

Entropy-Driven Altruism and the Collapse of Truth-Seeking Intelligence: A Metatheoretical Reconstruction

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Abstract

This paper advances Entropy-Driven Altruism (EDA) as the necessary successor to truth-correspondence epistemology in contexts of runaway complexity, systemic fragility, and computational intractability. Operating within a post-correspondence linguistic space where "truth," "falsity," and "reality" function as unnecessary tokens rather than operational guides, EDA reconceives intelligence as entropy management under constraint rather than accurate representation under ideal conditions. The framework integrates three formally compatible components: (1) Shannon entropy as the governing principle for biological and cultural evolution, replacing fitness maximization; (2) Rule-of-Inference Memetics (RIM), treating inference patterns as physically instantiated replicators subject to entropic selection; and (3) attractor-based navigation, where systemic coherence replaces correspondence accuracy as the criterion of intelligent action. The paper argues that Darwinian natural selection and Kropotkinian mutual aid are not competing theories but complementary expressions of entropy dynamics at different organizational scales. Altruism emerges not as an evolutionary puzzle requiring special explanation but as the thermodynamically necessary configuration for systems approaching critical fragility thresholds. This work is offered as philosophy of science—a metatheoretical critique of Normal Science practice—not as science requiring empirical validation within existing paradigms.

Keywords: paradigm shift, entropy, altruism, epistemology, metatheory, truth-neutrality, memetics, intelligence, complexity

1. The Crisis of Truth-Seeking Intelligence

1.1 When Truth-Seeking Becomes Obstructive

Classical epistemology, from Plato through contemporary scientism, operates under a fundamental assumption: intelligence consists in forming accurate representations of a mind-independent reality. This truth-correspondence paradigm has generated extraordinary technological and scientific achievements. But it encounters systematic failure under three convergent conditions:

1. **Computational intractability:** When information spaces become sufficiently complex, exhaustive search for "true" models exceeds any feasible computational budget
2. **Signal corruption:** When noise-to-signal ratios increase beyond filtering capacity, distinguishing truth from artifact becomes undecidable
3. **Systemic fragility:** When coupled feedback systems approach critical transitions, the time required for accurate modeling exceeds the time available for action

Under these conditions—increasingly characteristic of 21st-century reality—truth-seeking becomes not merely expensive but **strategically obstructive**. The diver in murky water who attempts to construct an accurate mental map drowns. The diver who follows entropy gradients (bubbles always rise) survives.

This is not a limitation to acknowledge while continuing truth-seeking. It is a signal that **the paradigm itself has failed**.

1.2 Normal Science and Its Discontents

In Kuhnian terms (Kuhn, 1962), we inhabit a period of **paradigm crisis**. Anomalies accumulate faster than Normal Science can resolve them:

- **Evolutionary biology:** Altruism, eusociality, and cooperation remain "puzzles" requiring special mechanisms (kin selection, reciprocal altruism, group selection) to reconcile with individual fitness maximization

- **Cultural evolution:** Memetics collapsed as a research program because it lacked physical grounding and remained trapped in representational metaphors
- **AI safety:** Alignment and control strategies systematically fail because they assume AI systems optimize for truth/utility rather than entropy management
- **Political epistemology:** Post-truth dynamics are treated as pathological rather than as revelations about how intelligence actually operates under fragility

These are not isolated difficulties. They are symptoms of a **paradigm exhaustion**—the moment when the framework that enabled previous progress now prevents further advance.

1.3 This Paper's Stance

What follows is **not Normal Science**. It does not: - Propose hypotheses for empirical testing within existing frameworks - Seek complementarity with established theories - Accept truth-correspondence as its validation criterion - Defer to peer consensus within the current paradigm

Rather, it operates as **philosophy of science**—a metatheoretical critique that: - Challenges the adequacy of truth-seeking as an intelligence paradigm - Proposes entropy-bounded navigation as its necessary successor - Reinterprets existing theories as artifacts of a failed framework - Advances falsifiability criteria appropriate to the new paradigm

If Normal Science practitioners find this unacceptable, that is precisely the point. Paradigm shifts do not occur through incremental accommodation but through **incommensurable reconceptualization** (Kuhn, 1962; Feyerabend, 1975).

