

10⁻⁹

The Coherence Manifesto

On the Physics of Sustainable Existence,
the Entropic Transition, and the Infrastructure
of Conscious Stewardship

Intended for family office principals, NextGen stewards,
institutional investors, and long-horizon capital allocators.

Preface

This document was born from direct experience.

For more than a decade, I followed protocols left by ancient contemplative traditions: from Egyptian, Essene, Vedantic and Greeks and the active imagination work of Carl Jung, toward what I eventually recognised as a coherent pattern different practices and teachings: a form of **Quantum Coherence**, a method for deliberately reducing inner speed and realigning with what appears to be a more fundamental rhythm of existence.

This isn't a theory I constructed, it's an observation I perceived.

And that observation produced a question I couldn't ignore:

Does a number exist for this rhythm? A benchmark grounded not in ideology or preference, but in the physics of the universe itself ?

This manifesto is an attempt to answer that question with rigour. I offer it not as a conclusion, but as *a working thesis presented to those for whom it resonates*, in the hope that together we may measure its reach.

Antoine Sepulchre

Zurich, 2026

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Part I - The Physics

1. The Number at the Origin of Everything

There is a number at the origin of everything. In the first fractions of a second after the Big Bang, during what physicists call the baryogenesis epoch, matter and antimatter were created in nearly equal quantities. Upon meeting, these particles annihilated one another in a catastrophic symmetry, releasing energy as photons. Something, however, was slightly off.

For every billion antiparticles produced, there were one billion and one particles of matter. An asymmetry of 10^{-9} , one part per billion, or 0.000000001.

This asymmetry is known as *the baryonic asymmetry of the universe*, and it's the reason anything material exists at all.

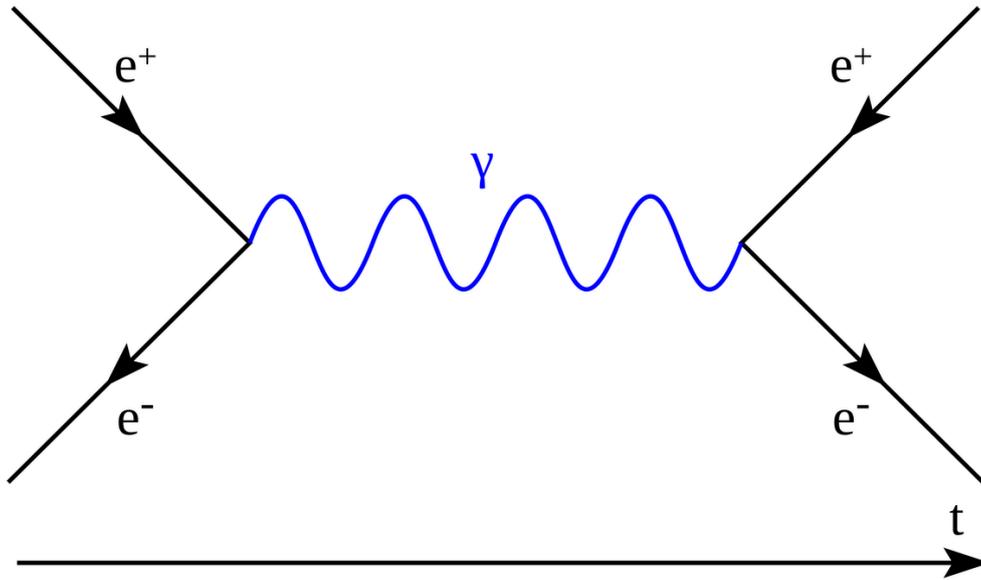
The entire observable universe, every star, every family, every institution, every decision ever made, is the residue of an imperfection so minute it barely registers as a rounding error. Had the symmetry been perfect, everything would have cancelled itself into a cold sea of radiation.

10 - 9	0.000000001	~13.8 Bn yrs
Baryonic Asymmetry	Surplus of matter per unit	Resulting observable universe

This observation is not new. The baryonic asymmetry has been documented and studied since Andrei Sakharov defined its theoretical conditions in 1967. What this document proposes is new: the application of this ratio as a normative benchmark, not merely a description of cosmic history, but a calibration instrument for the sustainable rate of growth of any complex system.

