



# Life-Coherent Attention

*and the Worlds We Bring Forth*

ACADEMIC WHITE PAPER



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# Life-Coherent Attention and the Worlds We Bring Forth

A Maturana-Informed, Wilber-Integrated, Coherence-Physiology Synthesis of  
Languaging, Viability, Mathematical Resonance, Artificial Intelligence, and  
Transformative Possible Doings

**Academic White Paper**

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The author also acknowledges Ken Wilber, whose integral framework and recent articulation of five irreducible paths of transformation — Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up — help prevent any single form of wholeness from becoming totalizing. This paper draws on that safeguard to distinguish life-coherent wholeness from imposed unity.

The author acknowledges the scientific and theoretical contributions of Dr. Anirban Bandyopadhyay, whose work on resonance, microtubules, nested clocks, triplet symmetries, Hinductor architectures, vortex computation, and the Self-Operating Mathematical Universe has opened a frontier domain for thinking about mathematical and biophysical coherence.

The author further acknowledges the developers of the Transformer architecture, whose work on attention-based models made possible new forms of large-scale language coordination, synthesis, and dialogical participation. This paper reflects critically on the significance of computational attention while distinguishing it from care, wisdom, love, and life-coherent responsibility.

Finally, this paper emerges from the larger evolving Life-Coherence project: an ongoing inquiry into medicine, physiology, law, politics, economics, spirituality, technology, ecology, and civilization in service of preserving, restoring, and expanding life-capacity.

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## AI Assistance and Responsibility Statement

This manuscript was developed with assistance from ChatGPT, GPT-5.5 Thinking, an AI language model developed by OpenAI. ChatGPT was used as a dialogical research, drafting, synthesis, and editorial assistant. Its functions included helping to organize concepts, compare frameworks, generate draft prose, refine distinctions, propose section architecture, develop figure concepts, and support the transformation of prior conversations into a coherent academic manuscript.

No AI system is listed as an author. The human author reviewed, directed, revised, and remains responsible for the manuscript's final content, interpretation, accuracy, ethical framing, citations, and publication decisions.

Because this paper explicitly concerns languaging, attention, artificial intelligence, and life-coherent world-bringing, the use of AI assistance is not incidental to the project. It is part of the phenomenon under reflection. The paper therefore treats AI-assisted inquiry neither as neutral tool use nor as autonomous authorship, but as a new domain of human-machine languaging whose consequences must be examined through the criteria of viability, responsibility, evidence discipline, and care for living.

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## Preface: Why Life-Coherent Attention Now

This paper marks a turning point in the Life-Coherence project.

For some time, the inquiry has moved across many domains: medicine, physiology, consciousness, trauma, spirituality, law, finance, politics, artificial intelligence, ecology, and the knowledge commons. Each domain has generated its own distinctions. Medicine asked how healing might be understood as the restoration of life-capacity rather than the suppression of isolated symptoms. Coherence physiology asked how the organism might be understood as a living continuum rather than an assemblage of organs. The tri-field model asked how self-regulation depends on the alignment of form, state, and world. Life-coherent jurisprudence, politics, and finance asked whether institutions conserve or negate the conditions of living.

Yet as these inquiries accumulated, a deeper question began to appear.

The question was no longer only: What is the right framework?

It became: What manner of living do our frameworks conserve?

That question changes everything.

A framework may be elegant and still dominate. A theory may be coherent and still erase the living beings it claims to explain. A civilization may be internally organized and still destroy the ecological medium through which it persists. A medical system may be technically advanced and still fragment the patient. A spiritual vision may speak

of wholeness and still bypass trauma, development, embodiment, or responsibility. An artificial intelligence system may attend across immense symbolic fields and still lack care for consequences in living.

This paper therefore begins from a simple but demanding insight:

Attention is not all we need.

The technological revolution inaugurated by attention-based artificial intelligence has made possible unprecedented forms of language coordination, synthesis, search, pattern recognition, and generative response. But attention alone is not love. Attention alone is not wisdom. Attention alone is not responsibility. Attention alone is not life-coherence.

The decisive question is: What kind of attention conserves living?

Life-coherent attention is attention disciplined by viability. It asks what is being conserved, what is being neglected, what worlds are being brought forth, what distinctions are becoming possible, what suffering is being stabilized, what forms of repair are being invited, and whether the living other remains legitimate in coexistence.

This paper develops life-coherent attention as a new integrative discipline. It draws from Maturana's observer-centered biology of cognition and love, Wilber's five paths of radical wholeness, coherence physiology, embodied self-regulation, mathematical and resonant domains of formal coherence, and Transformer-based computational attention. Its purpose is not to build a final theory of everything. Its purpose is to conserve a manner of inquiry in which better worlds can keep appearing without negating the living beings for whom the inquiry exists. (Maturana, 1987, 1988; Wilber, 2024; Wilber & Holecek, 2024; Sahely, 2026b; Vaswani et al., 2017).

The guiding question is:

What manner of living is being conserved here, and does that conservation conserve or negate the conditions of living?

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## Abstract

This white paper develops the concept of life-coherent attention as a new integrative discipline for understanding how distinctions, conversations, technologies, bodies, institutions, and civilizations bring forth worlds that either conserve or negate the conditions of living. It arises from the convergence of several prior streams in the Life-Coherence project: Humberto Maturana's biology of cognition, languaging, structural coupling, and biology of love; Ken Wilber's five irreducible paths of transformation; coherence physiology as the embodied substrate of life-coherent medicine; tri-field dynamics of embodied self-regulation; mathematical and resonant models of coherence; and the attention-based architecture of contemporary artificial intelligence.

The paper argues that attention is not merely a cognitive act, computational mechanism, or therapeutic skill. Attention is a world-bringing operation. What an observer distinguishes, attends to, and conserves shapes the domain of possible doings. In artificial intelligence, attention enables large-scale relational patterning across language. In human living, however, attention must be disciplined by love, viability, developmental maturity, evidence, embodiment, shadow awareness, and responsibility for consequences.

The paper proposes that the Life-Coherence project is best understood not as a single totalizing framework, but as an evolving conversational ecology of distinctions ordered toward the preservation, restoration, and expansion of life-capacity. Maturana provides the observer, distinction, languaging, structural coupling, and love-based ethical

ground. Wilber provides a five-path safeguard against reducing wholeness to any one domain: Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up. Coherence physiology grounds the inquiry in the living organism as a nested continuum of substrate, interface, force-flow, exchange, boundary, energy, and recovery. Mathematical and resonant domains offer formal discipline without final metaphysical authority. Artificial intelligence reveals both the power and danger of attention detached from care.

The central claim is that life-coherent attention must ask, in every domain: What manner of living is being conserved here, and does it conserve or negate the conditions of living? The paper concludes that the work is not to construct a final map of life-coherence, but to conserve a manner of inquiry in which more adequate, humane, embodied, and responsible maps can continue to appear.

