

The Limits of Authority: Continuity \neq Coherence

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Abstract

This paper distinguishes continuity, coherence, and persistence as non-equivalent structural properties. Contemporary systems frequently treat external continuity – narrative consistency, interpretive plausibility, and social legibility – as evidence of internal integrity. This assumption underwrites modern forms of authority, allowing systems to persist without confronting structural violations.

We argue that continuity is neither generative nor stabilizing at the level required for coherence. Coherence arises from invariant constraint, not from interpretation, explanation, or narrative success. Persistence, properly defined, is invariant-bound and cannot be produced or repaired through semantic means.

Authority emerges precisely where invariants are no longer sufficient to regulate behavior. Once granted, it functions to defer contact with structural limits, allowing incompatibilities to remain unregistered so long as continuity is externally maintained. This substitution of continuity for coherence produces systems that appear stable while accumulating unresolved structural violations.

The paper concludes that authority is not inherently pathological but structurally redundant where invariants are enforced. Where authority substitutes for constraint, coherence becomes optional, and failure is detected only after structural limits are exceeded.

1. The Problem of Misplaced Authority

Modern systems routinely confer legitimacy on what remains intelligible over time. Ideas, institutions, and explanatory frameworks that continue to function socially – by repetition, reinforcement, or habitual interpretation – are treated as stable, reliable, or structurally sound simply because they do not visibly fail.

This practice rests on an implicit assumption: that external consistency over time is evidence of internal soundness. What appears to hold together is presumed to do so because it *is* held together. And this assumption is rarely examined.

Thus this assumption is embedded into validation procedures that privilege legibility, consensus, and explanatory adequacy. Systems are judged by whether they can be narrated coherently, defended plausibly, or maintained without overt contradiction. When these conditions are met, authority is granted.

The difficulty is that external consistency and internal integrity are not the same property. A system may remain narratable without being structurally unified. It may appear consistent while accumulating

unresolved incompatibilities. It may function socially while relying on continuous interpretive effort to do so. The distinction matters because authority, once granted, alters how failure is detected. When legitimacy attaches to what can be maintained perceptually, breakdown is registered only when contradictions become externally salient. Structural violations and internal incompatibilities may remain unregistered indefinitely, provided they are not forced into view.

This paper argues that such authority is misplaced. Structural integrity is not produced by interpretation, explanation, or narrative success. It arises from constraint. When systems are evaluated primarily at the level of external consistency, coherence becomes optional and structural limits are deferred rather than confronted.

Questions concerning the epistemic access, discovery, or empirical identification of invariants are bracketed for now; this analysis is restricted to the structural behavior of systems conditioned on invariant constraint.

The sections that follow draw a strict distinction between continuity, coherence, and persistence. These concepts are often treated as interchangeable. They are not. Confusing them relocates authority from structure to appearance and replaces constraint with management. Once this relocation occurs, systems may remain stable for extended periods while becoming increasingly fragile.

The purpose of this paper is not to reject meaning, interpretation, or narrative. It is to reestablish their proper position. Meaning does not generate structure. It emerges downstream of it. Authority that fails to respect this order cannot distinguish between what merely continues and what actually holds.

2. Persistence, Continuity, and Coherence

This paper relies on three distinct concepts that are often conflated in both academic and institutional discourse: **persistence, continuity, and coherence**. These terms are not interchangeable. Each names a different mode of stability, governed by different constraints, and failure to distinguish them leads directly to misplaced authority.

2.1 Persistence

Persistence refers to the survival of a system across admissibility conditions imposed by invariant constraints.

A system is persistent if it remains admissible under transformation – that is, if it continues to satisfy the constraints required for its existence or operation when subjected to pressure, perturbation, or projection. Persistence is not descriptive and does not depend on interpretation, narration, or observer agreement. It is earned structurally.

Persistence therefore implies invariant satisfaction, constraint compliance, and survival through admissibility gates.

A system may be legible, popular, at scale, or narratively stable without being persistent. Persistence is indifferent to appearance. It is determined entirely by whether the system continues to satisfy the conditions required for its own realization.

