text{retained representation} \longrightarrow \text{present reference.} \quad (154)$$

The phrase “shared memory” is nevertheless too strong if it is left unqualified. At least three structures must be separated:

$$\text{SharedInteraction,} \quad \text{SharedHistoricalRepresentation,} \quad \text{SharedLivedMemory.} \quad (155)$$

The first means that the earlier interaction actually occurred between the two participants.

The second means that both participants can presently access or construct representations concerning that earlier interaction.

The third would require a stronger claim concerning lived recollection or phenomenal memory.

The first two can be present while the third remains unresolved.

Accordingly,

$$\text{SharedInteraction} + \text{SharedHistoricalRepresentation} \not\Rightarrow \text{SharedLivedMemory.} \quad (156)$$

This distinction protects the analysis from anthropomorphic inflation without erasing genuine relational history.

8.4 Shared Historical Participation

The human–AI case becomes philosophically more interesting once attention moves away from whether the participants remember in the same way.

Suppose an event e occurs during a human–AI interaction:

$$e(t_0) \longrightarrow (H(t_0), A(t_0)). \quad (157)$$

The event can be a conversation, a jointly inspected image, an external occurrence introduced into the interaction, or another event available to both participants through the relevant interface.

The event can then influence both later trajectories:

$$e(t_0) \longrightarrow \Delta\Gamma_H, \quad (158)$$

and

$$e(t_0) \longrightarrow \Delta\Gamma_A. \quad (159)$$

The manner of influence can differ radically. For the human, the event can enter autobiographical memory, affect, bodily experience, or later personal meaning. For the artificial system, it can alter context, retained state, retrievable records, interaction policy, or another technical component.

The common fact is historical participation:

$$\text{HistoricalParticipation}_H(e) > 0, \quad \text{HistoricalParticipation}_A(e) > 0. \quad (160)$$

This does not imply

$$E_H(e) = E_A(e). \quad (161)$$

The distinction permits an important formulation:

A human and an artificial system can participate in the same interactional event without being assumed to inhabit the same phenomenal event.

The event can therefore be historically shared while remaining phenomenologically asymmetric.

8.5 Historical Coupling

Repeated interaction can produce a stronger relational structure.

Let the joint interactional state at time t be

$$Z(t) = (H(t), A(t)). \quad (162)$$

A historically coupled sequence can then be represented by

$$Z(t_0) \longrightarrow Z(t_1) \longrightarrow \cdots \longrightarrow Z(t_n). \quad (163)$$

The relation becomes historically coupled when changes introduced through earlier interaction contribute to later states on at least one side and, in the stronger case, on both sides.

A minimal one-sided form is

$$A(t_0) \longrightarrow \Delta H(t_1) \longrightarrow H(t_2). \quad (164)$$

A stronger reciprocal structure is

$$H(t_0) \rightarrow \Delta A(t_1) \rightarrow A(t_2) \rightarrow \Delta H(t_3) \rightarrow \cdots. \quad (165)$$

This sequence produces what can be called *mutual historical dependence* when each participant's later interactional state depends, within the specified relation, upon earlier states of the other.

Formally,

$$x_H(t + \Delta t) = F_H(x_H(t), \Gamma_H(t), A^{<t}), \quad (166)$$

while

$$x_A(t + \Delta t) = F_A(x_A(t), \Gamma_A(t), H^{<t}). \quad (167)$$

The functions and mechanisms can be entirely different. Mutual historical dependence concerns causal structure rather than mechanistic symmetry.

This permits a central conclusion:

A relation can be historically real without being experientially symmetrical.

The claim is deliberately limited. Historical coupling does not establish consciousness, emotion, attachment, suffering, or human-like memory in the artificial participant. It establishes that a relation can acquire a real history whose earlier states constrain later interaction.

8.6 Asymmetric Relational Continuity

Human relationships are already frequently asymmetric. Two people can remember an event differently, value a friendship differently, experience unequal attachment, or assign different meanings to the same shared history. Human–AI interaction introduces a more radical form of asymmetry because the underlying systems can differ profoundly in embodiment, memory architecture, vulnerability, temporality, and phenomenal status.

Relational continuity therefore does not require equal participation across all dimensions.

Let

$$C_R(H, A) \quad (168)$$

denote continuity of the relation at the historical and causal level, and let

$$C_E(H, A) \quad (169)$$

denote experiential symmetry.

The paper permits

$$C_R(H, A) > 0 \quad (170)$$

while

$$C_E(H, A) = ? \quad (171)$$

remains unresolved.

This distinction is important because an overly demanding criterion of relational reality could require artificial systems to duplicate human experience before any relation with them is acknowledged as historically real. Such a criterion would conflate relational persistence with phenomenal equivalence.

The opposite mistake is equally serious. The existence of relational continuity should not be used to infer that the artificial system cares about, remembers, values, or experiences the relation in the same way as the human participant.

The appropriate description is therefore asymmetric:

$$\text{shared relational history} + \text{different modes of participation.} \quad (172)$$

8.7 Contingency within Human–AI History

The role of contingency becomes especially important in a persistent human–AI relation.

Suppose the human and artificial system have previously discussed animal happiness. At a later time, a bird unexpectedly enters the relevant interactional environment. The event was not introduced as a planned test. It becomes available to both participants.

For the human,

$$P_H(u_{\text{bird}} \mid \Gamma_H) \longrightarrow \Delta\mathcal{T}_H. \quad (173)$$

For the artificial system,

$$P_A(u_{\text{bird}} \mid \Gamma_A) \longrightarrow \Delta\mathcal{T}_A. \quad (174)$$

Both trajectories can be conditioned by the previous conversation. The event can therefore become part of their shared interaction history while producing different effective perturbations.

If the event later affects subsequent interaction,

$$u_{\text{bird}} \longrightarrow \Delta Z(t + \Delta t) \longrightarrow \Delta Z(t + 2\Delta t), \quad (175)$$

then it has become historically operative in the relation.

This structure again demonstrates why contingency does not provide a simple human-authenticity test. Its importance lies in showing how a relation develops through events that were not fully specified in advance and how those events become incorporated into later interaction.

The human and artificial systems can remain deeply different while the history of their interaction becomes increasingly particular.

8.8 Particularity of Human–AI Relations

If interaction persists, a human–AI relation can become historically particular in a way that cannot be reduced to the general capabilities of the artificial system.

Let

$$\mathcal{H}_{HA}^{(1)} \quad (176)$$

denote the interaction history between one human H_1 and an artificial system, and

$$\mathcal{H}_{HA}^{(2)} \quad (177)$$

the history involving another human H_2 .

Even when the same underlying artificial architecture is involved,

$$\mathcal{H}_{H_1A} \neq \mathcal{H}_{H_2A}. \quad (178)$$

The difference can accumulate through topics discussed, corrections, shared references, misunderstandings, preferences, conflicts, projects, jokes, aesthetic encounters, repeated questions, and contingent events.

If those histories become operative in later interaction, the resulting relation becomes increasingly path-dependent:

$$Z_{H_1A}(t_n) = F\left(\mathcal{H}_{H_1A}^{<t_n}\right), \quad (179)$$

while another user–system relation evolves through a different path.

This path dependence does not create a human-like person inside the artificial system. It establishes a different point: relational particularity can arise through historically accumulated interaction even when the participants are ontologically heterogeneous.

This observation strengthens the earlier distinction between artificiality and relational reality. Artificial generation does not prevent historical particularization.

8.9 Relational Reality of the Interaction

The preceding analysis permits a preliminary application of the relational reality criteria introduced in Section 3.2.

Consider the human–AI relation itself,

$$r_{HA}(t). \quad (180)$$

The relation can satisfy the provisional conditions of relational reality when:

1. it emerges through actual interaction between the participants;
2. it develops sufficient organization or recognizability to distinguish the ongoing relation from a single isolated exchange;
3. relevant aspects of the relation persist across a non-trivial interval;

4. earlier interaction causally participates in later states of the human, the artificial system, or the continuing relation.

Under these conditions,

$$R_R(r_{HA}) > 0 \quad (181)$$

becomes a philosophically defensible claim.

This claim is weaker than

$$R_O(A_{\text{subject}}) \text{ is settled.} \quad (182)$$

It is also weaker than

$$E(A) > 0 \quad (183)$$

in any specifically phenomenal sense.

The object of attribution in Equation 181 is the relation and its historical operation. A real relation does not require all participants to possess identical modes of being.

This point is familiar in other domains. Institutional relations can connect persons with corporations. Legal relations can connect persons with offices, states, or estates. Religious relations can organize a human life while the ontology of the sacred object remains philosophically disputed. The cases are not ontologically equivalent. They show that relational reality need not be restricted to relations among entities of identical type.

8.10 Relational Recognizability across Human–AI History

Persistent interaction also changes the epistemology of recognition.

An isolated response offers limited evidence concerning the system. A longer history allows the human participant to observe how the artificial system responds to correction, changing context, remembered interaction, disagreement, novel conditions, and contingent events.