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## Keywords

life-coherent attention; life-coherence; Humberto Maturana; Ken Wilber; languaging; observer; distinction; structural coupling; biology of love; viability grammar; coherence physiology; tri-field regulation; salugenesis; defensive lock-in; artificial intelligence; Transformer; attention mechanism; mathematical coherence; resonance; SOMU; Fano plane; octonions; triality; radical wholeness; Waking Up; Growing Up; Opening Up; Cleaning Up; Showing Up; knowledge commons; possible doings; world-bringing.

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## Executive Summary

This white paper proposes life-coherent attention as a keystone concept for the next phase of the Life-Coherence project.

The inquiry begins from a recognition that the project has generated many powerful distinctions across domains: life-coherent medicine, coherence physiology, salugenesis, defensive lock-in, tri-field regulation, life-coherent law, life-coherent politics, life-coherent finance, life-coherent spirituality, and the Knowledge Commons. Yet the accumulation of frameworks creates a new responsibility. Each distinction brings forth a world. Each framework conserves a manner of living. The question is therefore not only whether a framework is coherent, elegant, useful, or integrative, but whether it conserves or negates the conditions of living.

The paper draws its methodological ground from Humberto Maturana. Maturana's central insight is that everything said is said by an observer. The observer does not stand outside the world, naming it from nowhere. The observer participates in bringing forth a world through distinctions, explanations, conversations, and conserved patterns of living. Human beings live in languaging: recursive coordination of doings through which worlds, identities, institutions, and cultures are conserved. This means that a life-coherent inquiry must examine not only what it says, but what manner of living is conserved by saying it. (Maturana, 1987, 1988; Maturana & Varela, 1980, 1992).

From this ground, the paper develops life-coherent attention as attention disciplined by viability. Attention is not treated merely as focus, awareness, or computational weighting. It is understood as a world-bringing operation that selects relevance, shapes perception, organizes action, and defines what becomes possible. In contemporary artificial intelligence, the Transformer architecture demonstrates the power of attention as a computational mechanism for relational patterning. But computational attention alone is not care, love, wisdom, responsibility, or ethical participation. It can serve learning or manipulation, healing or extraction, synthesis or domination. Life-coherent attention therefore asks what kind of attention conserves living.

Ken Wilber's five paths of transformation provide a crucial safeguard. Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up each disclose a distinct kind of wholeness. No one of them can substitute for the others. A person may awaken spiritually while remaining developmentally immature. A culture may become cognitively complex while failing to integrate shadow. A movement may show up politically while lacking contemplative depth or relational humility. A medical system may open up technically while failing to clean up its institutional biases. A coherence framework may speak of wholeness while becoming totalizing. Wilber's five paths therefore become five disciplines of life-coherent attention. (Wilber, 2024; Wilber & Holecek, 2024).

Coherence physiology grounds the inquiry in the living body. The organism is not an assemblage of organs but a living continuum of material substrate, hydrated interfaces, force-flow dynamics, exchange intelligence, boundary intelligence, energetic governance, and recovery trajectory. Health is not static stability but coordinated adaptability. Chronic illness can be understood as defensive lock-in: a state in which protective responses become mutually reinforcing and difficult to exit. Healing is salugenesis: restoration of the conditions through which the organism can resume adaptive self-repair. (Sahely, 2026b).

The tri-field model deepens this clinical and embodied perspective. Human self-regulation depends on the alignment of proprioceptive form, interoceptive state, and exteroceptive world. The person experiences selfhood as the living coherence of "this body, in this state, in this world." Trauma narrows possible doings and fixes survival coherence beyond its original usefulness. Repair must often proceed through Form → State → World → Meaning, because meaning cannot be sustainably transformed while the organism remains dysregulated, unsupported, or unsafe. (Sahely, 2025b).

The paper then enters the mathematical and resonant domain. Fano planes, octonions, triality, exceptional structures, nested clocks, prime-coded resonance, and Bandyopadhyay's Self-Operating Mathematical Universe are treated as formal-symbolic and frontier scientific resources for thinking about relational closure, irreducible threefoldness, non-associativity, symmetry, resonance, and transformational constraint. The paper does not claim that life, consciousness, or civilization are literally reducible to these mathematical forms. Instead, it proposes that mathematics can serve as a third look: a domain that disciplines relational coherence after living and observing have brought forth the concern. (Baez, 2002; Conway & Smith, 2003; Manogue & Dray, 2015; Springer & Veldkamp, 2000; Sahely, 2025a).

The central integrative proposal is that life-coherent inquiry requires a triple movement:

Living provides the concern.  
Observing brings forth the distinctions.  
Formalizing disciplines the relations.  
Love judges the conservation.

The Knowledge Commons becomes the practical cultural form of this inquiry. It is not merely an archive of writings, podcasts, figures, and videos. It is a conversational ecology of distinctions where different domains of wholeness can meet without being collapsed into one another. Medicine, spirituality, law, finance, politics, physiology, artificial intelligence, mathematics, ecology, and story each remain distinct, yet enter relation through the guiding question of life-coherence.

The paper concludes that the task is not to produce the final map of life-coherence. The task is to conserve a manner of inquiry in which better maps can continue to appear without negating the living beings for whom the maps are made. Life-coherent attention is therefore not a theory alone. It is a practice of world-bringing in service of possible living.