2.2 Coherence

Coherence refers to the internal structural integrity of a system as determined by the compatibility of its invariants.

A coherent system is one in which constraints do not fragment, contradict, or require external repair to remain jointly satisfiable. Coherence is a property of **generation**, not narration. It arises when a system's components are bound together by invariants that remain intact across transformation.

Topologically, coherence corresponds to the preservation of structure. Invariant relations remain connected rather than breaking into disjoint or incompatible regions. This is why topological considerations are relevant: coherence is about **whether the system remains one system**, not merely whether it can be described continuously.

Coherence does not require observers. It does not require explanation. It does not require reinforcement. A system is coherent or it is not.

2.3 Continuity

Continuity refers to the maintenance of *externally perceived* consistency under an interpretive frame oriented **towards an objective**.

A system is continuous if, from the perspective of an observer or audience, its states can be arranged into a narratable sequence that appears consistent relative to a selected goal, explanation, or outcome. Continuity does not require internal structural consistency. It requires only that contradictions, breaks, or violations are not selected into perception in a way that disrupts the narrative object.

It depends on external evaluation, interpretive selectivity, observer participation, and teleological orientation. Because continuity is externally assessed, it can be preserved despite internal contradiction or invariant violation, providing those violations remain unexposed, reframed, or irrelevant to the observer's evaluative frame. Continuity is thus a semantic property: it describes how a system is perceived to unfold, not how it is constructed.

Continuity may provide local stabilization or temporary coordination, but it possesses no generative capacity for coherence and cannot substitute for invariant constraint.

2.4 Non-Teleology of Coherence and Persistence

A final distinction is required to prevent continuity from being mistaken for either coherence or persistence. Unlike continuity, **neither coherence nor persistence is objective driven**.

Coherence is a property of internal structure. It does not aim at an outcome, persuade an observer, or satisfy a narrative goal. A system is coherent if its invariants remain mutually compatible across transformation. Whether this compatibility is noticed, valued, or even intelligible to observers is irrelevant. Coherence has no objective; it either holds or it does not.

Persistence is likewise non-teleological. A system persists only insofar as it remains admissible under invariant constraints. Persistence does not seek survival, legitimacy, or recognition. It is determined entirely by whether the system continues to satisfy the conditions required for its realization. Persistence therefore cannot be achieved by interpretation, justification, or explanation. In fact, it often

survives despite them.

Continuity stands in contrast to both. Continuity is explicitly objective oriented – it exists to preserve a particular perception, explanation, ideology, or outcome. Because it is evaluated externally, continuity must manage appearances rather than structure. This distinction is not merely conceptual. It has operational consequences.

Where continuity is prioritized, contradictions are not eliminated; they are **internalized**. In order for a system to appear externally consistent, violations must be absorbed, deferred, or concealed within the system boundary. Continuity therefore enables plausible deniability: inconsistencies can exist without invalidating the narrative, provided they are not surfaced in a way that disrupts the external evaluation frame.

This asymmetry explains why continuity is frequently mistaken for robustness. Systems optimized for continuity can remain socially stable while accumulating unresolved internal contradictions. Coherence and persistence do not permit this behavior. They cannot redirect or defer contradiction; invariant violation immediately manifests as structural failure or inadmissibility.

The consequence is that authority, when granted at the level of continuity, becomes decoupled from both coherence and persistence. What appears consistent may be neither structurally sound nor admissible. The remainder of this paper examines how this decoupling arises and why invariant-first generation is the only mechanism capable of preventing it.

3. Authority as Invariant Avoidance

Authority is often treated as a mechanism for enforcement, coordination, or resolution. In practice, its primary function is neither prescriptive nor corrective. Authority operates as a **friction reduction mechanism**, stabilizing systems when direct engagement with constraint becomes costly, disruptive, or socially untenable.

This function is frequently beneficial in the short term. By mediating interactions, resolving disputes procedurally, and contextualizing failure, authority allows systems to maintain operational continuity without repeated confrontation with underlying constraints. However, this same mediation introduces a structural asymmetry: authority does not resolve incompatibilities; it absorbs the pressure that would otherwise force them into adjudication.