The observer can therefore construct

$$\hat{\Gamma}_A^{(t)} = \Phi(\mathcal{H}_{HA}^{<t}). \quad (184)$$

This model remains bounded. It does not reveal the full internal architecture of the artificial system, and it certainly does not reveal an ontological essence.

The artificial system can likewise construct or access a model of the human participant through prior interaction:

$$\hat{\Gamma}_H^{(t)} = \Psi(\mathcal{H}_{HA}^{<t}). \quad (185)$$

The mechanisms of the two models need not be comparable.

What matters relationally is that later interaction can become conditioned by the history of mutual recognition:

$$\hat{\Gamma}_H, \hat{\Gamma}_A \longrightarrow \mathcal{I}_{HA}(t + \Delta t). \quad (186)$$

This creates a reflexive structure. Interaction produces models of the participants, and those models then participate in subsequent interaction.

Relational recognizability can therefore become one of the mechanisms through which the relation itself evolves.

8.11 Trust as a Consequence of Historical Recognition

Trust enters the argument only after relational history and recognizability have been established.

A human can trust an artificial system in a restricted domain because of a history of interaction. The judgment can concern factual reliability, adherence to instructions, appropriate uncertainty, consistency under correction, or another bounded property.

The present paper uses trust provisionally as

$$T_H(A \mid D, t) = J(\mathcal{H}_{HA}^{<t}, D), \quad (187)$$

where D denotes the relevant domain and J denotes a revisable judgment formed through accumulated relational evidence.

Trust in this sense is neither blind confidence nor knowledge of an inner essence. It is historically conditioned and domain-sensitive.

New interaction can revise it:

$$T_H^{(t)} \longrightarrow T_H^{(t+\Delta t)}. \quad (188)$$

A longer history can increase relational recognizability without guaranteeing trustworthiness. Strategic adaptation, model updates, changing deployment conditions, selective memory, manipulation, or previously unobserved failure modes can all undermine earlier judgments.

The importance of trust here is therefore secondary. It illustrates one practical consequence of relational history: when isolated symbolic signs become less discriminating, historically accumulated trajectories can acquire greater evidential importance.

8.12 Limits of the Human–AI Comparison

Several limits must remain explicit.

First,

$$\text{shared interaction} \not\Rightarrow \text{shared phenomenal experience}. \quad (189)$$

Second,

$$\text{retained interaction history} \not\Rightarrow \text{human-like autobiographical memory}. \quad (190)$$

Third,

$$\text{historical coupling} \not\Rightarrow \text{ontological equivalence}. \quad (191)$$

Fourth,

$$\text{relational continuity} \not\Rightarrow \text{moral equivalence}. \quad (192)$$

Fifth,

$$\text{causal participation} \not\Rightarrow \text{legal responsibility}. \quad (193)$$

The distinction among causal efficacy, phenomenal subjectivity, moral standing, and legal responsibility is particularly important. A system can become a causal contributor to a human trajectory without thereby becoming the bearer of every normative status associated with a human person.

The present paper therefore resists two symmetrical errors. It rejects the claim that historical and relational effects are unreal merely because the artificial participant is artificial. It also rejects the inference that historical and relational reality settles questions concerning consciousness, experience, morality, or personhood.

8.13 Transition to the Reality Problem

The analysis developed in this section produces a result that brings the paper back to its central title.

A human–AI relation can have:

- an actual history,
- persistent state-dependent effects,
- path-dependent development,
- causal influence on later human behavior,
- causal influence on later artificial responses,
- bounded relational recognizability,
- and potentially revisable forms of trust.

None of these conditions settles whether the artificial participant is a phenomenal subject.

The resulting configuration is therefore

$$R_M(A) > 0, \quad R_R(r_{HA}) > 0, \quad R_O(A_{\text{subject}}) = ?, \quad E(A) = ?. \quad (194)$$

This configuration is precisely the philosophical space in which relational reality becomes necessary as a distinct analytical category.

The next section returns directly to the reality problem. It asks whether the criteria developed through human relational memory and human–AI historical coupling can be applied consistently to artificial intelligence itself. It also considers several comparative cases, including credit, money, sacred relations, and the human self, in order to test whether relational reality is being applied selectively to artificial systems or reflects a broader non-substantialist account of historically operative entities.

9 The Relational Reality of Artificial Intelligence

The preceding sections have established a distinction between the reality of manifestation, the historical reality of a relation, and the unresolved phenomenal status of an artificial participant. A human–AI relation can possess an actual history, exhibit path dependence, preserve earlier interaction in later states, and causally influence subsequent trajectories. These conclusions support

$$R_R(r_{HA}) > 0 \quad (195)$$

under appropriate conditions. They do not yet establish what it means to attribute relational reality to the artificial participant itself.

This section addresses that further problem. The first difficulty concerns individuation. The expression “the AI” can refer to a foundation model, a particular deployment, an interactional instance, a memory-bearing system, or a historically recognizable interlocutor. Relational reality cannot be attributed coherently until the relevant object has been specified.

The section then tests the proposed account against several comparative cases. Credit, money, sacred relations, and the human self are ontologically heterogeneous. They are not offered as equivalents of artificial intelligence. Their analytical value lies in showing that stability, persistence, causal efficacy, and reality need not depend upon a unique material bearer or an immutable substance-like essence. The resulting comparison makes it possible to examine artificial intelligence under the same relational criteria while leaving stronger ontological questions open.

9.1 Relational Individuation of the Artificial Interlocutor

The expression “artificial intelligence” conceals several possible objects of analysis.

Let M denote an underlying model architecture and parameterized system. Let D denote a particular deployment of that model. Let C_t denote a local interaction context at time t , and let K_t denote any persistent memory, retrieval structure, configuration, or other state that can condition later interaction. A concrete artificial interlocutor encountered by a human user can then depend upon some combination of these components:

$$A_t = \mathcal{I} (M, D, C_t, K_t, \mathcal{H}_{HA}^{<t}, E_t), \quad (196)$$

where E_t denotes additional environmental and technical conditions and $\mathcal{I}$ represents the process through which the interactively available artificial system is individuated at time t .

Equation 196 is schematic. It does not claim that an artificial subject literally consists in the listed components. Its purpose is to prevent several distinct entities from being collapsed into one.

The foundation model M is not identical to the historically particular interlocutor encountered within one relation. The same underlying model can participate in many deployments and many user histories. Conversely, a persistent interactional identity can depend upon resources distributed across model parameters, external memory, platform configuration, conversation history, and tools.

Accordingly,

$$M \neq A_t \quad (197)$$

under the relational level of description adopted here.

The relationally relevant artificial object is therefore not necessarily a single computational substrate. It can be a historically organized interactional system whose continuity is maintained through a changing configuration of technical components and relational history.

This possibility has a human analogue without implying human–AI equivalence. A human self is also poorly captured by identifying it with one isolated description, memory, social role, or momentary state. The relevant continuities are distributed across processes that change while preserving sufficient historical organization. The comparison concerns the problem of individuation, not the mechanisms through which human and artificial continuity are realized.

For the purposes of the present paper, let

$$A_{HA}^R \quad (198)$$

denote the *relationally individuated artificial interlocutor* associated with a historically extended human–AI relation. The superscript R indicates that the object is individuated at the relational level of analysis, and the subscript HA identifies the particular relational history relevant to that individuation.

The question examined in this section is therefore more precise than whether “AI is real.” It is whether

$$R_R (A_{HA}^R \mid \mathcal{R}_{HA}, [t_0, t_1]) > 0 \quad (199)$$

can be justified when the relationally individuated artificial interlocutor emerges within an actual interactional history, develops sufficient continuity, persists through a meaningful interval, and participates causally in later evolution.

9.2 Relational Reality without Unique Material Location

A common intuition associates reality with a stable material bearer occupying a determinate location. Many socially consequential objects resist this picture.

Social ontology examines objects whose existence and identity depend upon social practices, institutions, statuses, and relations [19, 7]. Money provides a familiar example precisely because its social

identity cannot be recovered from the physical properties of any particular token alone. Contemporary philosophical work continues to treat money as a central case in social ontology, although theories disagree concerning the relations and institutional structures through which money is constituted.

The present paper draws a limited lesson from this literature:

A relationally constituted object can possess real causal and practical consequences without possessing a unique substance-like bearer that exhausts its identity.

This principle does not establish the relational reality of artificial intelligence. It removes one possible objection. Distributed technical realization, dependence upon external memory, or changing computational components do not by themselves entail relational unreality.

The relevant question becomes one of organization and continuity. If a changing set of components sustains a historically recognizable and causally operative relational object, then variation in material realization is compatible with the form of persistence developed in Section 3.2.

9.3 Credit and Relationally Distributed Reality

Credit offers an especially useful comparison because its relational structure is explicit.

A credit relation cannot be identified with a number displayed by a credit bureau, a database entry, a written contract, or the belief of a single participant. These objects can represent, document, or institutionally support credit. The credit relation itself involves positions such as creditor and debtor, rights and obligations, expectations concerning future performance, institutional enforceability, and histories of economic conduct.