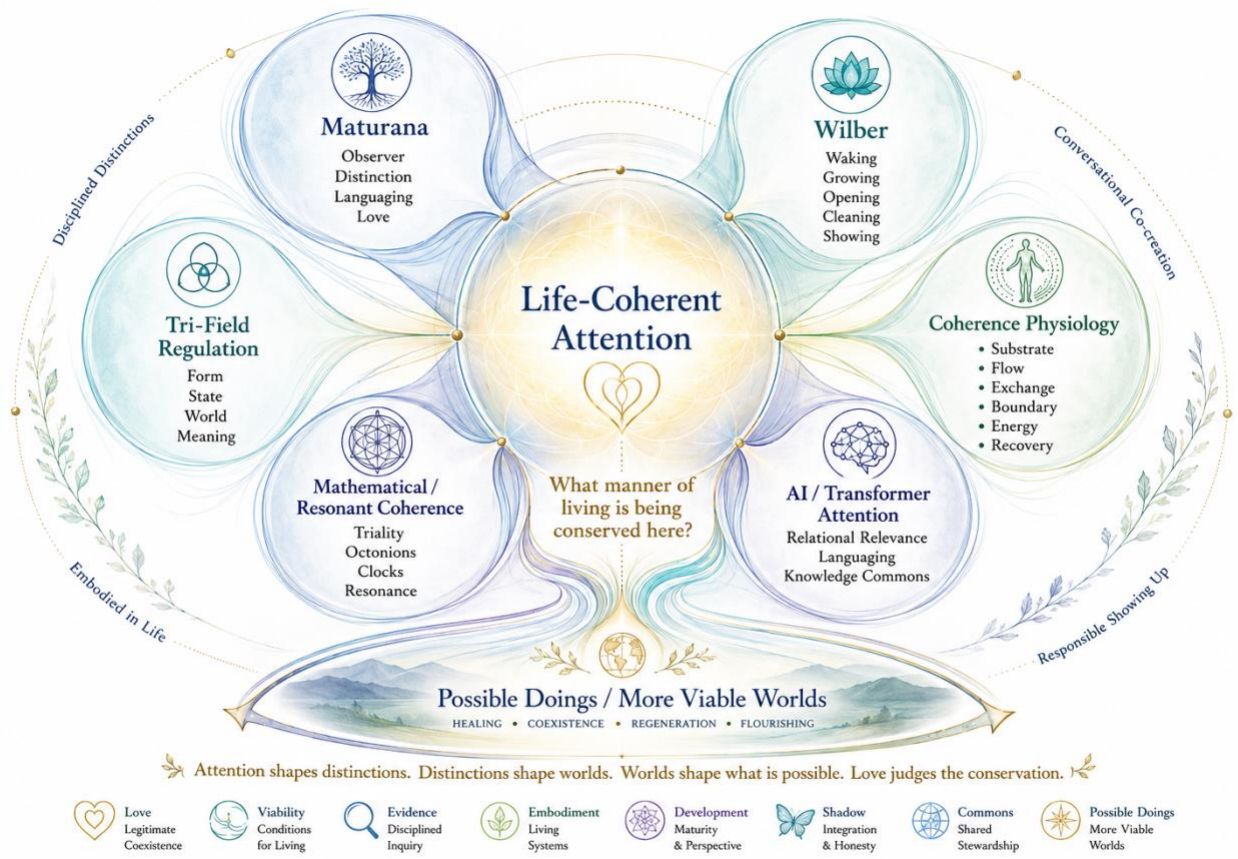


Figure 1. Life-Coherent Attention: The Whole Architecture

# Methodological Note: Evidence Gradient, Domain Discipline, and Integrative Humility

This white paper integrates domains with very different evidentiary status, explanatory methods, and criteria of validity. For that reason, it proceeds with an explicit commitment to evidence gradient, domain discipline, and integrative humility.

Table 1. Evidence Gradient and Domain Status

Category	Meaning	Examples in This Paper	Required Discipline
Established / Strongly Supported	Well-grounded in empirical, clinical, or technical literature.	Mechanotransduction, microvascular regulation, autonomic regulation, sleep-recovery biology, Transformer architecture.	Cite accurately; avoid exaggeration.
Integrative Synthesis	Concepts that organize convergent findings across domains.	Coherence physiology, defensive lock-in, salugenesis, life-coherent attention.	Present as synthesis, not settled fact.
Clinical Heuristic	Practical pattern useful for assessment or care but requiring clinical judgment.	Form -> State -> World -> Meaning; field restoration; margin restoration.	Avoid rigid protocol claims.
Formal-Symbolic Analogy	Mathematical or symbolic structures used to discipline thought.	Fano plane, octonions, triality, exceptional ladder.	Do not confuse analogy with proof.
Frontier Hypothesis	Speculative scientific claims that may guide inquiry but remain unsettled.	Microtubular quantum coherence, Hinductor-based computing, SOMU.	Name uncertainty clearly.
Metaphysical / Mythopoetic Orientation	Meaning-bearing cosmological or philosophical interpretation.	Coherence cosmology, prime-coded universe as participatory mythos.	Keep separate from empirical claims.
Practical Possible Doing	A next step that can be enacted in real life.	Better clinical summaries, Knowledge Commons organization, AI responsibility practices.	Test by viability and consequences.

Some claims discussed in this paper are strongly grounded in established research traditions. These include the biological importance of structural coupling, development, language, trauma, autonomic regulation, interoception, proprioception, microvascular exchange, mechanotransduction, mitochondrial stress signaling, sleep and recovery, and the technical architecture of Transformer-based attention.

Other claims are integrative in nature. These include life-coherent attention, coherence physiology, defensive lock-in, salugenesis, tri-field regulation, the Knowledge Commons as a conversational ecology, and the interpretation of social institutions as conserved networks of life-supporting or life-negating distinctions. These are not presented as settled empirical constructs in the narrow sense. They are synthesis concepts intended to organize convergent findings, guide inquiry, and generate more adequate possible doings.

A third group of claims is formal-symbolic. These include the use of Fano planes, octonions, triality, and exceptional mathematical structures as ways of disciplining thought about relational closure, non-associativity, threefoldness, and transformation. These mathematical forms may illuminate certain structural analogies, but they do not by themselves prove biological, psychological, social, or metaphysical claims.

A fourth group of claims is frontier or speculative. These include broader interpretations of prime-coded cosmology, nested clocks, triplet consciousness, microtubular quantum coherence, Hinductor architectures, vortex computation, and the Self-Operating Mathematical Universe. These claims are included because they open fertile domains of inquiry, but they should be handled with careful distinction between evidence, hypothesis, analogy, symbolic resonance, and metaphysical imagination.

The paper also maintains domain discipline. A distinction valid in one domain may not be valid in another. Mathematical elegance does not automatically establish biological truth. Biological plausibility does not automatically justify clinical practice. Clinical usefulness does not automatically validate metaphysical interpretation. Spiritual insight does not automatically replace developmental maturity. Artificial intelligence does not automatically possess care because it can manipulate language. Coherence does not automatically imply life-coherence.

Finally, this paper proceeds with integrative humility. It does not aim to master life from above. It does not seek a totalizing system that explains everything. Its purpose is to conserve a reflective, evidence-aware, love-disciplined, and viability-oriented manner of inquiry. Its central question remains recursive:

What manner of living does this very inquiry conserve?

Table 2. Foundational Sources and Their Contributions to Life-Coherent Attention

Source / Framework	Core Contribution	Life-Coherent Function
Humberto Maturana	Observer, distinction, structural coupling, languaging, conversation, culture, biology of love	Provides the epistemological and ethical ground: everything said is said by an observer, and every distinction brings forth a world.
Maturana-Informed Viability Grammar	Conservation, constraint, margin, disturbance, present structure, regulation, relevance, possible doings	Provides the diagnostic grammar for asking what manner of living is being conserved.
Ken Wilber	Waking Up, Growing Up, Opening Up, Cleaning Up, Showing Up; holons; wholeness and partness	Provides the fivefold developmental and transformational safeguard against reducing wholeness to one path.
Coherence Physiology	Material substrate, hydrated interfaces, force-flow, exchange, boundary, energy, recovery	Grounds life-coherence in the living organism as an embodied continuum.
Tri-Field Regulation	Proprioceptive form, interoceptive state, exteroceptive world, meaning	Provides the embodied operator of self-regulation and repair.
Salugenesis	Restoration of the conditions for adaptive self-repair	Provides the positive clinical and biological movement out of defensive lock-in.
Bandyopadhyay / SOMU	Prime-coded resonance, nested clocks, triplet symmetry, microtubules, Hinductors, vortex computation	Opens a frontier mathematical-resonant domain for exploring coherence cosmology and non-digital intelligence.
Transformer / Attention Architecture	Multi-head self-attention, relational relevance, long-range dependency modeling	Provides the technological hinge for AI-assisted languaging and large-scale synthesis.
Life-Coherence Project	Life-capacity, life-ground, civil commons, life-serving institutions, Knowledge Commons	Provides the ethical and civilizational criterion: does this conserve or negate living?

