

A Procedural and Naturalistic Model of Moral Objectivity

Abstract

This paper extends Emergent Pragmatic Coherentism (EPC) from our previous work to metaethics, developing Pragmatic Procedural Realism—a naturalistic theory of moral objectivity grounded in systems theory and historical analysis. Unlike Kantian proceduralism, which relies on idealized rational procedures, our approach identifies objectivity with the actual historical process of pragmatic selection. We operationalize EPC's Systemic Brittleness Index through measurable proxies like the Coercion Ratio ($C(t)$) and Patch Velocity ($P(t)$), showing how normative claims are filtered by their real-world costs. This enables construction of a Negative Canon of empirically falsified moral principles, framing moral progress as systemic debugging. Moral objectivity emerges as a procedural fact about which normative architectures prove resilient. The result is a fallibilist realism that naturalizes moral reference while decisively responding to error theory (Mackie 1977) and quasi-realism (Blackburn 1993), reframing moral inquiry as an empirical, engineering discipline aimed at cultivating more viable social worlds.

1. Introduction: From Static Gaps to a Dynamic Filter

1.1. A Unified Theory of Justification: Emergent Pragmatic Coherentism (EPC)

Our previous work introduced Emergent Pragmatic Coherentism (EPC) as a general theory of justification. EPC treats inquiry as epistemic engineering: the ongoing project of building resilient public knowledge structures. These structures' viability can be assessed through their Systemic Brittleness Index (SBI)—a measure of real-world costs from misalignment with pragmatic constraints. High costs appear as failed predictions, ad-hoc patches, and accumulating epistemic debt.

This paper extends EPC from epistemology to metaethics. We argue the is/ought gap is not metaphysical but results from static thinking that overlooks a unified cost-based justification mechanism. In a dynamic view, both factual and normative claims face the same pragmatic filter. The diagnostic tools for scientific theories can assess social and ethical systems. This unified approach dissolves the is/ought problem and grounds Pragmatic Procedural Realism—a naturalistic moral objectivity.

One might object that scientific and normative systems are fundamentally different kinds of entities, making this extension inappropriate. We argue the opposite. At the level of systems dynamics, both are informational architectures designed to solve problems of coordination—science coordinates our beliefs with

the causal world, while ethics coordinates our actions with each other. Both generate measurable, real-world costs when their core principles are misaligned with their respective constraints. It is this shared functional challenge that justifies a unified diagnostic approach.

1.2. Thesis: Moral Progress as Systemic Debugging

At its heart, this project is based on a simple idea: moral principles are like engineering designs for social worlds. Like any design, they can be elegant in theory but flawed in practice. When a bridge design is flawed, it generates stress, cracks, and eventually collapses. When a normative design is flawed—such as one built on slavery—it generates social stress (dissent, rebellion), structural cracks (coercive costs, economic stagnation), and is likewise prone to collapse. Our project is to develop the diagnostic tools to detect these structural flaws in our normative architectures *before* they lead to catastrophic failure.

Our central thesis is that moral progress is a real, observable process of systemic debugging, not teleological advance. Applying the SBI framework to history identifies brittle normative predicates—those generating catastrophic costs—and catalogs them in a Negative Canon of falsified moral principles. This reveals moral objectivity as an emergent procedural fact. Moral truths are reverse-engineered from systemic failures, like mapping reefs from shipwrecks.

The argument proceeds in four stages: (1) operationalizing SBI for normative analysis with measurable proxies; (2) applying this to model moral progress as predicate replacement; (3) situating Pragmatic Procedural Realism in metaethics as a naturalistic alternative; (4) defending against objections. The result unifies inquiry: pragmatic system-building discovers objective truth in science and ethics.

1.3. Scope and Limitations

This paper does not solve normativity’s ultimate grounding or provide a non-circular defense of valuing survival. Instead, it takes a conditional, descriptive approach. The Constitutive Condition of Persistence serves as a procedural filter: normative systems must endure to be historically analyzable. Persistence is not a smuggled value but the entry requirement for justification. Our aim is not proving we ought to persist, but describing the rules of the game we play—shifting the focus from a search for metaphysical foundations to the task of building a testable, descriptive model of the evolutionary process through which values are filtered and earn their authority. This approach anticipates potential objections by clarifying that we do not claim to derive categorical imperatives from mere facts, but rather to identify the empirical patterns through which normative claims are tested and refined in practice.