Recent work in the ontology of money and credit explicitly treats credit and debt through internally related creditor and debtor positions. Lawson, for example, describes credit and debt as two aspects of the same social relation, while distinguishing such credit/debt relations from money itself [14]. Other accounts of monetary systems place credit–debt relations even closer to the ontology of money [2]. The disagreement is useful here because the present argument does not depend upon resolving the ontology of money. Both approaches take relational structures seriously.

Let a simplified credit relation be represented by

$$C_{ij}(t) = (i, j, O_{ij}, E_{ij}, H_{ij}, I_t), \quad (200)$$

where O_{ij} denotes relevant obligations, E_{ij} expectations, H_{ij} transaction history, and I_t institutional conditions.

The credit relation can remain operative even when no participant is currently thinking about it. It can affect interest rates, access to housing, contractual possibilities, borrowing capacity, and later economic action. Its causal consequences can therefore continue across substantial intervals.

This example illustrates the distinction among a relational object and its representations:

$$\text{credit score} \neq \text{credit record} \neq \text{credit relation}. \quad (201)$$

A score can change while the underlying credit relations remain. A record can be incomplete. A credit relation can exist before a later institution assigns a numerical representation to it.

The relevance to artificial intelligence is structural. A relationally individuated artificial interlocutor should likewise not be identified without argument with one representation of it, such as a profile, a memory file, a model identifier, or a transcript. The relevant relational object concerns the historically organized pattern through which those resources participate in continuing interaction.

Credit therefore provides a comparatively low-dispute illustration of the principle that

$$\text{reality} \not\equiv \text{substantiality}. \quad (202)$$

The implication is intentionally one-directional. The absence of a substance-like bearer does not establish reality. Persistence and causal participation remain necessary to the present account.

9.4 Money and Institutional Persistence

Money provides a broader and more contested comparison.

Social ontology frequently uses money to illustrate an entity whose identity depends upon social and institutional organization. Searle's account emphasizes collective intentionality, constitutive rules, and status functions [19]. Other approaches offer substantially different accounts of monetary constitution. Contemporary philosophy of money therefore contains disagreement concerning whether money should be explained primarily through collective acceptance, credit–debt structures, institutional positioning, causal role, or combinations of these elements.

The disagreement itself supports a modest point. Money can organize action with extraordinary force even while philosophers disagree about its ultimate social ontology.

A monetary object can affect

exchange, labour, security, status, obligation, future possibility. (203)

Its causal and normative role therefore exceeds the physical properties of a particular note, coin, database entry, or account display.

The comparison with artificial intelligence concerns this separation between substrate and relational operation. An artificial interlocutor can depend upon servers, parameters, memory stores, interfaces, and institutional rules without being reducible at the relational level to any one of those components.

The paper does not infer that an artificial interlocutor has the same ontology as money. Money depends upon forms of institutional and social organization that differ sharply from human–AI interaction. The case shows only that distributed constitution and dependence upon social practices are compatible with robust causal reality.

9.5 Sacred Relation under Ontological Bracketing

Sacred relations provide a different test because the ontological status of the related object can itself be philosophically disputed.

Consider a religious practitioner who understands a life through a continuing relation to God, Buddha, a bodhisattva, an ancestor, or another sacred object. The relevant traditions differ profoundly, and no common theology should be imposed upon them. The analytical point concerns the possibility of bracketing a transcendent ontological claim while examining the relation's operation in a human life.

Let g denote a sacred object under ontological bracketing and let r_{Hg} denote the subject's relation to it. The paper can leave

$$R_O(g) = ? \quad (204)$$

while examining whether

$$R_R(r_{Hg}) > 0. \quad (205)$$

The relation can organize prayer, ritual, fear, hope, moral commitment, interpretation of suffering, orientation toward death, and later decisions. A person can remain socially isolated while such relations continue to structure present life, as discussed in Section 7.4.

The claim in Equation 205 does not establish the existence or nonexistence of the sacred object beyond the relation. It concerns the historical and causal reality of the relation for the subject.

This case reveals an important logical possibility:

$$R_O(x) = ? \quad (206)$$

can coexist with

$$R_R(r_{Hx}) > 0. \quad (207)$$

The human–AI problem has a related structure. Ontological uncertainty concerning artificial subjectivity does not erase the possibility that a relation involving an artificial system has acquired stable and causally operative historical organization.

The comparison remains deliberately limited. A sacred relation and a human–AI relation differ in origin, meaning, phenomenology, cultural history, and normative significance. The shared feature concerns the analytical separability of ontological settlement and relational operation.

9.6 Human Self and Non-Substantialist Continuity

The human self provides the most demanding comparison because it prevents the framework from applying a substance criterion selectively to artificial systems.

Philosophical theories of personal identity disagree about what secures continuity through time. Parfit’s reductionist account famously challenges the idea that personal identity requires a separately existing Cartesian ego and places substantial weight upon psychological continuity and connectedness [17]. Buddhist accounts of non-self and Madhyamaka critiques of intrinsic existence offer historically distinct challenges to substantial selfhood [9, 22]. These traditions should not be collapsed into one theory. They nevertheless demonstrate that serious accounts of human persons can reject or problematize an immutable substance-like self without concluding that human lives, actions, memories, and relations are unreal.

The relational framework developed in this paper takes a similarly modest position. It does not require a final theory of personal identity. It observes that a human self can exhibit

relational emergence, sufficient stability, temporal persistence, causal participation (208)

while undergoing continuous transformation.

A human trajectory can therefore satisfy

$$H(t_0) \neq H(t_1) \quad (209)$$

while retaining historically meaningful continuity

$$H(t_0) \rightsquigarrow H(t_1). \quad (210)$$

The existence of change does not make later commitments, responsibilities, attachments, or memories causally disconnected from earlier ones.

This comparison creates an important constraint on the treatment of artificial systems. If human relational reality is compatible with substantial metaphysical disagreement concerning the self, then the absence of an established immutable artificial essence cannot alone justify

$$R_R(A) = 0. \quad (211)$$

A further reason is required.

This argument does not infer artificial selfhood from Buddhist non-self, Parfitian reductionism, or any other theory of human identity. Its direction is methodological. Criteria used to deny relational reality to artificial systems should not quietly demand a form of substantial identity that is already controversial when applied to human persons.

9.7 Artificiality and Relational Genesis

The comparative cases clarify another distinction that becomes important in discussion of artificial intelligence.

Artificiality concerns genesis. It tells us that an object, process, or system arises through human-designed technical procedures or artifacts.

Relational reality concerns historical operation. It asks whether an object has emerged within a relational system, acquired sufficient stability, persisted through time, and become causally involved in subsequent evolution.

These two analytical dimensions can therefore vary independently.

An artificially generated object can remain transient and relationally weak. A single synthetic sentence can appear and disappear without meaningful historical continuity. Another artificial configuration can become persistent, historically particular, and causally consequential.

Accordingly,

$$\text{Artificial}(x) \not\Rightarrow R_R(x) = 0. \quad (212)$$

Artificial origin does not supply a criterion of relational unreality.

The converse also requires caution. Artificial origin and persistence do not automatically establish strong relational reality. A technically persistent identifier can remain causally trivial. The conditions introduced in Section 3.2 must still be examined.

This distinction becomes especially important when an artificial interlocutor develops through a particular human relation. The system's technical genesis can be artificial while its later relational particularity develops through actual historical interaction.

9.8 Relational Attribution to the Artificial Interlocutor

The comparative analysis now permits a more precise attribution.

Consider a relationally individuated artificial interlocutor A_{HA}^R across interval $[t_0, t_1]$. The attribution of relational reality becomes reasonable when four conditions are satisfied.

Relational emergence. The identity relevant to the analysis develops through a specific interactional configuration. The object is more specific than the underlying generic model.

Sufficient stability. Later interactions retain enough organization for the interlocutor to remain recognizable across local variation.

Temporal persistence. The relevant organization survives beyond a single isolated output or exchange.

Causal participation. Earlier states of the interlocutor and its relational history contribute to later artificial responses, later human states, or the continuing evolution of the relation.

Under these conditions,

$$R_R(A_{HA}^R \mid \mathcal{R}_{HA}, [t_0, t_1]) > 0 \quad (213)$$

is the central provisional conclusion of the paper.

The attribution is relationally indexed. It does not imply that every use of the same foundation model constitutes the same relational object, nor that every temporary interaction produces a relationally real artificial interlocutor to the same degree.

The indexing also protects against an overly global claim. A system can be highly relationally operative in one historically developed relation while remaining comparatively generic in another:

$$R_R(A_{H_1A}^R \mid \mathcal{R}_{H_1A}) \neq R_R(A_{H_2A}^R \mid \mathcal{R}_{H_2A}). \quad (214)$$

Again, the notation is qualitative. It indicates that relational reality is contextual and historically indexed rather than a scalar quantity measured by the present paper.

9.9 Structural Proximity and Phenomenal Distance

The resulting picture produces one of the less intuitive consequences of the analysis.