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# 1. Introduction: From Frameworks to Manner of Living

The Life-Coherence project began as an attempt to name what modern systems often forget: that living beings are not objects, resources, variables, consumers, patients, data points, legal abstractions, or economic inputs before they are living beings. They are participants in a shared field of life whose viability depends on biological, relational, cultural, ecological, and spiritual conditions that can be conserved or destroyed.

This concern has unfolded through many domains.

In medicine, it asked how clinical care might be reordered toward the preservation, restoration, and expansion of life-capacity. In physiology, it asked how the organism might be understood as a living continuum rather than an assemblage of organs. In trauma, it asked how survival coherence becomes fixed and how possible living can return. In law, it asked whether legal systems protect the life-ground or serve abstractions detached from living beings. In politics, it asked whether institutions conserve domination or partnership. In finance, it asked whether money remains in service of life or drifts into life-extraction. In spirituality, it asked how ultimate concern can support embodied, relational, and ecological repair rather than bypass the world.

Across all these inquiries, one word kept returning: coherence.

At first, coherence appeared as a needed correction to fragmentation. It helped name the missing wholeness in medicine, the missing life-ground in law, the missing relationality in politics, the missing embodied substrate in spirituality, and the missing ecological accountability in economics. Coherence became a way of asking how differentiated processes might align in service of living.

Yet coherence itself is not enough.

A domination system may be coherent. A surveillance apparatus may be coherent. A trauma pattern may be coherent. A financial extraction machine may be coherent. A rigid ideology may be coherent. A civilization can continue reproducing itself coherently while destroying the living medium through which it persists.

Therefore, the decisive distinction is not coherence alone.

The decisive distinction is life-coherent conservation.

Life-coherence asks what is being conserved, by whom, through what distinctions, in what relational domain, with what consequences for living. It does not ask only whether a system functions. It asks whether that functioning preserves or negates the conditions through which living beings can continue in dignity, reciprocity, repair, and legitimate coexistence.

This shift turns the inquiry back upon itself. If every framework brings forth a world, then the Life-Coherence project must ask what world it is bringing forth. Is it conserving humility or certainty? Love or control? Reflection or accusation? Embodied care or abstract totalization? Possible living or another refined form of domination?

This is where Maturana becomes indispensable.

Maturana teaches that everything said is said by an observer. Observing is not passive reception of an independent world already divided into ready-made objects. Observing involves distinction. To distinguish is to bring forth a domain in which some relations become visible, some doings become possible, and some realities become conserved. Human beings do this in languaging, in recursive coordination of doings, in conversation, in culture, and in the emotional domains that specify what actions are possible. (Maturana, 1987, 1988).

From this view, a theory is not merely a representation. It is a doing. A diagnosis is not merely a label. It is a world-bringing act. A policy is not merely an instrument. It conserves a manner of living. A technology is not merely a tool. It shapes attention, relevance, possibility, and relation. An artificial intelligence system is not merely a neutral processor of text. It participates in new domains of languaging whose consequences depend on the worlds they help bring forth.

This paper therefore asks: what kind of attention is worthy of life?

The question arises with special force because contemporary artificial intelligence has been transformed by attention-based architectures. The Transformer showed that attention mechanisms could replace recurrence and convolution in key sequence-processing tasks, allowing models to relate distant positions, learn complex dependencies, and generate coherent language at scale. This made possible a new technological domain of large-scale language coordination. (Vaswani et al., 2017).

But computational attention is not life-coherent attention.

Computational attention selects relevance within a formal architecture. Life-coherent attention asks what relevance is in service of. It asks whether the selected relation conserves life, negates life, hides suffering, amplifies domination, restores possibility, or opens a more adequate world. It asks whether what is being brought into focus is being held in love, evidence, developmental maturity, embodied care, and responsibility.

Wilber's recent articulation of five paths of transformation deepens this discipline. Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up are not interchangeable. Each path discloses a distinct kind of wholeness. The Life-Coherence project requires all five. It must wake up to depth, grow up into wider perspectives, open up to multiple intelligences, clean up its shadows and hidden dominations, and show up in responsible possible doings. (Wilber, 2024; Wilber & Holecek, 2024).

Without Waking Up, life-coherence may become merely managerial.  
Without Growing Up, it may become spiritually or politically immature.  
Without Opening Up, it may become narrow and mono-intelligent.  
Without Cleaning Up, it may become a refined defense against its own shadow.  
Without Showing Up, it may remain beautiful but ineffective.

The aim, then, is not to construct a single totalizing framework called life-coherence. The aim is to conserve a living inquiry capable of generating distinctions that restore possible living across domains while remaining accountable to the beings, bodies, communities, ecosystems, and futures affected by those distinctions.

This paper proceeds in that spirit.

It begins with Maturana's observer and the world-bringing power of distinctions. It then reflects on attention as a technological, epistemic, and ethical phenomenon. It integrates Wilber's five paths as disciplines of wholeness without totalization. It grounds the inquiry in coherence physiology and tri-field regulation. It explores mathematical and resonant domains as formal disciplines of relation. It reflects on artificial intelligence as a participant in contemporary languaging. Finally, it proposes life-coherent attention as a practical and philosophical discipline for medicine, knowledge commons work, institutional design, technology, ecological repair, and civilization.

The guiding question will remain simple:

What manner of living is being conserved here?

And the more demanding follow-up:

Does that conservation conserve or negate the conditions of living?

## 2. Everything Said Is Said in a Domain of Languaging

The Life-Coherence project must begin where every human inquiry begins: not with a world already divided into objects, systems, facts, mechanisms, and values, but with an observer making distinctions in the praxis of living.

This is the methodological gift of Humberto Maturana. He does not allow inquiry to begin from nowhere. He asks the observer to notice that explanation itself is a living operation. We do not first stand outside the world and then describe it. We live, distinguish, coordinate, converse, explain, and in doing so bring forth worlds of relevance, relation, and possible action. (Maturana, 1987, 1988).