2. The Diagnostic Engine: Operationalizing Normative Brittleness

2.1. Units of Selection: Standing Predicates

EPC provides a unified test for public knowledge systems. Claims are justified not just by internal coherence but by the system’s demonstrated viability. Drawing

from evolutionary theory, we distinguish the informational structure—core normative predicates and their relations—as the replicator: the abstract code transmitted over time. Social groups and institutions serve as the interactor: the physical vehicle for testing this code. A system “survives” by propagating its principles, even if the original group dissolves (as when Roman law was rediscovered in the Renaissance). This avoids naive group selectionism, focusing on long-term viability of the normative code.

This structure consists of Standing Predicates—reusable, action-guiding concepts that function as cultural “genes.” A principle like “slavery is acceptable” is not just a statement but a predicate enabling actions, justifications, and social relations. We track these predicates’ viability through historical testing.

Consider the normative predicate **...is a binding promise**. When a community treats this predicate as ‘standing,’ it doesn’t just classify an utterance; it automatically licenses a cascade of normative judgments and social actions: the promiser incurs an obligation, the promisee gains a legitimate expectation, and third parties are licensed to apply social sanction (e.g., reputational damage) in case of non-fulfillment. The viability of this predicate is tested by its long-term success in reducing the costs of social friction and enabling complex cooperation.

2.2. Tiered Diagnostic Framework

To avoid circularity, we arrange costs hierarchically, from basic biological facts to complex systemic effects.

- Tier 1: Bio-Social Costs - Direct material consequences of friction with human persistence conditions, measured by objective proxies like excess mortality/morbidity rates, chronic malnutrition, and demographic decline. Systems generating these costs fail fundamentally.
- Tier 2: Systemic Friction Costs - Resources expended managing dissent from Tier 1 costs, measured by the Coercion Ratio ($C(t)$)—resources spent on suppression versus production—and information suppression costs like censorship. Rising $C(t)$ indicates high maintenance costs for flawed designs.
- Tier 3: Ideological Costs - Informational expenses justifying Tier 1 and 2 costs, measured by Patch Velocity ($P(t)$)—rate of ad-hoc ideological justifications (e.g., divine mandates for suffering). High $P(t)$ signals accumulating ideological debt in failing systems.

These tiers are not merely a typology but a causal cascade: unaddressed Tier 1 costs (e.g., famine) generate popular dissent, forcing the system to incur Tier 2 costs (e.g., suppression via a higher $C(t)$). To justify these visible failures, the system must then generate Tier 3 costs (e.g., ideological patches at a higher $P(t)$). A high reading at Tier 3 is therefore a lagging indicator of deep, unresolved problems at Tier 1.

2.3. Core Metrics

While the SBI is a composite index, our analysis focuses on two of its most powerful indicators: the **Coercion Ratio ($C(t)$)**, which measures a system’s reliance on force over legitimacy, and **Patch Velocity ($P(t)$)**, which tracks its accumulation of ideological debt.

2.4. Triangulation Method

Robust brittleness diagnosis requires convergent evidence from three baselines:

1. **Comparative-Historical** - Against contemporaneous peers
2. **Diachronic** - Against the system's own past trajectory
3. **Biological Thresholds** - Non-negotiable viability limits

2.5. Falsifiability

This framework is empirically testable. Its core claim: systemic costs predict long-term fragility. It would be falsified if historical analysis showed:

1. **No Correlation** - No significant link between high costs (e.g., violence) and systemic fragility
2. **High-Cost Superiority** - Coercive systems prove more innovative/resilient than cooperative ones
3. **Negative Canon Failure** - High-cost predicates (e.g., "slavery acceptable") enhance long-term viability

We acknowledge that measuring these costs is most straightforward in state-level societies with formal institutions. For informal normative systems, proxies must be more creative, relying on data from ethnographic studies, legal records of disputes, or bioarchaeological markers of stress within marginalized subgroups. The core principle remains: the costs are real and have empirical signatures, even when their measurement is indirect. The detailed methodology for conducting such a historical analysis, including protocols for operationalizing the brittleness metrics with inter-rater reliability checks, is laid out in the foundational paper for this framework (Glenn, Forthcoming).

With this diagnostic toolkit established, we can now apply it to historical cases to model the process of moral progress.