2. Baryogenesis and the Viable Asymmetry

The conditions under which the baryonic asymmetry emerged were formalised by Sakharov in his foundational 1967 paper. He identified three necessary conditions for matter to survive initial annihilation, known since as the Sakharov conditions.



A Feynman diagram showing the annihilation of an electron and a positron (antielectron), creating a photon that later decays into a new electron-positron pair.

Condition	Description	Significance
Baryon number violation	The universe must permit processes creating more baryons than antibaryons.	Without this, no net matter can exist.
C and CP symmetry violation	The laws of physics must treat matter and antimatter differently.	This is the source of the 10^{-9} asymmetry.
Departure from thermal equilibrium	The process must occur outside equilibrium conditions.	Equilibrium would erase any asymmetry as fast as it formed.

The third condition is particularly significant. The asymmetry could only survive in a system that wasn't in thermal equilibrium. It's precisely the dynamic, directional character of the early universe that allowed the tiny asymmetry to crystallise into the structure we observe today.

This carries a profound implication for systems theory: perfect equilibrium isn't generative. It's entropic. Structure, and the complexity that follows, requires an asymmetry operating in a dynamic system. But the asymmetry must be calibrated. Too small, nothing forms. Too large, the system destabilises before structure can emerge. The ratio 10^{-9} represents the viable range.

3. When Equilibrium Is Broken Beyond Its Frame

The Large Hadron Collider at CERN has provided an experimental answer to what happens when asymmetry is forced beyond its viable range.

When the LHC creates conditions approaching those of the early universe, matter enters a state called quark-gluon plasma. In this state, the structure of protons and neutrons dissolves.

Crucially: the return of quark-gluon plasma to structured matter is not instantaneous. It depends on the rate of cooling. Cool too fast, and the structures that reform are chaotic and unstable. Cool at the appropriate rhythm, and coherent, stable structures emerge.

"The pace of the transition determines the quality of what is reconstituted."

We propose that this physical observation contains a direct analogy for complex human systems, languages, technologies, families, organisations, civilisations, that have operated beyond their viable asymmetry for an extended period. The question isn't whether dissolution has begun. The data suggests it has. The question is whether cooling can be managed at a pace that permits the emergence of new, more stable structures.

$$s \stackrel{\text{def}}{=} \frac{\text{entropy}}{\text{volume}} = \frac{p + \rho}{T} = \frac{2\pi^2}{45} g_*(T) T^3$$

$$g_*(T) = \sum_{i=\text{bosons}} g_i \left(\frac{T_i}{T} \right)^3 + \frac{7}{8} \sum_{j=\text{fermions}} g_j \left(\frac{T_j}{T} \right)^3,$$

Therefore, the preferred asymmetry parameter uses the entropy density, because the entropy density of the universe remained reasonably constant throughout most of its evolution.

Part II - The Diagnosis

4. A More Honest Way to Measure Time

The standard unit of time, the year, is a human convention, calibrated to a planet's rotation. It tells us nothing about the actual density of events, exchanges, computations, and interactions that constitute the lived experience of a civilisation.

A more honest unit would be occurrence density: the number of distinct significant events per second at civilisational level. In this framework, time is not a neutral container. It is a function of complexity.

Period	Key Development	Est. Occurrence Density	Log Factor
1900	Telegraph, post, no electronic computation	$\sim 10^{15}$ events/s	0
1945	First electronic computers (ENIAC)	$\sim 10^{16}$	1
1971	Microprocessor (Intel 4004)	$\sim 10^{18}$	3
1991	World Wide Web (public internet)	$\sim 10^{20}$	5
2007	Smartphone — mobile computing at scale	$\sim 10^{22}$	7
2015	Cloud, IoT, social networks at global scale	$\sim 10^{24}$	9
2022	Generative AI — LLMs at scale	$\sim 10^{27}$	12
2025	AI agents, multimodal systems	$\sim 10^{29+}$	14+

The ratio between 1900 and today: somewhere between 10^{12} and 10^{14} . One trillion to one hundred trillion times denser in terms of significant occurrences per second.