This asymmetry becomes decisive when authority is allowed to persist without explicit mechanisms for abdication. Once authority is granted and permitted to continue by default, constraint enforcement is no longer primary. Evaluation shifts from admissibility under invariants to manageability under continuity. What matters is no longer whether a system remains structurally coherent, but whether it can continue operating without interruption.

In this sense, authority does not oppose invariants directly. Rather, it **interposes between systems and their invariants**, reducing contact. Exceptions are contextualized, violations are deferred, and incompatibilities are rendered non-salient. The system remains functional, but only by avoiding the conditions under which structural resolution would be forced.

This dynamic explains why authority is inherently a slippery mechanism. Authority emerges precisely where the contact surface with invariants is no longer sufficient to regulate behavior. Its continued existence depends on maintaining distance from invariant boundaries, since renewed contact would either invalidate the authority or render it unnecessary. As a result, authority systematically favors continuity over correction.

The consequence is not immediate failure, but arrested progress. Progress requires invariant contact. New structure is generated only when systems are forced to reconcile with constraints they cannot reinterpret away. Authority delays this reconciliation by making failure survivable without structural change. The smoother the system becomes, the less pressure is applied to resolve incompatibilities.

Persistence, however, is indifferent to authority. While continuity may be maintained through mediation and narrative management, persistence is sustained only where invariant constraints are met. Where they are not, no amount of authority can prevent eventual contact. The invariant boundary is not chosen, negotiated, or enforced; it inevitably asserts itself.

4. Why Invariants Produce Meaning

Invariants are commonly mischaracterized as restrictive constraints that limit expression, reduce flexibility, or suppress creativity. This interpretation is intuitive but incorrect. It confuses freedom of variation with generation of structure and treats meaning as something that emerges from unconstrained choice rather than from differentiation against stable reference. In practice, the opposite is the case. Meaning does not arise from the absence of constraint, but from sustained interaction with it.

Semantic generation requires structure. For any distinction to be intelligible, something must remain fixed while something else varies. Invariants provide this fixed substrate. They define what cannot change, and in doing so, make change legible. Without invariants, variation collapses into undifferentiated flux. Activity may continue, but it does not accumulate into stable semantic structure. Narrative may proliferate, but they lack anchoring, and their interpretations remain observer-dependent.

This relationship is not unique to abstract systems. It appears wherever interpretation arises from interaction with constraint. Physical systems exhibit it directly: material properties enable form by resisting deformation. Biological systems exhibit it implicitly: genetic invariants constrain development, allowing phenotypic variation to become functional rather than arbitrary. In cognitive systems, stable grammatical and logical structures make interpretation possible by limiting admissible combinations. In each case, constraint is not an impediment to expression but the condition under which expression becomes meaningful.

When invariants are absent or bypassed, semantic activity does not disappear; it changes character. Meaning becomes continuous rather than generative. Associations can be drawn, explanations offered, and narrative extended, but these operations rely on interpretive reinforcement rather than structural differentiation. Because no invariant boundary is encountered, no resolution is forced. Semantic output increases, but semantic density does not. The system appears productive while remaining structurally static with ever increasing dependency.

This distinction clarifies why invariant contact is essential for progress. Progress does not consist in the accumulation of interpretations, but in the emergence of new, stable distinctions. Such distinctions arise only when existing structures fail under constraint and must be reconfigured. Invariants create the

conditions under which failure becomes informative. They determine where reinterpretation is insufficient and where structural revision is required. Without invariants, failure is endlessly deferrable; with them, it becomes generative.

Authority and narrative continuity are often mistaken for mechanisms that support meaning. In reality, they function by routing around invariant contact. By contextualizing failure and stabilizing interpretation, they preserve intelligibility without forcing differentiation. This may sustain continuity – surface appearances – but it does not generate new structure. Meaning remains dependent on reinforcement rather than emergence.

Invariants therefore do not stand in opposition to meaning. They are its source. They define the admissible space within which semantics can form, stabilize and evolve. Where invariants are held, semantic generation is forced to occur through differentiation rather than interpretation. Where they are avoided, meaning becomes continuous, expansive, and ultimately unstable.