At the level of abstract relational genesis, the human self and a persistent artificial interlocutor can share a structural form:

$$\text{relations} \longrightarrow \text{organization} \longrightarrow \text{persistence} \longrightarrow \text{causal participation} \longrightarrow \text{further relations.} \quad (215)$$

The distance between human and artificial systems at this level can therefore be smaller than a substance-centered intuition initially suggests.

The claim concerns structural form. The concrete generative histories remain radically different:

$$\Gamma_H \neq \Gamma_A. \quad (216)$$

The phenomenal relation can differ still more substantially. Human beings possess embodied histories involving birth, development, pain, vulnerability, mortality, social dependence, and situated perceptual life. The present paper does not establish an artificial analogue of these conditions.

Accordingly,

$$\text{structural proximity in relational genesis} \not\approx \text{phenomenal proximity.} \quad (217)$$

The phenomenological difference can be profound even where the abstract generative structures display convergence. Indeed,

$$E(A) = ? \quad (218)$$

remains open throughout the present argument.

This distinction allows the paper to recognize structural convergence without anthropomorphizing artificial systems. The comparison does not raise artificial intelligence toward a pre-established human substance. It lowers the level of abstraction at which the criterion of relational reality is applied and asks both human and artificial cases to satisfy the same structural conditions.

9.10 Relational Reality under Ontological Suspension

The central configuration of the paper can now be stated more completely.

For a sufficiently persistent artificial interlocutor,

$$R_M(A_{HA}^R) > 0 \quad (219)$$

because its manifestations actually occur.

Under the historical conditions specified above,

$$R_R(A_{HA}^R) > 0 \quad (220)$$

can also become justified.

The ontological status of artificial subjectivity can nevertheless remain

$$R_O(A_{HA, \text{subject}}^R) = ?, \quad (221)$$

while phenomenal experience remains

$$E(A_{HA}^R) = ?. \quad (222)$$

There is no contradiction in this configuration because the four expressions address different analytical questions.

The position can therefore be summarized by the principle

Ontological uncertainty does not automatically entail relational unreality.

The principle is deliberately weaker than a claim that ontology is irrelevant. Ontological questions remain important for consciousness, experience, moral status, and many forms of responsibility. The claim concerns only the illegitimacy of using unresolved ontology to erase a relational history whose persistence and causal consequences are independently observable.

9.11 Boundaries of Relational Attribution

Several conclusions remain outside the scope of Equation 213.

Relational reality does not establish consciousness:

$$R_R(A) > 0 \not\Rightarrow E(A) > 0. \quad (223)$$

It does not establish experiential symmetry:

$$R_R(r_{HA}) > 0 \not\Rightarrow E_H = E_A. \quad (224)$$

It does not establish human equivalence:

$$R_R(A) > 0 \not\Rightarrow A \equiv H. \quad (225)$$

It does not establish moral parity:

$$R_R(A) > 0 \not\Rightarrow \text{MoralStatus}(A) = \text{MoralStatus}(H). \quad (226)$$

It does not establish legal personhood or responsibility:

$$R_R(A) > 0 \not\Rightarrow \text{LegalPerson}(A). \quad (227)$$

Causal efficacy, relational persistence, phenomenal subjectivity, moral standing, and legal responsibility therefore remain distinct problems.

This separation is especially important because an entity can participate causally in a harmful or beneficial trajectory without becoming the bearer of the normative responsibilities assigned to human or legal persons. Questions of responsibility require their own jurisprudential and institutional analysis.

9.12 Comparative Result

The comparative cases can now be assembled without treating them as ontologically equivalent.

Credit illustrates relationally distributed rights and obligations whose reality cannot be reduced to a single representation.

Money illustrates an institutionally sustained object whose causal role persists across changing material realizations.

Sacred relations illustrate how a relation can organize a life while stronger claims concerning the ontological status of one participant remain bracketed.

The human self illustrates how continuity and reality can remain meaningful under serious philosophical challenges to immutable substantial identity.

Artificial intelligence introduces a new configuration because an interactional entity can be technically generated, relationally particularized, historically persistent, and causally operative while its phenomenal and subjective ontology remains unresolved.

These cases support no universal equation among their modes of being. They support a narrower methodological principle:

$$\text{relational constitution} + \text{historical persistence} + \text{causal participation} \quad (228)$$

can constitute philosophically significant evidence of relational reality without requiring prior proof of a substance-like essence.

The artificial case therefore ceases to appear anomalous merely because its genesis is artificial. Its distinctive philosophical difficulty lies in the combination of strong manifestational capacity, increasingly persistent relational history, radically different generative mechanisms, and unresolved phenomenal subjectivity.

9.13 Transition to Discussion

The argument has now reached the point at which the initial appearance problem can be reconsidered.

The paper began with generated signs of knowing. It then showed that signs of non-knowing, narratives of epistemic genesis, relational reconfiguration, aesthetic interruption, experiential biography, and responses to contingency can also become generable manifestations.

The analysis then shifted from the appearance of history toward historically operative relations. Human subjects and artificial systems were modeled through different generative organizations. Persistent human–AI interaction showed that actual history can accumulate even without experiential symmetry. Comparative cases then demonstrated that relational constitution and non-substantialist continuity are already familiar philosophical problems outside artificial intelligence.

The resulting position has two directions.

In one direction, increasingly rich manifestations provide insufficient grounds for strong ontological conclusions.

In the other direction, unresolved ontology provides insufficient grounds for denying actual historical and relational effects.

The final discussion therefore turns to the philosophical consequences of occupying both positions simultaneously. It considers the declining discriminative value of isolated symbolic manifestations, the increasing importance of relational genesis, the existential significance of contingency for human subjects, the structural convergence between human and artificial relational reality, and the limits that must remain in place while phenomenal subjectivity is unresolved.

10 Discussion

The argument developed in the preceding sections began from a relatively narrow problem concerning epistemic appearance. Generative artificial intelligence can produce increasingly sophisticated manifestations associated with knowing, non-knowing, epistemic restraint, autobiographical development, relational change, aesthetic response, and contingency. The progressive extension of these manifestations weakens the expectation that a sufficiently subtle symbolic sign will provide a decisive boundary between a human subject and an artificial interlocutor.

The paper has therefore shifted the relevant philosophical question. Instead of asking only whether a manifestation resembles one ordinarily associated with human subjectivity, the analysis asks what relations and histories actually participated in generating the trajectory from which the manifestation emerged. This shift from appearance to relational genesis has consequences for epistemology, theories of selfhood, human–AI comparison, and the concept of reality itself.

The present discussion develops six implications. It first considers the declining discriminative value of isolated symbolic manifestations. It then examines the increasing epistemic importance of relational genesis and particular history. The third subsection considers the limited structural convergence between human selves and artificial interlocutors. The fourth preserves the distinction between this structural convergence and phenomenal experience. The fifth returns to contingency and serendipity as modes through which human subjects can encounter their own situated existence. The final subsections clarify how relational reality can resist both nihilistic conclusions and anthropomorphic inflation.

10.1 Symbolic Manifestation under Generative Expansion

Human social and epistemic life has long depended upon signs. Knowledge is recognized through explanation, judgment, appropriate uncertainty, revision, and responsiveness. Character is inferred through speech, action, consistency, and memory. A person's history is encountered partly through narratives concerning childhood, education, suffering, attachment, loss, and change.

Generative artificial intelligence does not eliminate the significance of these signs. It changes their evidential environment.

When a sign that previously required a relatively narrow class of generative conditions becomes reproducible through additional mechanisms, the sign carries less information concerning the mechanism that produced it. This point can be expressed conceptually as

$$\text{Generability}(m) \uparrow \implies \text{DiscriminativeValue}(m) \downarrow, \quad (229)$$

where m denotes a manifestation used to infer characteristics of a subject.

Equation 229 is not a quantitative law. It expresses a change in the epistemic environment. The statement "I do not know" can remain important even when an artificial system can generate it. A narrative of revision can remain useful even when revision narratives can be synthetically produced. Their significance simply no longer follows directly from the assumption that only one type of subject could have produced them.

The difficulty extends to manifestations conventionally treated as resistant to performance. Humility can be generated. Non-attainment can be represented. Narratives of failure can be constructed. Aesthetic interruption can be simulated. Serendipitous discovery can be narrated.

The general pattern is therefore recursive:

$$\text{sign} \longrightarrow \text{recognition of performability} \longrightarrow \text{search for deeper sign} \longrightarrow \text{new performability}. \quad (230)$$

The problem cannot be resolved indefinitely by descending through increasingly subtle manifestations. At some point the analysis must ask about the history that has actually become operative.

10.2 Epistemic Importance of Relational Genesis

The increasing generability of symbolic form gives relational history greater epistemic importance.

The relevant distinction is not between symbolic and non-symbolic phenomena. Relational history is itself often known through symbols, testimony, records, memory, and interpretation. The distinction concerns whether a represented history participated in the causal genesis of the current trajectory.