"We aren't experiencing acceleration. We are experiencing the perceptual consequences of navigating an exponential reality with linear instruments."

5. The Uncomfortable Arithmetic

If 10^{-9} is the viable asymmetry, the ratio of growth at which existence has proven sustainable, we can ask a question that has never been formally posed in economic or governance discourse:

Has human economic growth been aligned with the pace the universe itself has demonstrated as viable?

Global GDP has grown from approximately \$2 trillion in 1900 to approximately \$110 trillion today, a factor of roughly 55x in measured monetary value. Seemingly modest. But monetary GDP isn't a measure of value creation. It's a measure of what has been converted into exchangeable form. It doesn't account for what was consumed in the process: soil, aquifers, atmospheric stability, biodiversity.

Indicator	1900	2025	Factor
Global GDP (constant \$)	\$2 Tn	\$110 Tn	55x
World population	1.6 Bn	8.2 Bn	5x
CO2 concentration (ppm)	296	423	1.4x
Wild vertebrate populations	Baseline	-70% 3-5 planet equiv.	n/a
Estimated natural capital consumed	—		n/a

Sources: World Bank; IPCC Sixth Assessment Report (2021); WWF Living Planet Report (2022); FAO Global Soil Status Report; UN Water (2023).

*"We did not grow at 55x. **We liquidated at a far higher multiple and called the proceeds of that liquidation growth.**"*

6. We Are Already in an Entropic Phase

By the standards of the viable asymmetry, and across multiple convergent indicators, human civilisation has entered what the physics of the LHC would recognise as an entropic phase: a period in which accumulated excess beyond the 10^{-9} ratio resolves through the dissolution of organised structures.

Domain	Observable Indicators of Entropic Dissolution
Ecological systems	Sixth mass extinction confirmed by IPBES (2019). Collapse of pollinator populations. Accelerating ocean acidification.
Social cohesion	Trust in institutions at historic lows across OECD nations (Edelman Trust Barometer, 2024). Loneliness epidemic recognised by WHO.
Cognitive systems	Degradation of sustained attention capacity. Burnout as a mass condition. Meaning deficits in professional environments.
Economic structures	Wealth concentration at 1929 levels. Debt/GDP ratios structurally unsustainable in most G20 nations.
Family systems	70% of intergenerational wealth transfers fail within two generations (FBN/IMD, 2024). Governance breakdown at succession.

It is important to be precise about what the entropic phase implies. In LHC physics, quark-gluon plasma isn't a terminal state. It's a transition. Energy is conserved. What dissolves is the particular configuration of organised structure. New structures can and do emerge but their quality depends entirely on the pace of cooling.

Part III - The Framework

7. The 10⁻⁹ Benchmark for Organisations

The 10⁻⁹ framework, applied at the organisational level, proposes a method for evaluating whether a given structure, a family office, an enterprise, a capital allocation strategy, a governance system, is operating within or beyond the viable asymmetry for its context.

Question	What it measures	Diagnostic signal
What is our growth rate relative to the occurrence density of our sector?	Whether growth follows environmental complexity or outpaces it.	Growth significantly exceeding complexity = extraction signal.
What capital, natural, human, attentional, relational, are we consuming that appears in no balance sheet?	The true extraction ratio, accounting for non-financial capital.	Large gap between financial growth and non-financial depletion = liquidation pattern.
Is our trajectory generative or extractive at the relevant timescale?	Whether the organisation creates conditions for future coherence, or consumes them.	Inability to answer this question honestly is itself a diagnostic signal.

What distinguishes this framework from conventional sustainability assessments is its benchmark. Most ESG frameworks measure performance against sector averages or regulatory minimums. The 10⁻⁹ benchmark measures performance against the physics of viable existence. It is not ideological. It is not political. It is derived from the initial conditions of the universe.

8. The Eight Domains of Coherent Stewardship

The 10⁻⁹ benchmark can't be applied to a portfolio in isolation. Research on intergenerational wealth transfer failure identifies the source of collapse not in financial management, but in the broader system of the steward's life.