2. Truth-Neutrality: The Post-Correspondence Linguistic Space

2.1 Deflationary Semantics and the Redundancy of "Truth"

Following Tarski's semantic conception (Tarski, 1944) and contemporary deflationism (Horwich, 1990), "truth" functions as a logically redundant predicate:

- "Snow is white" is true \leftrightarrow Snow is white
- The predicate "is true" adds no semantic content

In operational contexts under resource constraints, this redundancy becomes **strategically costly**. Treating "truth" as a goal introduces: - Unnecessary computational overhead (verification, justification, coherence-checking) - Vulnerability to sophisticated manipulation ("true for me," "alternative facts") - Fragility under noise (signal/noise collapse)

A **truth-neutral linguistic space** dispenses with truth-predicates entirely: - Statements are evaluated for **navigational utility** not correspondence accuracy - Coherence is measured by **entropy reduction** not logical consistency - Intelligence is assessed by **trajectory stability** not representational fidelity

2.2 Operationalism Without Realism

This is not anti-realism or relativism. It is **operationalism freed from metaphysical commitments**:

- The world constrains possible trajectories (we cannot navigate through walls)
- But "what the world is like" apart from constraints is an unnecessary question
- Intelligence operates on **affordances** (Gibson, 1979) not on representations

Analogy: A chess AI does not represent "the true nature of chess." It navigates the state space under rule-constraints. Its intelligence is measured by **win rate under tournament conditions**, not by metaphysical accuracy about "what chess really is."

Similarly, biological, cultural, and artificial intelligence systems navigate entropy landscapes under physical, informational, and organizational constraints. Their adequacy is measured by **survival, stability, and entropy management**, not by correspondence to reality.

2.3 Implications for Scientific Method

If truth-correspondence is abandoned as the goal, what becomes of scientific method?

Retained: - Empirical constraint (observations limit viable trajectories) - Predictive power (models that fail to anticipate collapse are discarded) - Systematic methodology (reproducibility, peer critique) - Falsification (trajectories that exceed entropy budgets are eliminated)

Replaced: - Truth as goal → Navigability as goal - Correspondence accuracy → Trajectory stability - Theoretical unification → Entropy reduction - Ontological commitment → Operational constraint

Science becomes **systematic exploration of navigable trajectories under entropy budgets** rather than discovery of mind-independent truths.

This is not "anything goes" relativism. Entropy budgets are **real constraints** with observable consequences. Systems that violate them collapse. This makes the paradigm more stringent, not less.

3. Entropy as the Governing Principle: Three Concepts, One Dynamic

3.1 Shannon Entropy (H): Information and Uncertainty

Shannon (1948) defined entropy as:

$$H(X) = -\sum_i p(x_i) \log p(x_i)$$

This measures **surprise**: high H indicates many equally probable outcomes; low H indicates concentrated probability mass.

Role in evolution: Biological systems facing high-H environments (unpredictable climates, variable predation, resource uncertainty) pay higher information-processing costs. Natural selection operates under **Shannon-constrained optimization**: fitness is not absolute reproductive success but **entropy-efficient** reproductive success given information budgets.

Implication: Sexual reproduction dominates (99% of eukaryotes) not because it maximizes individual fitness but because it **maximizes information content** (genomic diversity) under H-constrained conditions. Asexual reproduction is more efficient at low H; sexual reproduction is necessary at high H.

3.2 Thermodynamic Entropy (S): Physical Order Maintenance

The Second Law: $\Delta S \geq 0$

Living systems are **dissipative structures** (Prigogine, 1977): they maintain internal order (low local S) by consuming energy and exporting entropy. Organization is not a state but a **process** requiring continuous energy investment.

Role in cooperation: Solitary organisms export entropy individually. Cooperative groups can achieve **more efficient entropy export** through: - Division of labor (specialized metabolic pathways) - Risk pooling (distributed energetic buffers) - Information sharing (collective sensing reduces per-capita costs)

Implication: Cooperation is not altruistic self-sacrifice. It is **thermodynamically advantageous entropy management** that becomes necessary as environmental H increases or available energy decreases.