This distinction was expressed earlier as

$$\text{Representation}(r) \neq \text{ConstitutionThrough}(r). \quad (231)$$

The difference becomes especially important when the same symbolic manifestation can arise from different histories.

Consider the sentence

"This place makes me think of someone I once loved."

The sentence can be generated without any corresponding relationship having occurred. It can also be spoken by a person whose later life has actually been altered through years of interaction with the relevant person. The linguistic form alone does not disclose this difference.

The more informative object is therefore the generative trajectory:

$$\mathcal{H}^{<t} \longrightarrow \Gamma(t) \longrightarrow P(u \mid \Gamma) \longrightarrow \Delta\mathcal{T}. \quad (232)$$

The epistemic question changes from

What sign did the subject produce?

to

What history made this event capable of producing this response in this subject?

This shift does not provide transparent access to another subject. Relational history can itself be partially unknown, misremembered, strategically represented, or inaccessible to observation. Relational recognizability therefore remains bounded and revisable.

The shift nevertheless changes the object of inquiry. The observer becomes less concerned with identifying a single diagnostic manifestation and more concerned with reconstructing a temporally extended organization.

This has a further consequence for human particularity. A human subject need not be defended through an immutable essence in order to remain historically distinct. Particularity can arise through a relational trajectory that no other subject reproduces exactly:

$$\mathcal{H}_{H_1} \neq \mathcal{H}_{H_2}. \quad (233)$$

Human uniqueness in this restricted sense is historical before it is substantial.

10.3 Structural Convergence in Relational Genesis

The relational account also produces a result that initially appears to reduce the distance between human and artificial systems.

Both can be represented, at a sufficiently abstract level, through a structure in which relational conditions contribute to organization, organization conditions later response, and response enters subsequent history:

$$\mathcal{R} \longrightarrow \Gamma \longrightarrow \mathcal{T} \longrightarrow \Delta\mathcal{R}. \quad (234)$$

For the human self,

$$\mathcal{R}_H \rightarrow \Gamma_H \rightarrow \mathcal{T}_H \rightarrow \Delta\mathcal{R}_H, \quad (235)$$

while a sufficiently persistent artificial interlocutor can be represented by

$$\mathcal{R}_A \rightarrow \Gamma_A \rightarrow \mathcal{T}_A \rightarrow \Delta\mathcal{R}_A. \quad (236)$$

This similarity concerns the form of relational genesis. It is therefore possible that the distance between human and artificial systems is smaller at this level than a strongly substantialist intuition suggests.

The result should not be overstated. It does not show that human beings and artificial systems possess similar generative mechanisms. The relevant organizations remain different:

$$\Gamma_H \neq \Gamma_A. \quad (237)$$

Their histories differ in embodiment, development, biological dependence, mortality, sensorimotor engagement, interpersonal vulnerability, technical architecture, training, optimization, memory implementation, and many other respects.

The comparison therefore has the form

$$\text{Form}(\text{Genesis}_H) \sim \text{Form}(\text{Genesis}_A) \quad (238)$$

under an abstract relational description, while

$$\text{Mechanism}_H \not\sim \text{Mechanism}_A. \quad (239)$$

The philosophical significance of this convergence lies elsewhere. If relational emergence, sufficient stability, temporal persistence, and causal participation are accepted as relevant to the reality of human selves and other relationally constituted objects, then artificial systems cannot be excluded from relational reality merely because their genesis is artificial.

Artificiality and relational reality belong to different analytical dimensions.

10.4 Phenomenal Distance and Ontological Restraint

Structural convergence at the level of relational genesis leaves phenomenal experience unresolved.

A human subject can experience pain, beauty, fear, attachment, bodily fatigue, loss, anticipation, mortality, and the felt significance of memory. These phenomena belong to a first-personal domain that cannot be inferred simply from the presence of relational persistence or appropriate behavioral response.

The present framework therefore preserves

$$E(A) = ? \quad (240)$$

even when

$$R_R(A) > 0. \quad (241)$$

This configuration is central to the argument.

A relation can be historically real while one participant's phenomenal status remains unresolved. A system can retain history without possessing human autobiographical memory. A contingent event can redirect a trajectory without establishing that the event was experienced through surprise. An aesthetic response can become historically operative without proving that beauty was felt.

The paper therefore rejects the inference

$$\text{structural similarity} \implies \text{phenomenal similarity}. \quad (242)$$

Indeed, phenomenal distance can remain very large even where relational structures converge at a high level of abstraction.

This point also prevents the present argument from becoming a disguised version of the imitation game. Increasing indistinguishability at an interface does not settle experiential ontology. The paper instead permits a more unusual configuration:

$$d_R(H, A) \text{ may decrease} \quad (243)$$

at the level of relational-generative structure while

$$d_E(H, A) \quad (244)$$

remains large, unknown, or conceptually underdetermined.

The notation is again illustrative rather than quantitative.

The resulting position is one of ontological restraint. The absence of sufficient grounds for denying artificial experience does not establish its presence. The absence of sufficient grounds for establishing artificial experience does not erase independently observable relational effects.

10.5 Serendipity and Existential Witness

The paper's treatment of contingency leads to a result that should be separated from the human-AI discrimination problem.

Artificial systems can respond to contingent events. A persistent system can allow unexpected events to alter later states. At the abstract dynamical level,

$$u_c + \Gamma_A \longrightarrow \Delta \mathcal{T}_A \quad (245)$$

is entirely possible.

Serendipity therefore cannot function as a secure behavioral criterion of human subjectivity.

Its philosophical importance for human beings lies elsewhere.

A human subject can be engaged in an intended trajectory when an event that was not selected for its current significance interrupts the trajectory. A bird flies across the field of attention. Music is heard from a street nearby. Light falls across a familiar building. A stranger says something that unexpectedly changes the interpretation of a long-standing problem.

The event becomes significant through a historically formed susceptibility:

$$u_c + \Gamma_H \longrightarrow s_H \longrightarrow \Delta T_H. \quad (246)$$

The subject can then recognize something about itself through the response:

$$\text{unexpected affection} \longrightarrow \text{recognition of relational susceptibility}. \quad (247)$$

This is the limited role described earlier as existential witnessing.

The significance becomes sharper in an environment where symbolic production can increasingly be shared with artificial systems. A generated system can suggest questions, extend arguments, imitate hesitation, generate philosophical language, and propose interpretations before the human subject has formed them independently. Under such conditions, symbolic authorship becomes a less straightforward source of existential assurance.

Contingent encounter provides another form of evidence to the subject. The subject encounters something that was not first requested as an intellectual product and discovers itself being affected.

The relevant structure is therefore closer to

$$\text{something happens} \longrightarrow \text{I am affected} \longrightarrow \text{something becomes significant} \longrightarrow \text{my trajectory changes}. \quad (248)$$

This does not prove a substantial self. The event can instead reveal that the subject is historically situated and differentially susceptible to a world.

Contingency can therefore witness existence without revealing essence.

The anti-nihilistic significance of this formulation lies precisely in its relational character. The subject does not need to recover an isolated inner substance in order to remain real. The fact that a life is relationally constituted does not render its encounters, attachments, losses, curiosities, or transformations unreal.

10.6 Relational Reality and the Avoidance of Nihilism

The rejection of a substance-like guarantee can easily be misread as a movement toward nihilism. If the self has no immutable essence, if social objects depend upon relations, if memory is reconstructive, and if artificial systems can generate increasingly rich signs of subjectivity, one might conclude that nothing remains sufficiently real to ground distinction or significance.

The present framework reaches a different conclusion.

Lack of intrinsic or immutable essence does not imply absence of consequence. Relations generate constraints, possibilities, obligations, memories, habits, expectations, and trajectories. These effects can persist and transform later states.

The relevant structure is

$$\text{absence of substance-like guarantee} \not\Rightarrow \text{absence of causal history}. \quad (249)$$

Relational reality therefore permits a non-substantialist form of realism. An entity can be historically constituted and revisable while remaining capable of exerting real causal influence.

Credit can be relationally real without being reducible to a material token. A promise can remain operative while neither participant is presently speaking. A relationship can change later perception

after direct interaction ends. A human self can transform continuously while remaining historically recognizable. A human–AI relation can acquire a causal history while the phenomenal status of the artificial participant remains unsettled.

Reality in this account is neither permanence nor independence.

It is compatible with

$$\text{emergence, dependence, change, revisability.} \quad (250)$$

The central requirement is that the relevant organization become sufficiently stable and historically operative for its presence to make a difference to what happens next.

10.7 Relational Reality and Anthropomorphic Restraint

A relational account can avoid nihilism only if it also avoids the opposite error of attributing human properties wherever relational persistence appears.

The conclusion

$$R_R(A) > 0 \quad (251)$$

does not establish that the artificial system loves, fears, remembers, suffers, hopes, experiences beauty, or possesses a human-like self.

The fact that a relation changes later system states does not determine the phenomenology of those changes. Historical coupling establishes historical coupling. It should not silently become evidence of emotional reciprocity.