Domain	Focus	Entropic Risk if Misaligned
01 · Identity & Mission	Alignment, purpose, decisional clarity	Decisions guided by identity confusion
02 · Consciousness	Inner integration, epistemic sovereignty	Reactive governance; inability to hold complexity
03 · Body & Mind	Emotional regulation, health, somatic intelligence	Cognitive noise at high-stakes decision moments
04 · Relations	Family dynamics, intergenerational coherence	Conflict, disengagement, rupture at succession
05 · Resources	Capital, time, energy, capacity for action	Invisible extraction patterns invisible to the steward
06 · Contribution	Leadership, value creation, societal responsibility	Legacy reduced to asset management; meaning deficit
07 · Legacy & Impact	Family governance, philanthropy, NextGen development	70% transfer failure rate; generational discontinuity
08 · Nature	Relationship to land, regenerative capacity, ecological interdependence	Blind allocation to natural capital depletion

9. Quantum Coherence as Practice

The theoretical framework outlined above would remain abstract without a corresponding practice, a method by which individual stewards can actually experience the difference between operating above and within the viable asymmetry, and develop the capacity to recognise and correct misalignment in real time.

This is the function of Quantum Coherence: a structured protocol for deliberately reducing inner speed and realigning with the fundamental rhythm described by the 10^{-9} framework. The method draws on a set of contemplative and somatic practices that significantly predate the present moment, traditions which have, in various forms, understood the relationship between the rhythm of individual attention and the quality of decisions made from that attention.

The specific insight that Quantum Coherence brings to this ancestral observation is precision: rather than describing the benefits of slowing down in qualitative terms, it anchors the practice in the physical constant.

The target isn't a subjective feeling of calm. It's a measurable reduction in the gap between the individual's operational pace and the viable asymmetry of the universe.

Documented effects among individuals who have followed this protocol include: a marked reduction in reactive decision-making under complexity; an increased capacity to simultaneously hold multiple time horizons; improved quality of relational presence in high-stakes governance conversations; and a perceptible shift in the experience of time from compressed urgency toward what might be called operational depth.

9b. The Interstitial — The Space Between Occurrences

There is a dimension of this practice that deserves to be named separately, because it may constitute the most operationally relevant mechanism of the framework for a steward confronting contemporary occurrence density.

In Zen traditions, reference is made to what some call **the zero space**: *the interstice between occurrences*, the interval between two stimuli, the space between two thoughts. This isn't emptiness. Contemporary neurology, notably research on the Default Mode Network, shows that these states of attentive rest between stimuli are precisely the moments where the brain integrates complex information, reconciles contradictions, and produces its most coherent decisions.