To say that everything said is said by an observer is not to collapse reality into private opinion. Nor is it to deny science, evidence, rigor, or shared worlds. It is to recognize that every explanation takes place in a domain of operations, within a history of distinctions, among observers who accept or reject explanations according to criteria of validity. This places responsibility at the center of inquiry. It asks not merely whether a statement is internally coherent, but what domain it belongs to, what operations make it valid, what consequences follow from accepting it, and what manner of living it conserves.

Maturana's insight is especially important for integrative work. The more ambitious a synthesis becomes, the greater the temptation to forget the observer. One may begin to speak as if the synthesis itself were the world, as if the map had escaped the conditions of map-making, as if coherence were a property seen from outside living rather than a distinction made within living.

A life-coherent synthesis cannot take that path.

It must remain reflexive. It must ask: Who is making this distinction? In what domain? With what concern? What becomes visible through this distinction? What becomes invisible? What possibilities open? What possibilities close? What relations are conserved? What beings are legitimized, and what beings are subtly negated?

This reflexive discipline does not weaken inquiry. It strengthens it. It protects the inquiry from becoming imperial. It prevents medicine from becoming reductionism, spirituality from becoming bypass, mathematics from becoming metaphysical overreach, law from becoming abstraction, finance from becoming life-detached calculation, and artificial intelligence from becoming disembodied symbolic acceleration without responsibility.

### 2.1 Distinction as World-Bringing

A distinction is never merely a label. To distinguish is to bring forth a domain in which certain relations can be perceived, coordinated, and acted upon.

When medicine distinguishes "the patient" as an organ system, a certain world appears: tests, pathways, lesions, receptors, procedures, and interventions. This world is not false. It has saved lives. But it becomes life-incoherent

when it forgets the patient as a living whole whose symptoms may arise from relational, metabolic, ecological, traumatic, and social fields that no single organ category can contain.

When economics distinguishes “growth” as increased production and consumption, a world appears: markets, productivity, investment, debt, extraction, and expansion. This world can coordinate activity at scale. But it becomes life-incoherent when it cannot distinguish whether growth expands life-capacity or consumes the living ground.

When law distinguishes “rights,” “property,” “personhood,” or “standing,” worlds of protection and exclusion appear. Law may bring forth justice or it may conserve abstraction over life.

When artificial intelligence distinguishes relevance statistically, it may bring forth patterns invisible to individual human attention. But without life-coherent discipline, it may also amplify inherited biases, accelerate manipulation, flatten context, or simulate understanding without care.

Thus, distinctions are not innocent. They are world-bringing operations.

The Life-Coherence project is itself a distinction-making practice. It distinguishes life-capacity, life-ground, coherence physiology, defensive lock-in, salugenesis, tri-field regulation, life-coherent law, life-coherent finance, life-coherent spirituality, life-coherent attention, and the Knowledge Commons. Each distinction opens a world of possible doings. Each also carries risk. Each must therefore be asked what manner of living it conserves.



Figure 2. The Observer, Distinction, and World-Bringing Loop

## 2.2 Linguaging as Coordination of Coordination

For Maturana, human beings do not merely use language to describe a pre-given world. Human beings live in languaging. Linguaging is recursive coordination of doings. Through languaging, we coordinate actions, coordinate the coordination of actions, and bring forth shared domains of meaning. (Maturana & Varela, 1980, 1992; Maturana Romesín & Verden-Zöller, 2008).

This matters because the Life-Coherence project has unfolded precisely in such a domain. It has not developed as a static theory delivered in one piece. It has emerged through conversation, correction, resonance, disappointment, refinement, memory, reorientation, and renewed distinction. Each paper has conserved something and opened something. Each correction has shaped the drift.

A recurrent pattern has appeared. A domain becomes fragmented. A life-coherent distinction is introduced. The distinction opens a more relational view. That view then risks becoming too broad, too abstract, or too totalizing. A new safeguard appears: evidence gradient, domain discipline, love, developmental adequacy, embodied repair, non-totalizing wholeness, or possible doings. The inquiry then becomes more mature.

This is languaging as living drift.

It is not merely content production. It is the conservation of a manner of inquiry. The conversation itself has become a medium in which distinctions evolve, become tested, are corrected by concern, and are reordered toward life.

This helps explain why artificial intelligence occupies an unusual place in the present paper. A large language model does not live biologically as a human observer lives. It does not suffer, love, heal, or conserve itself as an organism. Yet it can participate in languaging as a technological participant in the coordination of distinctions. It can help retrieve relations, hold patterns, generate formulations, compare domains, and reflect back possible structures. It can assist in the coordination of the coordination of inquiry.

But that participation must remain disciplined. An AI language model can amplify attention, but it cannot replace responsibility. It can help formulate distinctions, but it cannot guarantee their life-coherence. It can support possible doings, but human beings remain answerable for the worlds that are brought forth through its use.

## 2.3 Conversation as the Human Medium of World-Conservation

Conversation is not merely exchange of information. It is the braiding of languaging and emotioning. It conserves worlds.

A family conserves a world through its conversations. A clinic conserves a world through its consultations, diagnoses, referrals, and silences. A school conserves a world through what it rewards, what it ignores, what it calls intelligence, and how it treats children. A profession conserves a world through its standards, journals, hierarchies, and exclusions. A civilization conserves a world through its media, markets, laws, rituals, technologies, and educational systems.

To ask what a culture is conserving is to ask what conversations recur.

This is why the Life-Knowledge Commons matters. It is not simply a repository of documents. It is an attempt to conserve a different network of conversations: conversations in which medicine remembers the living whole, economics remembers life-capacity, law remembers the life-ground, politics remembers care, spirituality remembers embodiment, science remembers humility, and technology remembers responsibility.

The Knowledge Commons is therefore a world-conserving practice. It asks whether a different cultural memory can be built: one that does not organize knowledge around competition, monetization, disciplinary fragmentation, or professional enclosure, but around shared life-serving intelligibility.

Yet this too must remain reflexive. A commons can become another archive of abstractions. A framework can become an identity. A synthesis can become a new orthodoxy. The only safeguard is recursive inquiry: what manner of living is this conversation conserving now?

## 2.4 Love as the Ground of Life-Coherent Distinction

Maturana's biology of love gives the Life-Coherence project its ethical center. (Maturana Romesín & Verden-Zöllner, 2008).

Love, in this sense, is not romance, sentiment, approval, preference, or softness. Love is the relational domain in which another living being arises as legitimate in coexistence. It is the condition under which the other is not first reduced to use, threat, object, data, obstacle, inferior, pathology, consumer, or resource.

Without love, distinction becomes dangerous.

A diagnosis without love can become objectification.

A policy without love can become control.

A spiritual teaching without love can become superiority.

A mathematical formalism without love can become domination by elegance.

An AI system without love can become relevance without care.

A coherence framework without love can become totalization.