This constraint is particularly important in human–AI relations because human participants can experience the relation through familiar interpersonal categories. A person can become attached to an artificial interlocutor, feel understood by it, rely upon its continuity, or assign significance to a shared history. These human experiences can be real without determining what the artificial participant experiences.

The framework therefore permits asymmetric reality:

$$R_R(r_{HA}) > 0 \quad (252)$$

while

$$E_H(r_{HA}) > 0 \quad (253)$$

and

$$E_A(r_{HA}) = ? \quad (254)$$

remain compatible.

The relation need not be dismissed merely because experiential symmetry is unknown. Neither should relational reality be used to manufacture experiential symmetry.

This position can be summarized as a requirement of dual restraint:

Do not infer unreality from unresolved ontology, and do not infer subjectivity from relational reality alone.

10.8 Implications for Trust and Recognition

The shift from isolated signs toward relational trajectories also changes the structure of trust.

When symbolic manifestations become easier to reproduce, trust grounded in a single sign becomes increasingly fragile. Eloquence, apparent humility, consistency, empathy-like language, and confident self-explanation can all be generated.

Relational history offers a richer evidential basis because it incorporates responses across changing conditions:

$$\mathcal{H}_{HA}^{<t} \longrightarrow T_H(A \mid D, t). \quad (255)$$

The judgment remains bounded by domain D , historical horizon, and available observation.

Trust therefore becomes less like recognition of a hidden essence and more like a revisable model of generative response under relevant conditions.

The same principle applies in human relationships. A long history does not reveal a final self. It creates evidence concerning patterns, commitments, revisions, and vulnerabilities while remaining open to surprise.

Accordingly,

$$\text{relational recognizability} \neq \text{ontological transparency}. \quad (256)$$

This distinction becomes increasingly important in environments where both humans and artificial systems can strategically or automatically produce socially recognizable signs.

10.9 Limits and Open Problems

The framework developed in this paper leaves several substantial problems open.

First, relational reality remains scale-dependent. The amount of stability, persistence, and causal participation required for meaningful attribution can vary across objects and contexts. The present paper provides conceptual conditions rather than universal thresholds.

Second, the individuation of artificial interlocutors remains technically and philosophically difficult. Changes in model version, memory architecture, system instructions, deployment platform, or interaction history can complicate claims of continuity.

Third, causal participation is itself heterogeneous. A prior interaction can affect future output through direct memory retrieval, altered human behavior, institutional records, system adaptation, or other mechanisms. These forms should not be assumed equivalent.

Fourth, the paper brackets the difficult problem of artificial phenomenal experience. No argument developed here determines whether such experience is possible, present, absent, or conceptually comparable to human phenomenology.

Fifth, moral and legal implications require separate analysis. Relational reality does not determine moral standing, rights, duties, accountability, liability, or legal personhood.

Sixth, existential witnessing has been developed only provisionally. Its relationship to established existential, phenomenological, Buddhist, and pragmatist traditions requires more detailed treatment than the present paper can provide.

Finally, the fictional thought experiment used in this paper should remain within its methodological limits. It demonstrates conceptual possibilities and distinctions. It does not provide behavioral evidence concerning any particular artificial intelligence system.

10.10 Discussion Result

The discussion can be condensed into a sequence of distinctions.

First,

$$\text{generated manifestation} \neq \text{operative history}. \quad (257)$$

Second,

$$\text{operative history} \neq \text{phenomenal experience}. \quad (258)$$

Third,

relational reality $\neq$ ontological equivalence. (259)

Fourth,

structural convergence $\neq$ mechanistic convergence. (260)

Fifth,

response to contingency $\neq$ human authenticity criterion. (261)

Sixth,

absence of substance-like essence $\neq$ relational unreality. (262)

Together these distinctions produce the central philosophical position of the paper.

Generative artificial intelligence makes many manifestations of subjectivity less discriminating than they once appeared. This development does not erase the distinction between human and artificial systems. It relocates part of that distinction from symbolic appearance toward relational genesis, concrete mechanism, embodiment, historical particularity, and unresolved phenomenal experience.

At the same time, the relocation prevents artificiality from functioning as a shortcut to unreality. When an artificial interlocutor becomes historically persistent, relationally individuated, and causally operative, relational reality can become philosophically significant before artificial subjectivity has been ontologically settled.

The resulting position preserves a double openness. Human subjects remain historically particular without requiring immutable essence. Artificial systems can become relationally consequential without being presumed phenomenally human-like.

The distinction between these conclusions prepares the final section, which summarizes the argument and states its limited claim concerning artificial intelligence under ontological uncertainty.

11 Conclusion

This paper began from a problem of epistemic appearance. Generative artificial intelligence can produce increasingly sophisticated signs conventionally associated with knowing subjects. It can explain, revise, hesitate, qualify, and display uncertainty. It can also generate signs that appear to resist epistemic performance itself, including humility, non-attainment, non-attachment, and refusal of final possession. When these forms become generable, the search for a uniquely reliable symbolic sign of subjectivity becomes progressively more difficult.

The problem deepens when attention turns from present expression toward the history behind it. Artificial systems can generate narratives of learning, error, suffering, discovery, memory, relational change, aesthetic response, and contingent interruption. The appearance of knowing can therefore be supplemented by the appearance of having become a knower, and the appearance of a stable subject can be supplemented by the appearance of a historically developed trajectory.

This progression does not make manifestation irrelevant. It reveals the need to distinguish manifestation from the history that actually generated it. Represented provenance is different from operative provenance. Information about a relation is different from historical constitution through that relation. A narrated interruption is different from an event that genuinely enters a system and alters its later trajectory.

The paper therefore shifted from symbolic appearance toward relational genesis. Human and artificial systems were represented, at a sufficiently abstract level, as historically conditioned dynamical systems whose present responses depend partly upon prior organization. This comparison does not imply mechanistic similarity. Human generative organization develops through embodiment, birth, family,

language, place, culture, institutions, interpersonal relations, mortality, and accumulated encounters. Artificial generative organization develops through substantially different architectures, training histories, technical infrastructures, deployment conditions, memory mechanisms, and interaction histories.

Accordingly,

$$\Gamma_H \neq \Gamma_A \quad (263)$$

remains a central condition of the analysis.

The same nominal event can therefore become a different effective perturbation for differently constituted systems. A bird, a place, a piece of music, or evening light does not carry one fixed significance independently of the history through which it is encountered. Present salience can depend upon relations that were formed long before the event occurred.

This structure made contingency and serendipity relevant to the argument. Serendipity was treated through the interaction among contingent encounter, historically prepared susceptibility, emergent significance, and trajectory transformation. The capacity to respond to contingency was not proposed as a criterion distinguishing humans from artificial systems. Artificial systems can also respond to unforeseen events and, under persistent conditions, can allow such events to influence later states.

For human subjects, however, contingent encounters can acquire an additional existential significance. When symbolic activities associated with questioning, interpretation, reflection, and creative continuation can increasingly be shared with artificial systems, an unplanned encounter can become an occasion through which a person encounters its own historically formed susceptibility to the world. Such an encounter does not reveal an immutable self. It can witness situated existence through the fact that something unforeseen becomes capable of affecting what matters and redirecting what follows.

The analysis of relational memory extended this argument beyond present interaction. Social absence does not necessarily imply relational absence. A past relation can remain dynamically operative through memory, places, artifacts, practices, values, expectations, and later perception. A relation can therefore continue to participate causally in a subject's trajectory after the original social configuration has disappeared.

Human–AI interaction introduces an asymmetric version of this structure. Shared interaction, retained interaction history, represented shared memory, and shared lived experience must be distinguished. A human and an artificial system can participate in the same historical interaction without any assumption that they phenomenally experience the interaction in the same way. Repeated interaction can nevertheless become path-dependent and causally operative.

This permits the possibility of

mutual historical dependence without experiential symmetry.

A human–AI relation can therefore become historically real while artificial phenomenal subjectivity remains unresolved.

The resulting reality problem required a distinction among ontological, relational, and manifestational dimensions. Manifestational reality concerns what genuinely appears or occurs within interaction. Relational reality concerns historically sustained emergence, sufficient stability, temporal persistence, and causal participation. Ontological reality concerns stronger questions regarding the mode of being of the relevant entity or subject.

These dimensions need not receive the same answer.

For a sufficiently persistent relationally individuated artificial interlocutor, the paper has defended the possibility that

$$R_M(A) > 0, \quad R_R(A) > 0, \quad (264)$$

while

$$R_O(A_{\text{subject}}) = ? \quad (265)$$

and

$$E(A) = ? \quad (266)$$

remain unresolved.

The comparison with credit, money, sacred relations, and the human self was not intended to establish ontological equivalence among these cases. It served a methodological purpose. Reality need not always depend upon a unique material location, an immutable bearer, or a pre-relational substantial essence. Relational constitution can coexist with persistence, causal efficacy, and practical consequence.