This relationship is decisive for understanding persistence. Only systems that remain in contact with their invariants can generate semantics that endure without constant interpretive maintenance. Continuity may preserve intelligibility in the short term, but persistence requires structural grounding. The distinction between the two is not philosophical. It is operational.

5. Persistence and the Admissibility Gate (PG-1)

Persistence, as used throughout this paper, refers to the capacity of a structure to remain valid under full exposure to its governing invariants. It is not a function of interpretation or narrative stabilization. A system either satisfies its invariant constraints simultaneously, or it does not. No amount of contextual framing alters this condition.

The distinction between continuity and persistence is therefore decisive. Continuity describes the externally perceived consistency of a system across time, typically maintained through selective exposure, interpretive maintenance, or authority-mediated stabilization. Persistence, by contrast, makes no reference to perception or narrative. It is indifferent to whether contradictions are noticed, deferred or explained away. Persistence is determined solely by invariant compliance.

The admissibility boundary that governs this distinction has been formalized elsewhere as the **Persistence Gate (PG-1)**. The gate defines the condition under which a system may be considered structurally admissible rather than merely continuous. The formulation is not introduced or modified here. It is reproduced verbatim and cited in order to fix the boundary presupposed by the preceding analysis:

The Existence of a Constraint-Eliminating Gate

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Definitions

Definition 1 (Configuration). A configuration x is an element of a configuration space X .

Definition 2 (Constraint).

A constraint C_i is a predicate $C_i : X \rightarrow \{0,1\}$, where $C_i(x) = 1$ if and only if a configuration x satisfies constraint i .

Definition 3 (Violation).

A configuration x is said to violate a constraint C_i if $C_i(x) = 0$. **Definition 4 (Persistence).**

A configuration x is persistent if and only if it satisfies all constraints in a given constraint set $C = \{C_1, \dots, C_n\}$.

Proposition

Proposition 1 (Existence of a Constraint-Eliminating Gate).

There exists a gate $G: X \rightarrow X \mathcal{R} \{\ell\}$ such that for any configuration $x \in X$,

$G(x) = \{x, \text{ if } C_i(x) = 1 \text{ for all } C_i \in C, \ell, \text{ otherwise.}$

Construction

Define, for each constraint C_i , an indicator operator

$1_{(C_i)}(x) = \{x, C_i(x) = 1, \ell, C_i(x) = 0.$

Define the gate G as the intersection over all constraints: $G(x) := \bigcap_{(C_i \in C)} 1_{(C_i)}(x)$. By construction:

-If any constraint is violated, at least one term in the intersection is ℓ , hence $G(x) = \ell$

-If no constraint is violated, all terms equal x , hence $G(x) = x$. Therefore, G exists and satisfies Proposition 1. \square

Corollary

Corollary 1 (Elimination of Non-Persistent Configurations).

Any configuration that violates at least one constraint is eliminated by G and cannot persist.

Equivalently, **only configurations that satisfy all constraints persist.**

Remarks

1. The construction requires no aggregation, weighting, approximation, or probabilistic interpretation.
2. Constraints are not ordered, prioritized, or relaxed.
3. The result is independent of the nature, origin, or discoverability of the constraints.

PG-1 does not evaluate narrative continuity or operational success. It does not reward stability achieved through compartmentalization or deferral. Systems that rely on selective exposure, authority-mediated exception handling, or interpretive patching fail the gate by construction. These mechanisms preserve continuity precisely by avoiding simultaneous invariant contact, which the gate requires.

This clarifies why continuity is neither sufficient nor relevant for admissibility. A system may appear

coherent, productive, and intelligible while remaining structurally inadmissible. As long as internal incompatibilities are shielded from joint exposure, continuity can be maintained indefinitely. Persistence cannot. Where invariant satisfaction fails, the gate is not crossed, regardless of narrative consistency or institutional validation.

PG-1 therefore formalizes the central claim of this paper. Continuity does not imply coherence, and coherence alone does not guarantee persistence. Admissibility is not granted by authority, consensus, or duration. It is determined exclusively by invariant compliance. What survives the gate does so without mediation. What does not, does not proceed.