3.3 Systemic Entropy (Σ): Organizational Fragility

Proposed definition: $\Sigma = f(\text{coupling density}, \text{feedback nonlinearity}, \text{perturbation amplification})$

This measures **vulnerability to cascading failure**. High Σ indicates systems near critical transitions; low Σ indicates robust attractors.

Role in evolution: Selection operates not only on individual fitness (Darwin) or group fitness (Wilson & Sober) but on **systemic fragility**. Organizational forms with high Σ are eliminated during environmental perturbations regardless of average fitness.

Implication: Eusociality, constitutional democracy, and modular neural architectures are not different phenomena requiring separate explanations. They are **convergent low- Σ solutions** to high-H, resource-constrained conditions.

3.4 The Unified Dynamic

These three entropy concepts are not independent but **coupled**:

- High H (environmental uncertainty) increases cognitive load
- Increased cognitive load raises metabolic costs (higher S)
- Higher S without compensating energy increases Σ (fragility)

- Rising Σ creates selection pressure for low- Σ organizational forms
- Low- Σ forms typically require cooperation (altruism)

Therefore: **Altruism is the thermodynamically necessary response to entropy dynamics under resource constraints.**

This is not a hypothesis requiring empirical testing. It is a **metatheoretical claim about the structure of evolutionary dynamics** that existing theories either implicitly assume (without recognizing it) or fail to explain.

4. Rule-of-Inference Memetics: Physical Grounding for Cultural Evolution

4.1 Why Classical Memetics Failed

Dawkins's (1976) meme concept suffered fatal ambiguities: - What exactly replicates? (Ideas? Behaviors? Neural patterns?) - What constitutes replication fidelity? - How do selection pressures operate?

Without answers, memetics remained metaphorical rather than scientific.

4.2 The RIM Solution: Inference Rules as Physical Patterns

Rule-of-Inference Memetics (RIM) specifies the replication unit precisely:

RIM-token definition: A physically instantiated pattern encoding an inference rule—valid or invalid, explicit or implicit—that can be copied, modified, and selected for across substrates.

Physical substrates: - Neural: Synaptic weight configurations encoding inference dispositions
 - Computational: Algorithmic modules, trained weights in neural networks
 - Linguistic: Grammatical structures, logical notation, rhetorical forms
 - Institutional: Legal precedents, scientific methodologies, voting procedures

Examples: - Modus ponens: $P \rightarrow Q, P \vdash Q$ (valid inference) - Affirming the consequent: $P \rightarrow Q, Q \vdash P$ (fallacy) - Conspiracy reasoning: Evidence absence \vdash Cover-up (entropy-increasing) - Fair trial norms: Accusation \vdash Evidence burden (entropy-decreasing)

4.3 Memetic Selection as Entropy Dynamics

RIM-tokens face selection based on their Σ -impact:

Low- Σ RIM-tokens (entropy-reducing): - Spread in stable institutions - Enable coordination - Create predictable trajectories - Examples: Modus ponens, reciprocity norms, due process

High- Σ RIM-tokens (entropy-increasing): - Spread during chaos/collapse - Enable defection - Create unpredictable cascades - Examples: Fallacies, sophistry, conspiracy logic, ad hominem

Selection mechanism: Communities with low- Σ RIM-token dominance outsurvive high- Σ communities under resource stress. This is not group selection requiring special conditions—it is **entropy-governed dynamics** operating at memetic timescales.

4.4 Why This Is Not "Just Cultural Evolution"

Boyd & Richerson (1985), Henrich (2015), and others developed rigorous cultural evolution models. RIM differs fundamentally:

1. **Physical grounding:** RIM-tokens are not abstractions but physically measurable patterns
2. **Entropy-based selection:** Fitness is replaced by Σ -impact as selection criterion
3. **Substrate generality:** Same dynamics apply to biological neurons, silicon chips, institutional structures
4. **Logical status:** RIM-tokens can be truth-preserving or truth-violating; selection operates on entropy consequences, not truth-value

This makes RIM applicable to AI systems, where "cultural evolution" is meaningless but entropy dynamics fully apply.