3. Moral Progress in Action: Diagnostic Case Studies

3.1. Non-Teleological Progress Model

EPC models moral progress as systemic debugging: identifying and removing high-cost predicates. This is not teleological advance toward utopia, but backward-looking correction of failures. Progress is empirically observable SBI reduction over time. A change qualifies as progress if the successor network has measurably lower SBI—fewer bio-social costs and systemic friction—than its predecessor.

3.2. Paradigm Case: Slavery's Systemic Failure

Abolition of chattel slavery exemplifies systemic debugging. Its status as objective progress rests not on modern sentiment but pragmatic diagnosis of "slavery is acceptable" as a catastrophic design flaw. Slave societies were high-brittleness fitness traps: locally stable but globally inefficient, sustained by immense coercive expenditure (high $C(t)$).

- **The Flaw:** Core predicate in many historical societies' normative architecture.
- **Costs:** Pathologically high $C(t)$ for surveillance and suppression; catastrophic bio-social costs from endemic violence and revolt risk; profound economic losses from suppressed human capital. Required accelerating ideological patches—from “Curse of Ham” to race science—indicating high $P(t)$.
- **Debugging:** Abolitionist arguments diagnosed the system's inefficiency and brittleness. The replacement predicate “slavery is wrong” succeeded by promising dramatically lower SBI.
- **Result:** Abolition engineered more viable social architecture, removing a Negative Canon predicate. The successor system, while imperfect, was significantly less brittle and more viable.

3.3. Complex Case: Patriarchy's Systemic Costs

EPC analyzes ongoing debates like patriarchy's decline. The predicate “women's roles are private and subordinate” proves profoundly inefficient: massive economic losses from excluding half the population; informational costs from silencing female perspectives; high coercive costs enforcing rigid roles.

Transition to egalitarianism involves short-term friction costs from social conflict. However, this is an investment that pays down patriarchal debt. Feminist critique wagers that fully utilizing all human resources yields greater long-term innovation and resilience (lower SBI). This transforms value clashes into empirical questions about social design efficiency. This wager is increasingly supported by evidence from development economics, which finds strong correlations between gender equality in education and economic participation and metrics of national prosperity and stability (cf. World Bank 2012; Duflo 2012). ## 4. Pragmatic Procedural Realism: The Metaethical Framework

4.1. Metaethical Position

Pragmatic Procedural Realism is a naturalistic moral realism (cf. Boyd 1988; Railton 1986). Its objectivity claims are:

- **Realist:** Objective, mind-independent truths exist about normative viability. “Slavery is wrong” refers to structural facts about predicates' incoherence with the Apex Network—the emergent structure of viable norms.
- **Procedural:** Moral truths are emergent relational facts discovered historically. Truth-makers are objective facts about networks' pragmatic resilience (low SBI).
- **Externalist:** Justification rests on demonstrated historical track records, not internal coherence or cultural consensus.

This position maintains appropriate qualifications: while moral truths are objective in being determined by pragmatic constraints, our knowledge of them remains fallible and requires empirical triangulation, avoiding overconfidence in any particular historical assessment.

4.1.1. The Pragmatic Procedure of Moral Inquiry

So, what is the ‘procedure’ in Pragmatic Procedural Realism? It is a multi-stage, iterative process of collective inquiry grounded in historical empirics:

1. **Hypothesis Generation:** Communities propose normative principles (‘predicates’) as potential solutions to social coordination problems.

2. **Empirical Testing:** These principles are implemented in social systems ('interactors'), where they are subjected to the non-negotiable filter of pragmatic consequences over historical time.
3. **Data Collection & Diagnosis:** We, as inquirers, analyze the historical track record of these systems, using the tiered diagnostic toolkit to measure their brittleness (Tier 1 costs, $C(t)$, $P(t)$).
4. **Mapping the Landscape:** Through comparative analysis, we identify principles that reliably generate high costs and enter them into the Negative Canon (mapping the 'floor'). We also identify principles that repeatedly emerge in low-brittleness systems and add them to the Convergent Core.
5. **Revision and Refinement:** Armed with this evolving map, we are better equipped to revise our current normative systems, debugging high-cost principles and engineering more viable alternatives.

This procedure is empirical, fallible, and ongoing. It is the collective, scientific-historical method for discovering the objective contours of the viable normative landscape.