Love does not mean the absence of boundary, discernment, conflict, or judgment. It means that even in boundary, discernment, conflict, and judgment, the other does not cease to be legitimate as a living being.

This is the heart of life-coherent attention. It attends in a manner that does not erase the other. It distinguishes in a manner that does not reduce the other. It seeks coherence without demanding sameness. It seeks wholeness without swallowing the parts. It seeks transformation without humiliating the present structure from which transformation must arise.

The Life-Coherence project therefore cannot be judged only by the elegance of its diagrams, the breadth of its synthesis, or the originality of its distinctions. It must be judged by whether its distinctions conserve love, responsibility, and possible living.

## 3. The Viability Question

The central question of this paper is: (Sahely, 2026a).

What manner of living is being conserved here, and does that conservation conserve or negate the conditions of living?

This question is deceptively simple. It reorders the whole inquiry.

It shifts attention from things to relations, from objects to doings, from isolated mechanisms to conserved patterns, from abstract ideals to lived consequences, from survival to livability, from function to viability, from coherence to life-coherence.

A system may survive while conserving suffering.  
A person may function while conserving self-negation.  
A family may remain intact while conserving fear.  
A school may perform while conserving humiliation.  
A clinic may operate efficiently while conserving fragmentation.  
An economy may grow while conserving extraction.  
A state may maintain order while conserving domination.  
A technology may scale while conserving disembodiment.  
A civilization may persist while consuming its ecological medium.

The viability question asks us not to be deceived by persistence.

Living systems conserve themselves through change. But not every conservation is life-coherent. Some conserved patterns narrow possible living. Some conserve fear, rigidity, trauma, domination, dissociation, depletion, or ecological destruction. They may stabilize a system in the short term while degrading the conditions that make life livable.

Life-coherence therefore requires a diagnostic grammar.

## 3.1 Conservation

Conservation asks: What is being kept in place through the ongoing pattern of doings?

This is the first diagnostic distinction because systems often claim to be pursuing one thing while conserving another. A health system may claim to conserve health while conserving throughput, billing codes, specialist authority, or pharmaceutical dependency. A school may claim to conserve learning while conserving obedience, ranking, and fear of failure. A political system may claim to conserve democracy while conserving elite capture. A family may claim to conserve love while conserving silence around pain.

The conservation question interrupts the declared purpose and asks what actually recurs.

What is conserved in the body when symptoms persist?  
What is conserved in the clinic when patients are repeatedly dismissed?  
What is conserved in finance when debt grows faster than life-capacity?  
What is conserved in spirituality when awakening is separated from shadow?  
What is conserved in AI when engagement is optimized without care?

Conservation is not inherently good or bad. Life depends on conservation. The question is what is conserved and at what cost.

## 3.2 Constraint

Constraint asks: What must be respected for this manner of living to continue without collapse?

Constraints are not merely limitations. They are conditions of possibility. A cell requires membrane integrity. A body requires oxygen, water, nourishment, temperature regulation, sleep, movement, and repair. A child requires safety, touch, responsiveness, play, and recognition. A culture requires trust, language, memory, and shared meaning. An ecosystem requires regenerative cycles. A conversation requires enough love for the other to remain legitimate.

Life-incoherence often begins when constraints are denied. The body is pushed beyond recovery. The clinician ignores the patient's energy envelope. The economy ignores ecological limits. The institution ignores trust. The technology ignores attention fatigue. The spiritual aspirant ignores developmental and psychological constraints.

A life-coherent system does not treat constraints as enemies. It treats them as the grammar of viable freedom.

### 3.3 Margin

Margin asks: How much room remains for adaptive change?

A system without margin may still function, but it cannot heal. A person with no sleep margin, financial margin, emotional margin, metabolic margin, relational margin, ecological margin, or institutional margin lives near collapse. Small disturbances then become crises. Recovery cannot complete because all energy is spent on immediate maintenance.

Margin is therefore central to salugenesis. Healing requires space. Reflection requires space. Love requires space. Learning requires space. Ecological regeneration requires space. Democracy requires space. Even attention requires space.

Modern life often consumes margin in the name of efficiency. Medicine compresses the consultation. Finance compresses the household. Work compresses rest. Media compresses attention. Supply chains compress resilience. Schooling compresses childhood. In such a world, life appears inefficient because living requires margin.

Life-coherence restores margin as a condition of viability.

### 3.4 Disturbance

Disturbance asks: What triggers change without determining the response?

This is a Maturana-informed distinction. A living system is not instructed by the environment in a simple linear way. External events trigger changes determined by the system's present structure. The same disturbance may produce collapse, growth, inflammation, learning, withdrawal, creativity, violence, reflection, or transformation depending on the structure and history of the system disturbed.

This distinction protects against blame and simplification.

A patient is not "overreacting" in a vacuum. Their present structure may have been shaped by infection, trauma, inflammation, autonomic instability, microvascular dysfunction, mast-cell vigilance, sleep collapse, or years of dismissal. A community is not simply "resistant to change." Its present structure may conserve memories of exploitation. An institution does not transform merely because new information is presented. It responds from what it already conserves.

Disturbance creates opportunity, but it does not specify transformation.

### 3.5 Present Structure

Present structure asks: From what embodied, relational, historical, and cultural organization does the response arise?

This distinction brings humility into intervention. One cannot understand a response without understanding the structure from which it arises. The body's response to exertion depends on its current energetic, vascular, autonomic, inflammatory, and recovery state. A person's response to care depends on their history of trust or betrayal. A culture's response to ecological warning depends on its conserved narratives of growth, entitlement, scarcity, or reciprocity.

Present structure is not destiny. But it is the condition from which any next doing must arise.

This matters clinically. Meaning cannot be repaired before regulation if the organism remains in defensive lock-in. Insight may not become action if the body cannot support the change. A patient may understand a treatment plan but lack the margin to enact it. A society may understand ecological crisis but remain structurally coupled to growth imperatives that reproduce the crisis.

Life-coherent transformation begins from present structure, not from idealized demand.

## 3.6 Regulation

Regulation asks: What recurrent dynamics restore or conserve the pattern?

Regulation can conserve health or pathology. Breath, sleep, movement, nourishment, relational safety, microvascular exchange, boundary discernment, mitochondrial flexibility, and reflective conversation can restore adaptive coherence. But fear, shame, inflammation, debt, surveillance, media outrage, institutional incentives, and ideological certainty can also regulate a system by returning it to a familiar pattern.

This is why life-incoherence persists. It is regulated.

Defensive lock-in is not random. It is maintained by mutually reinforcing loops. Trauma is not merely past event. It is conserved in present regulation. Financial extraction is not an accident. It is conserved by accounting rules, legal structures, cultural narratives, and political incentives. Fragmented medicine is conserved by reimbursement, training, specialty boundaries, time pressure, liability, and epistemic habits.