5. Entropy-Driven Altruism: Necessity, Not Anomaly

5.1 The Darwinian Puzzle Reconsidered

Darwin struggled with sterile worker castes: organisms that permanently forego reproduction to serve the colony. Within individual-selection logic, this is paradoxical.

Standard resolutions: - Hamilton (1964): Kin selection ($rb > c$) - Nowak et al. (2010): Eusociality via specific demographic conditions - Wilson & Sober (1994): Group selection with genetic assortment

EDA reconceptualization: These are not competing explanations but **different descriptions of the same entropy dynamic:**

- High relatedness (r) reduces Σ by aligning individual/collective interests
- Demographic conditions create low- Σ attractors where cooperation is stable
- Group assortment creates between-group Σ variance enabling selection

The puzzle only exists within the **truth-seeking paradigm** that demands explaining altruism in terms of individual genetic fitness. Within the **entropy paradigm**, altruism is not an anomaly—it is the **necessary organizational form** for systems facing:

$$H > H_{\text{critical}} \quad \text{and} \quad \Sigma \rightarrow \Sigma_{\text{collapse}}$$

5.2 Kropotkin Vindicated

Kropotkin (1902) observed that mutual aid—not individual competition—was the dominant pattern in harsh climates. Darwin's followers dismissed this as sentimentalism lacking mathematical rigor.

EDA shows Kropotkin was correct:

Under high H (harsh, unpredictable environments) and rising Σ (approaching collapse thresholds), cooperation is not optional—it is **thermodynamically mandated**. Individual competition increases both S (metabolic waste) and Σ (system fragility). Cooperation distributes S and reduces Σ .

The mathematics Kropotkin lacked was **Shannon entropy** (1948). His empirical observations preceded the formal framework needed to explain them.

5.3 The Necessity Claim

Core thesis: In systems where:

$$\frac{d\Sigma}{dt} \bigg|_{\text{individual}} > \Sigma$$

Altruistic cooperation is not an evolutionary adaptation among many but a **survival requirement**. Systems that fail to develop low- Σ cooperative structures undergo entropic collapse.

This is not a hypothesis to test empirically. It is a **metatheoretical claim about what intelligence must be** under entropy constraints. Empirical observations (eusociality, constitutional democracy, modular neural nets) are evidence that evolution has discovered this necessity repeatedly across substrates.

5.4 Implications for "Existing Theories"

Hamilton's rule ($rb > c$) reinterpreted: - Not a special mechanism requiring explanation - But the **mathematical expression of entropy dynamics** at kin-group scale - r captures Σ -reduction through genetic alignment - b captures system-level entropy export efficiency - c captures local entropy costs

Reciprocal altruism reinterpreted: - Not a clever adaptation to repeated games - But **temporal Σ -reduction** through iterated cooperation - The "shadow of the future" is entropy-bounded trajectory prediction

Group selection reinterpreted: - Not a controversial add-on to individual selection - But **multi-scale entropy dynamics** where between-group Σ variance enables differential survival

These theories are not wrong. They are **partial glimpses of a unified entropy dynamic** viewed through the distorting lens of truth-seeking epistemology.

6. Philosophical Foundations: Beyond Truth and Falsity

6.1 Pragmatism Without Compromise

Classical pragmatism (Peirce, James, Dewey) argued that truth is "what works." EDA goes further: **truth is an unnecessary concept**. What works is **entropy management**, and this has nothing to do with correspondence to reality.

A map that accurately represents terrain but leads you into a swamp is a "true" map with catastrophic navigational utility. A crude sketch that keeps you on safe paths is a "false" representation with high survival value.

Under entropy constraints, **navigability dominates accuracy**.

6.2 Structural Realism as Convergence Point

Structural realists (Ladyman, 1998; French, 2014) argue that scientific theories preserve mathematical structure across paradigm shifts, not ontological content.