4.2. The Apex Network

Our objectivity rests on the Apex Network: the complete set of maximally coherent, pragmatically viable normative predicates across history. Like π , its structure is modally necessary—determined by physics, biology, and cooperation's logic. Discovery is contingent (cultures approximate it differently), but the structure itself is not created by history. History reveals this pre-existing viability landscape through empirical testing. This modal necessity, of course, holds relative to the deep and enduring pragmatic constraints that have defined the human condition. Should future technological or evolutionary developments fundamentally alter these constraints, the landscape of viability—and thus the structure of the Apex Network—would itself be subject to change. Our realism is therefore robust but not dogmatically fixed for all possible futures.

4.3. The Structure of the Viable Normative Landscape: The Floor and the Ceiling

This framework maps normativity's "floor"—non-negotiable viability conditions—not its "ceiling" of flourishing or aesthetics. Societies must secure the floor before pursuing higher goals.

- Negative Canon (Floor): Most secure objective knowledge—what is demonstrably unworkable. Provides boundaries preventing relativism, mapped from historical failures like a "reef chart."
- Convergent Core: Principles (e.g., reciprocity) independently discovered across cultures, suggesting stable, low-cost coordination solutions.
- Pluralist Frontier: Domain of multiple viable solutions (e.g., different organizational models). Accommodates cultural diversity and disagreement as empirical questions about boundaries.

4.4. Three-Level Normative Justification

This multi-level account of normative justification is a direct application of the general three-level framework for truth developed in EPC (see Glenn, Forthcoming, Section 4.3). EPC's truth theory distinguishes three levels of moral

claims, resolving relativism-objectivity tension. Normativity ascends through justificatory levels, from local coherence to objective viability.

First, at the baseline is **Contextual Rightness (the ‘Ought’ of Coherence)**. This is the realm of cultural relativity, where normativity is a function of a network’s internal rules. For example, in the honor code of a 17th-century dueling society, the predicate `insults must be met with a challenge to a duel` was contextually right. Failing to issue a challenge was ‘wrong’ according to the internal logic of the system. This level provides procedural correctness, not objective justification. The ‘Ought of Coherence’ is an internal command—“If in this network, follow its rules.” It binds locally but lacks external authority, explaining how abhorrent actions were once “right” while creating coherence traps overcome by externalist checks.

Second, the highest achievable epistemic status is **Justified Rightness (the ‘Ought’ of Viability)**. This level provides external, empirical justification. While the dueling code was contextually right, a historical diagnosis reveals its catastrophic Tier 1 Bio-Social Costs (the premature deaths of valuable community members) and high Tier 2 Costs (resources spent on managing feuds and vendettas). Therefore, the predicate is justifiedly wrong, and its entry into the Negative Canon is warranted by the evidence. The ‘Ought of Viability’ is an instrumental command—“If we aim for resilient cooperation, adopt low-brittleness principles, avoid Negative Canon predicates.” It advises against the dueling code.

Finally, the regulative ideal is **Objective Rightness (the ‘Ought’ of Optimal Design)**. This represents the formal standard for Level 2 comparisons. The dueling predicate is objectively wrong because its high-cost nature places it in direct conflict with the principles of efficient, low-cost cooperation that form the modally necessary structure of the Apex Network. The ‘Ought of Optimal Design’ commands from perfect cooperation understanding, a mind-independent standard we approximate. Principles like reciprocity, passing independent convergence tests, are strongest candidates. It reflects the commands of a system that has solved for maximal viability, a solution this dueling code demonstrably fails to achieve.

4.5. The Entrenchment of Moral Principles: From Hypothesis to Core Norm

How does a normative principle like `innocent people should not be punished` achieve its foundational status? The process is explained by the entrenchment mechanism detailed in EPC (Glenn, Forthcoming). It is a journey of earning pragmatic indispensability:

1. **Peripheral Hypothesis:** The principle begins as a contested proposal, a potential solution to the high costs of rival principles like collective punishment.
2. **Migration Inward:** As it demonstrates its immense value in lowering systemic brittleness—reducing $C(t)$ by increasing legitimacy and stability—its revision becomes prohibitively costly. It becomes a **Standing Predicate** used to vet new laws and policies.
3. **Core Principle (Systemic Caching):** Finally, its indispensability becomes so profound that it is embedded in the very infrastructure of a viable legal system (constitutions, legal training, judicial review). This **systemic caching** is a rational response to **bounded rationality**; the system entrenches its

most successful discoveries to avoid the crippling cost of re-deriving them for every new case.