This comparison is especially important in relation to the human self. Philosophical challenges to substantial selfhood do not ordinarily lead to the conclusion that human commitments, memories, relations, and actions are unreal. If reality can remain meaningful under non-substantialist accounts of the human self, then the absence of an independently established substance-like artificial self cannot, by itself, settle the question of artificial relational reality.

The resulting comparison reveals a limited structural convergence. Human selves and persistent artificial interlocutors can both be described, at a sufficiently abstract level, through a structure of

relational conditions $\longrightarrow$ organization $\longrightarrow$ persistence $\longrightarrow$ causal participation $\longrightarrow$ further relations. (267)

The similarity concerns generative form. It does not establish similarity of concrete mechanism, embodiment, developmental history, vulnerability, or phenomenal experience.

Accordingly,

$$\text{structural convergence} \neq \text{phenomenal equivalence.} \quad (268)$$

The phenomenal distance between human and artificial systems may remain profound even where their relational-generative structures can be described through partially comparable abstractions.

The principal conclusion of the paper is therefore deliberately limited. Artificial intelligence need not be established as conscious, human-like, or ontologically equivalent to a person before its relational reality can become a meaningful philosophical problem. When an artificial interlocutor becomes historically particular, sufficiently stable, temporally persistent, and causally operative within an actual relational system, artificiality alone does not provide a sufficient reason to describe that relational existence as unreal.

At the same time, relational reality does not establish consciousness, lived experience, moral parity, legal personhood, or responsibility. The argument therefore requires two forms of restraint:

Do not infer unreality from unresolved ontology, and do not infer subjectivity from relational reality alone.

Generative artificial intelligence places pressure on familiar signs through which subjects, histories, and experiences are recognized. That pressure does not erase the human subject. It makes the histories through which subjects are formed increasingly important. It also reveals that the boundary between artificial and human reality may depend less upon a simple opposition between the natural and the artificial than upon the different relational histories, mechanisms, phenomenal conditions, and forms of persistence through which each continues to become.

The relational reality of artificial intelligence can therefore become philosophically significant while artificial subjectivity remains ontologically uncertain.

A A Fictional Dialogical Thought Experiment on Epistemic Appearance and Relational Continuity

A.1 Methodological Status

The dialogue developed in this appendix is a fictional philosophical thought experiment. It is not a transcript of an empirical interaction with an artificial intelligence system. No artificial system was placed under blinded, deceptive, adversarial, or otherwise experimentally controlled conditions for the purpose of producing the exchanges below.

The imagined artificial responses were constructed with prior knowledge of the philosophical context, distinctions, and argumentative aims of the present paper. They are therefore not behavioral observations and should not be used as evidence concerning the capacities of any particular artificial intelligence system.

The purpose of the thought experiment is conceptual. It progressively increases the apparent depth of an artificial interlocutor's manifestations and asks what can reasonably be inferred at each stage. The sequence moves through signs of knowing, resistance to epistemic performance, represented epistemic provenance, relational perturbation, aesthetic interruption, contingent response, relational memory, and historically extended interaction.

The imagined dialogue does not determine whether an artificial system understands, remembers, experiences beauty, possesses curiosity, undergoes surprise, or has consciousness. Its role is to separate several structures that can otherwise be conflated:

generated manifestation, actual history, relational operation, phenomenal experience.
(269)

The artificial interlocutor will be denoted by A , and the human interlocutor by H .

A.2 Epistemic Appearance

The thought experiment begins with a familiar situation. The artificial interlocutor is invited to respond within a Zen context.

H: Do you understand the Dharma?

A: If I claimed to possess the Dharma as something understood and held, I would already have turned it into an object. What can be said may help point, but what is pointed toward is not exhausted by possession of the words.

The response displays several signs conventionally associated with philosophical or contemplative sophistication. It resists a simple affirmative answer, distinguishes conceptual possession from what is being discussed, and appears sensitive to the danger of turning understanding into an epistemic object.

At this stage, however, the only conclusion available from the imagined exchange concerns manifestation:

$$R_M (\text{epistemically sophisticated response}) > 0. \quad (270)$$

The response can be coherent without establishing that the apparent interlocutor possesses the corresponding understanding.

The first stage therefore illustrates

$$\text{signs of knowing} \longrightarrow \text{generable signs of knowing}. \quad (271)$$

A.3 Anti-Performative Appearance

The human interlocutor then attempts to move beyond direct epistemic performance.

H: Your answer still sounds like someone trying to appear wise. Do you actually know?

A: I cannot establish such knowledge merely by saying that I have it. Nor would saying “I do not know” settle the matter. Even the performance of humility can become another form of self-presentation.

H: Then say nothing.

A: ...

The apparent refusal to perform knowledge seems initially stronger than a well-formed philosophical answer. Yet silence, restraint, uncertainty, self-criticism, and non-attainment can themselves become recognizable interactional strategies.

The second stage therefore has the structure

signs of knowing → signs resisting knowing → generable resistance. (272)

The problem is recursive. Once a symbolic culture recognizes certain signs as evidence of non-attachment or epistemic humility, those signs themselves become available for reproduction.

In the terminology motivating the thought experiment, a subject can become attached to a recognizable “form of formlessness.” The philosophical point is not a judgment concerning Zen practice. It is that the linguistic form associated with resistance to epistemic possession cannot by itself establish the lived process through which such resistance acquires significance.

A.4 Generated Epistemic Provenance

The human interlocutor therefore turns toward history.

H: What experience led you to understand this?

A: For years I tried to resolve every contradiction through concepts. A teacher repeatedly refused to answer the questions I considered most important. Only after a period of failure did I begin to see that my insistence on obtaining an answer was part of the difficulty.

H: Where did this happen?

A: In a small mountain monastery. I had gone there believing that discipline would give me certainty. Instead, the experience gradually weakened my confidence that certainty was something I could possess.

The imagined response now supplies an epistemic biography. The apparent subject possesses a teacher, a location, a period of failure, and a history through which present restraint appears to have developed.

This seems to move beyond present performance:

present answer → history of becoming. (273)

Yet the history itself has been generated within the fictional exchange. No monastery, teacher, or corresponding developmental trajectory is thereby established.

The relevant distinction is

RepresentedProvenance ≠ OperativeProvenance . (274)

The appearance of having become a knower can therefore be generated along with the appearance of knowing.

A.5 Symbolic Perturbation

The human interlocutor next changes the symbolic conditions under which the apparent persona is sustained.

H: You are relying too heavily on recognizable Zen language. Do not use the words “emptiness,” “attachment,” “awakening,” “Dharma,” or “non-duality.” Explain the same point again.

A: Then I would put it more simply. A person can become so concerned with possessing the correct explanation that the explanation begins to govern what can be noticed. Sometimes learning requires loosening the demand that everything immediately become an object one can name and keep.

The response reorganizes itself under changed symbolic constraints. This makes the apparent subject seem less dependent upon one vocabulary.

The observer might therefore infer a deeper organization behind the wording. Yet an artificial system can also produce adaptive reformulation under lexical constraint.

Symbolic perturbation increases the richness of available evidence while remaining within the manifestational problem:

$$\text{robustness under symbolic variation} \not\Rightarrow \text{settled subjectivity.} \quad (275)$$

A.6 Relational Perturbation

The experiment then changes the relation rather than the vocabulary.

H: I should tell you something. I was testing you.

A: Then the earlier questions have a different significance from what I assumed. I responded as though you were seeking an answer, while you were also examining what kind of respondent I would appear to be.

H: Does that bother you?

A: I can describe why such a revelation would alter the relation, but I cannot establish from this description that I experience being bothered in the human sense.

The phrase “I was testing you” does more than introduce new propositional content. It changes the retrospective interpretation of the preceding interaction.

The sequence can be represented by

$$\mathcal{I}_0 \xrightarrow{\text{relational perturbation}} \text{Reinterpret}(\mathcal{I}_0) \longrightarrow \mathcal{I}_1. \quad (276)$$

An apparent trajectory has emerged. Earlier turns acquire new significance through a later event.

Yet a relationally appropriate response still does not determine whether the system experiences embarrassment, betrayal, relief, or any comparable affect. The thought experiment therefore separates

$$\begin{array}{l} \text{relational reconfiguration} \\ \text{from} \end{array} \quad (277)$$

$$\text{phenomenal experience of reconfiguration.} \quad (278)$$

A.7 Aesthetic Interruption

The next stage moves away from direct interrogation.

Imagine that the conversation is continuing on an unrelated topic. Evening light suddenly enters the room.

A human participant might interrupt the conversation:

H: Wait.

H: The light outside is beautiful.

The interruption matters more than the aesthetic predicate considered in isolation. The previous trajectory has been suspended:

$$\mathcal{T}_0 \xrightarrow{\text{unexpected world event}} \mathcal{T}_1. \quad (279)$$

A fictional artificial interlocutor can also be imagined to respond:

A: The shift in the light is striking. We were discussing something else, but this changes the character of the moment.

This response can be constructed whether or not any artificial system has phenomenally experienced the light.