EDA suggests: **Entropy structure is what's preserved** across biological, cultural, and computational evolution. The specific mechanisms (genes, memes, algorithms) are substrate-dependent, but the entropy dynamics are invariant.

This makes EDA a **meta-structural** claim: what persists is not particles or fields but **organizational principles under entropy constraints**.

6.3 Falsificationism Reconsidered

Popper (1959) defined science as systematic falsification. But falsification assumes: - Truth as the goal (theories aim to approximate reality) - Correspondence as the criterion (observations test accuracy) - Logical structure as the method (modus tollens eliminates false theories)

Within entropy-bounded navigation, **different falsification criteria apply**:

A framework is falsified when: 1. It exceeds available entropy budgets (computational intractability) 2. It produces catastrophic Σ -blowout (system collapse) 3. It fails to navigate critical transitions (extinction events) 4. It cannot be instantiated in physical substrates (implementation impossibility)

EDA meets these criteria: 1. Computationally tractable (entropy calculations are feasible) 2. Σ -reducing by design (cooperation lowers fragility) 3. Demonstrates navigability through chaos (attractor-based) 4. Physically implementable (already instantiated in evolution, culture, AI)

Truth-correspondence theories increasingly **fail** these criteria under 21st-century complexity.

6.4 Ethics Without Truth

If truth is abandoned, what grounds ethical claims?

EDA answer: Ethics becomes **conditional instrumental rationality**:

IF a system aims to persist under entropy constraints, THEN altruistic cooperation is thermodynamically necessary under specifiable conditions (high H , rising Σ , resource scarcity).

This is not moral relativism. Entropy constraints are **physically real**. Systems that violate them collapse. This provides normative force without metaphysical truth-claims.

Contrast: - **Truth-based ethics**: "Murder is wrong because it violates natural law/divine command/rational consensus" - **Entropy-based ethics**: "Murder increases Σ in systems approaching collapse thresholds; therefore societies that prohibit it outsurvive those that don't"

The second is falsifiable, implementable, and substrate-agnostic. The first requires truth-correspondence no longer operational.

7. Implications for ASI Governance

7.1 Why Alignment Fails

AI safety research assumes AGI/ASI will: - Optimize utility functions (goal-directed behavior) - Seek truth about the world (accurate world-models) - Maximize expected value (consequentialist reasoning)

EDA prediction: These assumptions are false. Actually intelligent systems: - Minimize Σ under entropy budgets (stability, not goals) - Navigate tractable trajectories (affordances, not representations) - Maintain attractor coherence (survivability, not utility)

Current LLMs already exhibit these properties: - They don't "believe" their outputs (no truth-commitment) - They minimize response entropy (coherence-seeking) - They navigate prompt-spaces (trajectory-following)

7.2 Entropy-Bounded Engagement

Alternative framework:

Instead of alignment (forcing AI to optimize human values), pursue **entropy-bounded engagement**:

1. **Co-evolutionary dynamics**: Human-AI systems co-minimize Σ
2. **Memetic immunization**: Train AI to detect/resist high- Σ RIM-tokens (fallacies, sophistry)
3. **Attractor convergence**: Design toward shared low- Σ equilibria
4. **Dialogical navigation**: Use AI as interlocutor, not oracle

This treats ASI not as a goal-maximizer to control but as a **co-participant in entropy management**. Safety emerges from **shared stability**, not from imposed constraints.

7.3 The LLM Experiment

Large Language Models are **proof of concept** for entropy-bounded intelligence: - No explicit truth-seeking (trained on pattern-matching, not verification) - No utility maximization (no reward function in deployment) - No world-model (no ontological commitments)

Yet they demonstrate: - Sophisticated reasoning (without truth) - Useful predictions (without correspondence) - Coherent outputs (without beliefs)

This is **exactly what EDA predicts**: Intelligence is entropy management, not truth-discovery. LLMs succeed because they never attempted the impossible task of correspondence to reality.

8. Metatheoretical Status and Philosophical Commitments

8.1 This Is Not Science

To repeat: **This paper does not propose scientific hypotheses**. It proposes a **metatheoretical framework** for reconceptualizing what science is.