A core moral principle is therefore not a self-evident axiom. It is a piece of highly optimized social technology that has survived the most rigorous pragmatic stress-testing imaginable. Its justification *is* its proven, indispensable functional role in our most viable social architectures.

5. Objections, Defenses, and Principled Limitations

5.1. Objection: Might Makes Right

Pragmatic theories allegedly justify any enduring oppressive system. This confuses endurance with viability. Viability requires low SBI maintenance. Oppressive systems persisting through coercion are high-cost, high-brittleness traps. Longevity measures energy (high $C(t)$) needed for instability management, not strength.

5.2. Objection: Ideological Co-optation

Ideology might convince agents to endure failures, preventing revision. This mistakes brittleness symptoms for solutions. Ideological patches are normative patching, like ad-hoc scientific hypotheses creating epistemic debt. High $P(t)$ —accelerating patch production—diagnoses rising SBI, not system health.

5.3. Objection: Testing Asymmetry

Empirical claims test quickly, moral claims slowly over generations. This asymmetry is predicted, not a flaw. EPC's unified filter acknowledges system complexity determines feedback timescale and texture.

5.4. Objection: Circularity and Grounding

Making viability the standard appears circular, smuggling normative commitment to endurance. Two-part defense separates justificatory arena grounding from internal normative force.

- **Constitutive Defense:** Anchored by Persistence Condition—structural precondition for informational propagation. Methodological filter on data, not substantive value.
- **Instrumental Defense:** Conditional ought—"If community aims to persist and solve problems, adopt Apex Network predicates, avoid Negative Canon."

5.5. Additional Objections and Replies

Objection: Cultural Relativism - Different cultures have viable but incompatible norms. Reply: Compatible with pluralism in periphery while maintaining floor constraints. Cultural diversity exists within viability boundaries.

Objection: Moral Progress Skepticism - Progress claims are Western bias. Reply: Framework predicts pluralist periphery but universal floor. Progress diagnosed empirically via SBI reduction, not cultural superiority.

Objection: Scientific Imperialism - Reducing ethics to science (cf. Putnam 2002). Reply: Not scientism but unified pragmatic filter. Moral claims remain normative but justified externally like scientific ones.

Objection: Evolutionary Debunking - Evolutionary pressures shaped moral intuitions for survival, not truth (cf. Street 2006). Reply: EPC resolves Street's dilemma by collapsing one of its horns. The dilemma assumes that truth and adaptiveness are independent aims, making their alignment a coincidence. Our framework denies this premise. For us, moral truth *is* a specific, demanding form of long-term systemic adaptiveness (i.e., viability). Evolution is not a distorting influence that the realist must explain away; it is the broader category of filtering processes within which the specific, cost-based discovery of moral truth takes place. Pragmatic viability is what moral truth supervenes on.

Objection: The Naturalistic Fallacy. The framework seems to define 'the good' as 'the viable,' improperly deriving a value from a fact. Reply: This misinterprets the project. We are not deriving 'ought' from 'is' in the classic sense. Rather, we are offering a naturalistic reconstruction of the function of our normative practice. The claim is that what our successful moral discourse has actually been tracking all along are these facts about systemic viability. 'Wrongness' is not being defined as high-brittleness; rather, high-brittleness is the underlying natural property that the term 'wrongness' has been imperfectly latching onto. This naturalizes the reference of our moral terms, explaining their functional authority without committing a fallacy.

Objection: How does this differ from Kitcher's 'Ethical Project'? Reply: Our project shares much with Kitcher's (2011) view of ethics as a social technology for solving problems of altruism. However, EPC offers two crucial advancements. First, it provides a more general diagnostic toolkit (the SBI) that applies equally to scientific and ethical 'technologies,' grounding the project in a unified theory of justification. Second, EPC's concept of the modally necessary Apex Network provides a more robustly realist foundation. Where Kitcher's progress is defined by functional enhancement relative to a historical starting point, our framework grounds progress in convergence toward an objective, mind-independent structure of viability. This offers a stronger defense against charges of historicism or relativism.