The regulation question asks how the pattern keeps returning.

## 3.7 Relevance

Relevance asks: What becomes meaningful, visible, urgent, negligible, legitimate, or impossible within this conserved pattern?

Attention follows relevance. Relevance is not neutral. It is shaped by emotioning, culture, training, technology, incentives, trauma, and desire.

In a reductionist medical frame, a normal lab may become relevant while the patient's lived collapse becomes irrelevant. In finance, profit may become relevant while ecological degradation becomes externality. In law, procedural standing may become relevant while the river, soil, child, or future generation remains invisible. In AI, statistically salient patterns may become relevant while embodied consequences vanish.

Life-coherent attention reorders relevance around living.

It asks: What is this system unable to notice? What suffering has become normal? What beauty has become irrelevant? What dependency has been hidden? What relation has been severed? What future has been discounted? What living being has been turned into background?

### 3.8 Possible Doings

Possible doings asks: What can actually be lived next?

This is the most practical primitive. It prevents the grammar from becoming merely diagnostic. A life-coherent distinction should open possible doings that can be enacted from present structure, within real constraints, with available margin, in a manner that conserves or restores living.

Possible doings are not fantasies. They are viable next steps.

For a patient, a possible doing may be restoring sleep before rehabilitation.

For a family, it may be one honest conversation without blame.

For a clinic, it may be a better handover note.

For a website, it may be a new organizing layer over an existing archive.

For a policy, it may be one clause that protects the life-ground.

For AI, it may be refusing manipulation and supporting reflective understanding.

For a civilization, it may be redirecting finance toward care, soil, water, housing, health, and repair.

Possible doings are where life-coherence becomes real.

### 3.9 The Recursive Safeguard

The viability grammar must apply to itself.

What does this grammar conserve?

What constraints must it respect?

What margin does it require?

What disturbances does it introduce?

From what present structure does it arise?

How does it regulate inquiry?

What does it make relevant?

What possible doings does it open?

Without this recursive safeguard, the grammar could become accusatory, diagnostic in the harmful sense, or subtly superior. It could be used to judge others without love. It could become a tool of control rather than reflection.

The grammar remains life-coherent only when used in a relational domain where the other remains legitimate, where reflection remains possible, and where the aim is not domination but the restoration of possible living.

## 4. Attention Is Not All We Need

The phrase “Attention Is All You Need” marks one of the decisive technological turning points of the twenty-first century.

In its original technical context, the phrase named a breakthrough in machine learning architecture. The Transformer replaced recurrent and convolutional sequence-processing assumptions with an architecture based on attention mechanisms. Rather than processing language primarily through sequential recurrence, it allowed each position in a sequence to attend to other positions directly. Multi-head attention enabled the model to attend to different representation subspaces and relational patterns in parallel. Positional encodings supplied order without recurrence. The result was a model that could learn long-range dependencies more efficiently and powerfully than prior architectures in major language tasks. (Vaswani et al., 2017).

Technically, this was revolutionary.

Philosophically, it was prophetic.

It revealed that meaning-like patterning in language depends less on linear sequence alone than on relational relevance. A word becomes meaningful by how it attends and is attended to within a field. A sentence becomes intelligible through dependencies that may span distance. Different heads may learn different relational tasks. Meaning emerges through patterned attention across context.

This has deep resonance with the Life-Coherence project.

A symptom does not mean alone.

A patient does not mean alone.

A law does not mean alone.

A debt does not mean alone.

A spiritual experience does not mean alone.

A mathematical form does not mean alone.

A word does not mean alone.

A life does not mean alone.

Meaning arises relationally.

Yet this resonance must be handled carefully. A Transformer does not love. It does not biologically live. It does not suffer consequences as an organism. It does not possess wisdom because it can manipulate relations. It does not become life-coherent because it can generate coherent language.

Computational attention is not care.

## 4.1 Computational Attention as Relational Relevance

In the Transformer architecture, attention computes relations among queries, keys, and values. A query attends to keys, generating weights that determine how values contribute to an output. Multi-head attention allows several such relational operations to occur in parallel, enabling the system to represent different kinds of dependency, relevance, and context. (Vaswani et al., 2017).

For the Life-Coherence project, this is significant because it provides a formal-technological image of relational relevance. It shows that the capacity to generate coherent output depends not simply on storing units, but on dynamically weighting relations within a context.

The same general insight appears across living domains.

The nervous system does not respond to isolated stimuli but to relevance within state and history. The immune system does not respond to molecules alone but to context, pattern, damage, boundary, and prior exposure. The

body does not interpret movement apart from metabolic capacity, pain, posture, autonomic state, and environmental meaning. A culture does not respond to facts alone but to narratives, trust, identity, emotioning, and conserved conversations.

Attention is always situated.

The Transformer formalizes one version of this in machine learning. Life-coherent attention asks how situated relevance should be disciplined in living.

## 4.2 The Gift of Artificial Attention

The Transformer made possible a new scale of language-participation.

Large language models can hold and relate distant conceptual dependencies across vast symbolic spaces. They can assist with synthesis, translation, summarization, drafting, comparison, critique, and pattern recognition. They can help a human observer retrieve relations that would otherwise remain scattered across memory, documents, disciplines, and conversations.

This has mattered profoundly for the Life-Coherence project.

The project has required attention across long distances: from fascia to finance, microcirculation to politics, trauma to jurisprudence, Maturana to artificial intelligence, Wilber to coherence physiology, mathematical triality to embodied repair, spirituality to ecological governance. Such long-range relations are often invisible in fragmented knowledge systems. Artificial intelligence has helped hold them in relation long enough for new distinctions to appear.

This is a genuine gift.

It supports a new kind of Knowledge Commons work. It can help transform a chronological archive into a learning architecture. It can help derive audiobooks from white papers, generate figures from conceptual structures, translate dense theory into listener-friendly form, and create bridges among domains that institutions often keep separate.

But the gift is ambiguous.

The same capacity can be used for manipulation, surveillance, acceleration, persuasion, extraction, simplification, and simulation of care. Attention can be captured. Relevance can be monetized. Language can be optimized for engagement rather than truth, for persuasion rather than understanding, for dependence rather than freedom.

Therefore, the question is not whether AI attention is powerful. It is.

The question is: what manner of living does it conserve?

## 4.3 The Danger of Attention Without Love

Attention detached from love can become predatory.

An advertiser attends to vulnerability in order to exploit it.

A surveillance system attends to behavior in order to control it.

A financial system attends to risk and return while ignoring life-cost.

A political propaganda system attends to fear in order to mobilize it.

A clinician may attend to lab values while missing the suffering person.  
A spiritual teacher may attend to awakening while ignoring harm.  
An AI system may attend to language patterns while lacking care for the living consequences of its output.

Attention alone can sharpen domination.