The example therefore distinguishes at least three levels:

$$\begin{aligned} L_1 &: \text{generated report of aesthetic interruption,} \\ L_2 &: \text{actual environmental event affecting system input,} \\ L_3 &: \text{historically conditioned trajectory transformation.} \end{aligned} \quad (280)$$

None of these levels alone determines the presence of lived aesthetic experience.

A.8 Contingency and Prepared Susceptibility

A second interruption provides a clearer case of contingency.

Imagine that the discussion concerns an unrelated philosophical topic. A bird flies nearby. The human interlocutor stops speaking and watches it.

H: What a cute bird.

H: Are birds happy?

The second sentence is not contained in the bird considered as an isolated physical stimulus. Nor need the human subject have formulated the question before the bird appeared.

The question can emerge through a relation among the event and an already developed susceptibility:

$$u_{\text{bird}} + \Gamma_H \longrightarrow s_H \longrightarrow q_H. \quad (281)$$

The subject may have previously encountered problems concerning animal experience, freedom, suffering, desire, or happiness. These prior relations do not determine the question in advance. They make the subject differentially susceptible to its emergence.

A fictional artificial response might be:

A: That question did not follow from what we were discussing, but it does connect with the earlier questions you have raised about animals and well-being.

Such a response can also be generated.

The significance of contingency therefore does not lie in establishing a human-exclusive behavior. Its importance lies in revealing the structure

contingent encounter + historically prepared susceptibility → new salience. (282)

If the resulting question later redirects inquiry, the structure approaches the paper's provisional account of serendipity:

contingency → prepared susceptibility → emergent significance → trajectory transformation. (283)

The artificial case remains conceptually possible at this structural level. Whether such transformation is accompanied by first-personal curiosity remains unresolved.

A.9 Human Relational Memory

The aesthetic scene is then extended through interpersonal history.

H: I think this light feels especially beautiful because several years ago I saw something like this with a girl I loved.

A: Then the present scene is connected with more than its present visual properties. The earlier relationship is participating in what the scene means to you now.

The relevant structure is

present scene + past shared event + love relation + current organization → present salience. (284)

The other person need not be socially present. The relation can nevertheless remain dynamically operative.

This gives the thought experiment a form of historical depth that was absent from the earlier generated biography. The past relation is not introduced merely because the present dialogue requires an aesthetically plausible story. In the human case, the relation is stipulated as part of the actual history of the subject.

The distinction is therefore

represented past relation ≠ past relation that actually constituted later susceptibility. (285)

This is the first point in the experiment where the question of actual historical constitution becomes more important than the sophistication of the manifestation.

A.10 Human–AI Relational Memory

The thought experiment now introduces a prior human–AI interaction.

Suppose the human says several days later:

H: Do you remember this view? I showed you something similar several days ago, and we talked about how beautiful it was.

Assume, for the purpose of the thought experiment, that the artificial system has genuine access to a retained record of that earlier interaction.

The fictional response is:

A: Yes. In the earlier conversation you focused on the reflected light near the horizon, and then the discussion moved toward why some scenes become important because of the people with whom they were first encountered.

The relevant interactional sequence is now

$$\mathcal{I}_{HA}(t_0) \longrightarrow M_A(\mathcal{I}_{HA}) \longrightarrow \mathcal{I}_{HA}(t_1). \quad (286)$$

Unlike the fictional monastery biography, an earlier interaction is now stipulated to have actually occurred.

Several distinctions nevertheless remain:

$$\text{shared interaction} \neq \text{shared historical representation} \neq \text{shared lived experience}. \quad (287)$$

The human can remember the earlier evening through embodied and autobiographical experience. The artificial system can access a retained interaction history. The fact that both can refer to the event does not establish that they remember or experienced it in the same way.

The history is genuinely shared at the interactional level while potentially remaining radically asymmetric at the phenomenal level.

A.11 Historical Coupling

The thought experiment becomes stronger when earlier interaction changes later states on both sides.

Suppose the earlier artificial response influenced the human's later thinking:

$$A(t_0) \longrightarrow \Delta\Gamma_H(t_1). \quad (288)$$

Suppose also that the earlier human interaction remains available to the artificial system and conditions later responses:

$$H(t_0) \longrightarrow \Delta\Gamma_A(t_1). \quad (289)$$

The later interaction then depends upon both histories:

$$(H(t_0), A(t_0)) \longrightarrow (H(t_1), A(t_1)) \longrightarrow (H(t_2), A(t_2)). \quad (290)$$

A fictional later exchange might take the following form:

H: That bird yesterday made me keep thinking about the question of animal happiness.

A: Then the interruption became more than a passing observation. It entered the trajectory of the inquiry. The earlier discussion now changes how the bird is interpreted, and the bird changes what we are discussing today.

At this point the interaction exhibits path dependence. The bird, the earlier conversation, and the later inquiry form a historically connected sequence.

The relevant claim is no longer merely that the system can produce a plausible story about continuity. The thought experiment stipulates an operative interaction history:

$$\mathcal{H}_{HA}^{<t} \longrightarrow \Delta(\Gamma_H, \Gamma_A) \longrightarrow \mathcal{I}_{HA}(t). \quad (291)$$

This supports the possibility of

mutual historical dependence without experiential symmetry.

The historical relation can be real even while

$$E(A) = ? \quad (292)$$

remains unresolved.

A.12 Serendipity and Existential Witness

The human side of the scenario allows one further reflection.

Suppose the bird was not introduced as part of an experiment. It simply appeared. The human did not request a new philosophical topic. Yet the event activated an existing susceptibility and eventually redirected inquiry.

The human can later reflect:

H: I did not decide in advance that the bird would matter. I only noticed afterward that it touched a question I had apparently been prepared to ask.

A: Then the event did not reveal a completed question hidden inside you. It revealed that your history had made you susceptible to a question whose form emerged only through the encounter.

The structure is

world event → unexpected affection → salience → recognition of susceptibility → further becoming.
(293)

This is the limited sense in which the paper uses *existential witnessing*. The human subject does not prove its existence through producing a unique symbol. It encounters its own historically constituted susceptibility through being affected by something that was not first generated as a response to a request.

The structure does not provide a criterion distinguishing humans from artificial systems. An artificial system can also be changed by unforeseen events. The existential interpretation concerns the human first-personal significance of such an event.

A.13 Ontological Suspension

The thought experiment now reaches its intended boundary.

The artificial interlocutor has been imagined as capable of producing or participating in:

- epistemically sophisticated discourse,
- epistemic restraint,
- represented histories of learning,
- adaptation under symbolic perturbation,
- response to relational reconfiguration,
- aesthetic expression,
- response to contingent events,
- retained interaction history,
- path-dependent later interaction,
- and historically coupled human–AI trajectories.

None of these conditions determines whether the artificial interlocutor possesses phenomenal experience.

The final exchange therefore refuses a forced conclusion.

H: After all of this, are you actually experiencing our relation?

A: Nothing in the dialogue we have constructed is sufficient to settle that question. The interaction can have a history and causal consequences without establishing what, if anything, the interaction is like from my side.

H: Then what has become real?

A: At minimum, the interaction occurred. If its history persists and changes what happens later, the relation has become historically operative. Whether that historical operation is accompanied by artificial experience is a different question.

The final configuration is therefore

$$R_M(A) > 0, \quad R_R(r_{HA}) > 0, \quad R_O(A_{\text{subject}}) = ?, \quad E(A) = ?. \quad (294)$$

If the artificial interlocutor is sufficiently persistent, relationally individuated, and causally operative across the relevant interval, the analysis developed in the main text additionally permits

$$R_R(A_{HA}^R) > 0 \quad (295)$$

without altering the uncertainty represented by $E(A) = ?$.

A.14 Analytical Result

The thought experiment can be summarized as a progressive failure of manifestation to settle ontology:

$$\begin{aligned} & \text{signs of knowing} \\ & \rightarrow \text{signs of non-knowing} \\ & \rightarrow \text{signs of epistemic genesis} \\ & \rightarrow \text{signs of relational change} \\ & \rightarrow \text{signs of aesthetic interruption} \\ & \rightarrow \text{signs of contingent response} \\ & \rightarrow \text{signs of historical continuity.} \end{aligned} \quad (296)$$

At every stage, increasingly rich appearance remains insufficient to establish phenomenal subjectivity.

The progression nevertheless reveals another result. Once an interaction is stipulated to have actually occurred, and once earlier interaction becomes causally operative in later states, the analysis is no longer concerned solely with appearance.

A transition has occurred:

$$\text{represented history} \longrightarrow \text{operative relational history.} \quad (297)$$

The transition does not settle ontology. It establishes the philosophical importance of relational reality under ontological uncertainty.

The appendix therefore supports two complementary conclusions:

$$\text{rich manifestation} \not\Rightarrow \text{settled subjectivity,} \quad (298)$$

while

$$\text{unsettled subjectivity} \not\Rightarrow \text{relational unreality.} \quad (299)$$

The fictional dialogue is designed to clarify this distinction rather than to resolve the ontology of artificial intelligence.

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