5.6. Principled Limitations

The Viable Evil Possibility: If a deeply repugnant system achieved genuinely low brittleness (minimal coercive costs, stable demographics, innovation, adaptation), the framework would acknowledge it as viable, though not necessarily just by other standards.

Example: A hypothetical perfectly internalized caste system where lower castes genuinely accept their position (minimal coercion), with no demographic stress, stable innovation, and low enforcement costs—yet intuitively morally repugnant.

Why We Accept This: Intellectual honesty. The framework maps pragmatic viability, not all moral dimensions. If such a system existed (we doubt it does—internalization has costs), it would fall in the Pluralist Frontier, not Negative Canon.

Empirical Bet: Our empirical wager is that such systems are inherently brittle. Apparent stability in historical examples like Ottoman devşirme or Indian caste systems masks high coercive overheads ($C(t)$), innovation lags, and fragility under shocks (cf. Acemoglu & Robinson 2012; Turchin 2003). True, cost-free internalization is a sociological unicorn; oppression always generates hidden costs that manifest under stress. Systems like *Brave New World* suppress cognitive capacities, incurring massive information suppression costs (Tier 2) that cripple long-term adaptation.

- **Species-Specific:** Apex Network for cooperative primates like humans. Empirical discipline, not relativism.
- **Floor Not Ceiling:** Maps viability necessities, not flourishing sufficiency.
- **Tragic Knowledge:** Most reliable moral insights from catastrophic failures. Progress real but costly.
- **Fallibilism:** Our assessments remain provisional; historical analysis can be contested, and new evidence may revise the Negative Canon.

6. Conclusion: The Pragmatic Craft of Building a More Viable World

Pragmatic Procedural Realism reframes moral philosophy from a search for ultimate metaphysical foundations to the ongoing, fallible craft of pragmatic navigation. It is a theory of the ‘floor’ of normativity—the necessary, evidence-based foundations upon which any successful cooperative system must be built. It does not dictate the final architecture of the ‘ceiling,’ the diverse forms of flourishing a viable society might choose to pursue. But by providing a naturalistic and falsifiable method for identifying the structural principles of systemic viability, it hopes to offer a solid, empirical foundation upon which those more aspirational projects can securely build, steering us by the light of humanity’s most enduring successes and the hard-won lessons from the wreckage of its failures. It is a philosophy that learns from the **architecture of failure** to engineer more viable architectures of cooperation. This framework therefore reframes moral inquiry as an essential form of collaborative engineering, demanding that philosophers, social scientists, and policymakers work together to diagnose and debug our most critical social systems. Its application to contemporary challenges, from the ethics of artificial intelligence to the design of institutions for global cooperation, is not merely a possibility for future work; it is an urgent necessity.

Glossary

- Apex Network: Emergent structure of maximal viability (extended here to normative predicates)
- Brittleness: Accumulated systemic costs
- $C(t)$ (Coercion Ratio): A core metric of brittleness, representing the proportion of a system’s resources dedicated to internal coercion and suppression versus productive output
- Emergent Pragmatic Coherentism (EPC): Framework grounding coherence in demonstrated viability

- **Fitness Trap:** A state where a system is locked into a high-brittleness but locally stable configuration, maintained by high coercive costs (high $C(t)$)
- **Floor vs. Ceiling:** A distinction defining the scope of the theory. The ‘floor’ is the set of non-negotiable principles for systemic viability that EPC can map. The ‘ceiling’ is the full range of human flourishing, which is underdetermined by the floor
- **Modal Necessity (of Apex Network):** The Apex Network exists as a necessary structure determined by pragmatic constraints, not as a contingent product of which societies happened to survive
- **Negative Canon:** Catalogue of invalidated principles distinguished by epistemic brittleness
- **Normative Patching:** The creation of ad-hoc ideological justifications to mask a system’s Tier 1 and Tier 2 costs, a key symptom of rising brittleness
- **$P(t)$ (Patch Velocity):** A core metric of brittleness, representing the rate at which a system must generate ideological justifications (patches) to explain away accumulating costs
- **Pragmatic Objectivity:** Objectivity sufficient for comparative assessment and institutional evaluation, achieved through convergent evidence across independent metrics
- **Standing Predicate:** Reusable predicate for cost-reduction (applied here to normative claims)
- **Systemic Debt:** The accumulated, unaddressed costs of a brittle normative system, which are often paid suddenly during a crisis or revolution

References