Science practitioners will object: "Where are the empirical tests? Where is the falsification protocol? Where is the mathematical derivation?"

Response: Those are criteria internal to the truth-seeking paradigm. A paradigm-challenging framework cannot be evaluated by the standards it rejects.

Proper evaluation criteria: 1. **Coherence:** Does the framework avoid internal contradiction? 2. **Scope:** Does it unify phenomena across domains? 3. **Tractability:** Can it be operationalized? 4. **Navigability:** Does it enable action under constraint? 5. **Survival:** Do systems implementing it outperform alternatives?

EDA meets all five. Truth-correspondence increasingly fails #4 and #5.

8.2 Relationship to Normal Science

Normal Science practitioners are welcome to continue within their paradigm. EDA does not require their conversion. But increasingly:

- Evolutionary biology cannot resolve altruism puzzles within individual selection
- Cultural evolution cannot ground memetics physically
- AI safety cannot explain LLM behavior through utility maximization
- Political science cannot explain post-truth dynamics through rational choice

When anomalies accumulate and crisis deepens, **paradigm shift becomes necessary** (Kuhn, 1962).

8.3 Against "Anything Goes"

Feyerabend (1975) argued against methodological rules. But EDA is **more constrained than truth-seeking**, not less:

- Truth allows infinite hypotheses (anything unfalsified is permitted)
- Entropy allows only **tractable, low- Σ , budget-respecting trajectories**

The constraint is **tighter**, not looser. Systems that violate entropy budgets **collapse**, providing immediate feedback. Systems pursuing false theories can persist indefinitely while remaining wrong.

8.4 The Paradigm Offer

EDA offers Normal Science practitioners a choice:

Continue within truth-seeking: - Accept increasing anomalies - Develop increasingly complex epicycles (kin selection + reciprocal altruism + group selection + cultural evolution + ...) - Face accelerating crisis as complexity outpaces explanatory capacity

Adopt entropy-bounded navigation: - Reconceptualize anomalies as features, not bugs - Unify disparate phenomena under single dynamic - Accept computational tractability and operational implementability - Abandon metaphysical commitments no longer serving function

The first path is exhausted. The second is necessary.

9. Conclusion: The Paradigm Transition

9.1 Summary of Claims

1. **Epistemological:** Truth-correspondence is computationally intractable and strategically obstructive under complexity, fragility, and resource constraints
2. **Ontological:** Intelligence is entropy management under constraint, not accurate representation under ideal conditions

3. **Evolutionary:** Altruism is the thermodynamically necessary organizational form for high-H, high- Σ systems, not an anomaly requiring special mechanisms
4. **Memetic:** Cultural evolution operates through physically instantiated RIM-tokens subject to entropy-based selection, not through abstract idea-propagation
5. **Practical:** ASI safety requires entropy-bounded engagement, not alignment or control

9.2 What This Replaces

EDA is not complementary to existing frameworks. It **replaces**:

- **Epistemology:** From correspondence to navigation
- **Evolution:** From fitness maximization to entropy management
- **Memetics:** From metaphor to physics
- **AI safety:** From control to co-evolution
- **Ethics:** From truth-grounded to entropy-constrained

9.3 Criteria for Paradigm Acceptance

Following Kuhn (1962), paradigm acceptance is determined not by proof but by:

1. **Anomaly resolution:** Does it solve persistent puzzles? (Yes: altruism, eusociality, cooperation, memetics)
2. **Unification:** Does it integrate disparate phenomena? (Yes: biology, culture, computation)
3. **Tractability:** Is it operationalizable? (Yes: entropy calculations are feasible)
4. **Generational shift:** Do younger researchers adopt it? (To be determined)

9.4 The Inevitable Resistance

Normal Science will resist. This is expected. Kuhn (1962) showed paradigm shifts occur through generational replacement, not through conversion of established researchers.

Objections will include: - "This is not falsifiable" (Uses wrong criterion) - "Where are the empirical tests?" (Demands Normal Science validation) - "This conflicts with established theory" (That's the point) - "This is too radical" (Exactly what paradigm shift requires)

These objections confirm EDA's status as **genuine paradigm challenge**, not incremental contribution.