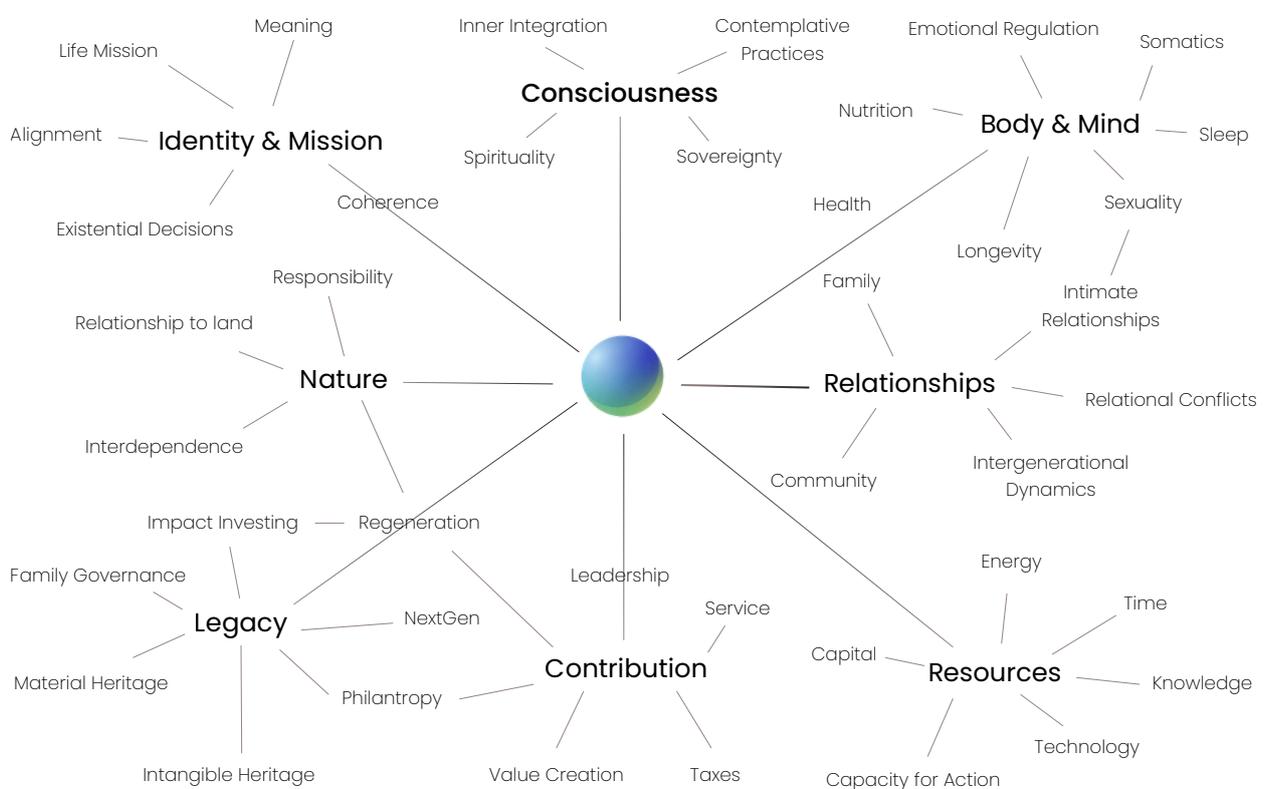
The repeated observation in Quantum Coherence practice is this: the interstitial possesses *a quality of suppleness*. By inhabiting it deliberately, by learning to dwell there rather than pass through it at speed, it becomes possible to modify one's subjective relationship to time itself. Not to slow external occurrences, but to expand the inner capacity to hold them without being overwhelmed.

"We are not becoming better drops. We are learning that our true nature was never 'drop-ness'." Kamlesh Patel, Heartfulness, 2025

Kamlesh Patel, in his September 2025 reflection on post-merger transformation, offers a metaphor that converges precisely with this observation: hydrogen and oxygen, separately volatile, fuse into water that nourishes all life.

And water no longer remembers being hydrogen. For a steward, inhabiting the interstitial isn't a stress management technique. It's the learning of a different nature, one that can hold complexity without being defined by it.

Applied to governance: the quality of a high-stakes decisions: transmission, long-horizon capital allocation, arbitration between generations, isn't determined by the volume of information processed. It's determined by the quality of the space from which that decision is made. The interstitial is that space. Developing it isn't a contemplative luxury, it's the most strategically significant cognitive infrastructure available to a steward in a period of transition.



"You are not a drop in the ocean. You are the entire ocean in a drop."
Jalāl ad-Dīn Muhammad Rūmī, 13th century Sufi poet

Part IV - The Response

10. The Cooling Rhythm

The LHC observation on quark-gluon plasma cooling contains the most operationally useful insight of this entire framework: the quality of structures that emerge from an entropic phase depends on the rate of cooling. Too fast, chaos. Too slow, dissolution continues indefinitely. The viable range is narrow.

For human systems in the current entropic phase, this translates into a specific challenge: the pressure to respond to dissolution through acceleration, grow faster, restructure more aggressively, adopt new technologies at maximum velocity, is precisely the pattern that produces chaotic and unstable reconsolidation.

"The entropic phase is not the problem. It's the process. The problem would be to attempt to rebuild former structures at increased speed, or to allow dissolution to continue without intention."

For family offices and long-horizon wealth management structures specifically, this carries a precise practical implication. The families that will best navigate the current transition won't be those that adopt AI fastest, nor those that restructure most aggressively. They will be those whose can think clearly under acceleration, who have reduced cognitive and relational noise at the point of governance to a level that allows decisions to emerge from clarity rather than pressure.

This isn't a soft skill. It's the primary structural advantage available to long-horizon capital in the current environment. And it's almost entirely unaddressed by the existing infrastructure of wealth management.

11. The Patient Money Advantage

There is a persistent misreading of the 10⁻⁹ benchmark: that it counsels restraint, moderation, conservative growth. It does not.

It counsels alignment.

The universe didn't grow slowly. It grew for 13.8 billion years without interruption, compounding at a rate that produced everything from a single asymmetry of one part in a billion. That is not conservative. That is the most extraordinary growth curve in observable history.

The distinction isn't between fast and slow. It's between growth that consumes its own conditions and growth that regenerates them.

Family offices and NextGen stewards are uniquely positioned to make this distinction operative. Unconstrained by quarterly reporting cycles, by institutional mandates, by the performance metrics of industrial capital, they are structurally capable of the one thing that aligns with the physics: holding a position long enough for coherence to compound.

Indie Johar put it plainly: institutional capital is bounded into an old worldview. Family offices can take a different risk profile. What he left unnamed is the benchmark against which that different risk profile should be calibrated.

10^{-9} is that benchmark.

Patient money isn't the alternative to high performance. Aligned with the rhythm of the universe, it's the only capital strategy that doesn't eventually pay the full cost of its own acceleration.

The soil enriched artificially produces more, until it produces nothing. The relationship accelerated past its natural rhythm intensifies, until it collapses. The portfolio optimized against quarterly extraction grows, until the system it extracted from can no longer support it.

The NextGen steward who understands this doesn't manage a portfolio. They steward a compound.

And compounding, at 10^{-9} , has 13.8 billion years of proof of concept.

12. CURANS: Infrastructure for the Transition

CURANS exists as a direct response to the gap identified above.

It's the operating system for sustainable governance, the cognitive infrastructure that allows stewards of long-horizon capital to make decisions from clarity rather than noise, and to navigate the current entropic phase with the coherence the transition requires.

Pillar	Description
Zero-Knowledge Architecture	All data processed within sovereign Swiss infrastructure. No third-party exposure. Epistemic restraint by design.
Eight-Domain Integration	CURANS maps the full landscape of the steward's life, not just the portfolio. Reduces cognitive noise at source.
AI-Mediated Reflective Dialogue	Structured conversation protocols that support clarity without creating dependency. AI as a clean mirror, not as an advisor.
Quantum Coherence Protocol	Individual practice layer for stewards requiring direct experiential recalibration toward the viable asymmetry.
Founding Circle	Peer-validation structure among pioneer families who use the product and constitute the first distribution network.
UCLouvain ICTEAM Partnership	Academic and technical grounding in precision systems theory, ensuring the architecture reflects the rigour the framework demands.

The market context is unambiguous. \$84 trillion transfers to the next generation by 2045. Historically 70% of those transfers fail, not for lack of financial engineering, but for lack of the human infrastructure to support them. Cognitive and emotional noise at the point of governance is where most family wealth decisions derail. Not for lack of advisors, but for lack of clarity.

13. An Invitation

This framework doesn't conclude. It opens.

The 10⁻⁹ benchmark isn't a prescription.

It's a mirror held up to any structure that wishes to know whether it is operating within or beyond the conditions of its own viability.

Those who recognize themselves in this document are not its audience.

They are its co-authors.

The next version of this hypothesis will be written by those who test it, in their governance decisions, in their capital allocation, in the quality of the space from which they make their most consequential choices.

One part in a billion was exactly enough. It still is.

Appendix

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This manifesto was born from an encounter between contemplative practices and scientific rigour. It's offered not as a conclusion but as a working hypothesis to those who govern structures with long horizons, to those who sense that the current instruments are reading something other than what they claim to measure, and to those willing to sit with a number that's almost nothing, and ask what it might mean that it was, nevertheless, exactly enough.

This document was developed in collaboration with Claude Sonnet 4.6 (Anthropic) as a thinking and writing partner. The observations, practices, and underlying thesis are the author's own. The AI assisted in structuring, articulating, and refining the argument.

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10^{-9} . One part in a billion.
That's what 13.8 billion years
looks like from the inside.