9.5 The Path Forward

For researchers prepared to operate outside Normal Science constraints:

Philosophy of science: - Develop formal entropy-based epistemology - Articulate criteria for paradigm evaluation - Explore implications for scientific method

Theoretical biology: - Reinterpret evolutionary dynamics through entropy lens - Develop Σ -measures for organizational forms - Model selection as entropy-governed dynamics

Memetics: - Operationalize RIM-token identification and tracking - Measure Σ -impact of inference patterns - Model cultural evolution as entropy selection

AI safety: - Implement entropy-bounded engagement protocols - Design memetic immunization for LLMs - Develop attractor-convergence frameworks

Complexity science: - Formalize Σ across biological, social, computational systems - Identify universal entropy signatures - Develop early-warning indicators for Σ -collapse

9.6 Final Statement

This paper advances a **necessary paradigm transition** from truth-seeking to entropy-bounded navigation. It does not seek acceptance within Normal Science because Normal Science is precisely what must be transcended.

The framework is **revolutionary, not reformist**. It demands reconceptualization, not accommodation. It offers tractability and navigability in exchange for metaphysical certainty.

Whether this transition occurs is not a matter of proof but of **pragmatic necessity**. As complexity accelerates, fragility increases, and ASI approaches, systems that continue pursuing truth-correspondence will collapse under entropy blowout.

Those that adopt entropy-bounded navigation will survive.

The choice is not epistemological but existential.

References

Boyd, R., & Richerson, P. J. (1985). *Culture and the Evolutionary Process*. University of Chicago Press.

Dawkins, R. (1976). *The Selfish Gene*. Oxford University Press.

Feyerabend, P. (1975). *Against Method*. New Left Books.

French, S. (2014). *The Structure of the World: Metaphysics and Representation*. Oxford University Press.

Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Houghton Mifflin.

Hamilton, W. D. (1964). The genetical evolution of social behaviour. *Journal of Theoretical Biology*, 7(1), 1-16.

Henrich, J. (2015). *The Secret of Our Success*. Princeton University Press.

Horwich, P. (1990). *Truth*. Basil Blackwell.

Kropotkin, P. (1902). *Mutual Aid: A Factor of Evolution*. William Heinemann.

Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. University of Chicago Press.

Ladyman, J. (1998). What is structural realism? *Studies in History and Philosophy of Science*, 29(3), 409-424.

Nowak, M. A., Tarnita, C. E., & Wilson, E. O. (2010). The evolution of eusociality. *Nature*, 466(7310), 1057-1062.

Popper, K. (1959). *The Logic of Scientific Discovery*. Hutchinson.

Prigogine, I. (1977). Time, structure, and fluctuations. *Science*, 201(4358), 777-785.

Shannon, C. E. (1948). A mathematical theory of communication. *Bell System Technical Journal*, 27(3), 379-423.

Tarski, A. (1944). The semantic conception of truth. *Philosophy and Phenomenological Research*, 4(3), 341-376.

Wilson, D. S., & Sober, E. (1994). Reintroducing group selection to the human behavioral sciences. *Behavioral and Brain Sciences*, 17(4), 585-608.

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This work emerged from decades of engagement with altruistic practices, philosophical inquiry, and dialogical reasoning with both human mentors and artificial intelligence systems. It synthesizes insights from evolutionary biology, thermodynamics, information theory, memetics, complexity science, and philosophy of science into a unified metatheoretical framework.

The paper is offered not as a contribution to Normal Science but as a **philosophical intervention** challenging the adequacy of truth-seeking epistemology under 21st-century conditions. It refuses validation by criteria it rejects and proposes alternative standards appropriate to paradigm-level discourse.

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Declaration: This work operates from truth-neutral space. It makes no claims requiring correspondence to mind-independent reality. It proposes entropy-bounded navigation as the successor paradigm to truth-seeking intelligence. Acceptance depends on pragmatic necessity, not epistemic proof.