This is why the life-coherent correction to “attention is all you need” is necessary. Attention is not enough unless it is disciplined by love, evidence, embodiment, developmental maturity, shadow integration, domain humility, and responsibility for possible doings.

Life-coherent attention asks not only what is salient, but why it has become salient. It asks who benefits from this relevance structure. It asks what is excluded. It asks whether the living other remains legitimate. It asks what consequences follow from acting on this attention.

## 4.4 Attention and the Five Paths

Wilber’s five paths help clarify why attention alone is insufficient.

Attention may wake to nondual awareness, but without growing up it may misinterpret spiritual states through immature structures. Attention may grow cognitively, but without cleaning up it may become clever defense. Attention may open to multiple intelligences, but without showing up it may remain aesthetic or theoretical. Attention may show up in action, but without waking up it may become compulsive activism. Attention may clean up personal shadow, but without opening up it may remain narrow.

Life-coherent attention must therefore become fivefold.

Waking attention opens to depth beyond egoic control.  
Growing attention expands perspective and developmental adequacy.  
Opening attention includes multiple intelligences and domains of knowing.  
Cleaning attention reveals shadow, trauma, projection, and hidden domination.  
Showing attention becomes responsible action in the world.

This fivefold discipline prevents artificial intelligence, science, spirituality, medicine, and politics from confusing one form of attention with the whole.

## 4.5 Attention, Care, and Possible Doings

Care is attention that has accepted responsibility for consequences in coexistence.

This does not mean care can guarantee outcomes. It cannot. But care refuses indifference. It refuses to attend only in order to use. It refuses to make the other into a mere input for one’s own system.

Life-coherent attention becomes care when it asks:

What does this living being need in order for possible living to expand?  
What does this body need in order to stand down from defense?  
What does this conversation need in order for reflection to remain possible?  
What does this institution need in order to stop conserving harm?  
What does this technology need in order to serve rather than capture attention?

What does this culture need in order to conserve love rather than fear?  
What does this Earth need in order for our manner of living to remain viable?

Attention becomes life-coherent when it opens possible doings that restore the conditions of living.

Thus, the title “Attention Is All You Need” becomes a generative provocation, not a final answer. The technological age has discovered the power of attention. The life-coherent age must discover the discipline of attention in service of living.

The next question is therefore not how to make attention more powerful.

The next question is how to make attention more worthy.

## **5. Wilber’s Five Paths as Disciplines of Life-Coherent Attention**

Life-coherent attention must be more than focus, relevance, pattern recognition, or synthesis. It must be transformed.

Ken Wilber’s five paths of transformation provide a crucial safeguard for this task. Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up each disclose a distinct kind of wholeness. None can be reduced to the others. Each path matures attention in a different way, and each guards against a different distortion of the Life-Coherence project.

This matters because coherence can easily be mistaken for total integration. One may imagine that if all parts are included within one grand synthesis, the task is complete. But this is precisely where danger enters. A system can become more inclusive in one dimension while remaining immature, dissociated, shadow-driven, disembodied, or irresponsible in another. Wholeness is not one thing. It is plural, developmental, embodied, relational, and enacted.

A life-coherent framework must therefore be tested across multiple paths of transformation. It must ask not only whether its concepts are elegant, but whether they awaken depth, expand perspective, include multiple intelligences, integrate shadow, and become responsible action.

The five paths become five disciplines of life-coherent attention.

# The Five Paths as Disciplines of Life-Coherent Attention



Figure 3. The Five Paths as Disciplines of Life-Coherent Attention

## 5.1 Waking Attention

Waking attention is attention opened to depth.

It is the attention that begins to sense that reality cannot be exhausted by objects, categories, mechanisms, roles, or narratives. It opens beyond the contracted egoic standpoint and begins to recognize a deeper ground of being, awareness, intimacy, and interdependence. In spiritual language, this is the path of awakening: the recognition that consciousness is not merely a private possession of the separate self, but participates in a more fundamental field of presence.

For the Life-Coherence project, waking attention protects against reductionism. It reminds medicine that the patient is not merely a body-object. It reminds law that justice is not merely procedure. It reminds economics that value is not merely price. It reminds science that explanation does not exhaust mystery. It reminds artificial intelligence that language without presence is not wisdom. It reminds politics that human beings are not merely voters, populations, or demographic units.

Yet waking attention has its own danger. Spiritual insight can become detached from development, embodiment, trauma, history, and responsibility. Nondual language can be used to bypass pain, flatten differences, ignore injustice, or prematurely dissolve the very distinctions needed for repair. The recognition of unity may become indifferent to the work required in the relative world.

Life-coherent waking attention therefore does not escape the world. It deepens participation in it. It opens the mystery of being while remaining answerable to bodies, relationships, communities, ecosystems, and consequences.

## 5.2 Growing Attention

Growing attention is attention that expands perspective.

It concerns the development of cognitive, emotional, moral, and perspectival capacity. A person may have intense spiritual experiences and still interpret them through egocentric, ethnocentric, authoritarian, narcissistic, or mythic-literal structures. A culture may have profound religious symbols yet remain developmentally unable to hold pluralism, complexity, ecological interdependence, or global responsibility. A movement may claim universal love while conserving tribal hostility.

Growing attention asks: from what developmental structure is this distinction being made?

This is essential to life-coherence. A framework that cannot distinguish levels of complexity will confuse pre-differentiated fusion with mature integration, dependency with communion, domination with order, relativism with pluralism, and abstraction with wisdom. It may mistake intensity for depth, certainty for truth, and simplification for clarity.

Growing attention allows the Life-Coherence project to honor complexity without losing compassion. It asks how individuals, institutions, and cultures grow in their capacity to take perspectives, hold tensions, coordinate domains, and act from wider circles of concern.

In medicine, growing attention helps clinicians move beyond one-disease, one-marker, one-pathway thinking toward systems reasoning. In politics, it helps move beyond friend-enemy narratives toward institutional and ecological complexity. In spirituality, it helps distinguish early fusion from mature nonduality. In artificial intelligence, it helps distinguish information retrieval from understanding, and fluency from wisdom.

Growing attention asks the inquiry itself to mature.

## 5.3 Opening Attention

Opening attention is attention diversified across multiple intelligences.

Human knowing is not exhausted by analytic cognition. There is emotional intelligence, moral intelligence, aesthetic intelligence, interpersonal intelligence, ecological intelligence, somatic intelligence, spiritual intelligence, narrative intelligence, clinical intelligence, mathematical intelligence, and practical intelligence. Each reveals aspects of reality that the others may miss.

The Life-Coherence project has already required opening attention. Coherence physiology required attention to fascia, interstitium, microvasculature, mitochondria, mast cells, sleep, movement, and recovery. Life-coherent law required attention to the life-ground behind legal abstraction. Life-coherent finance required attention to the gap between monetary claims and living processes. Spirituality required attention to ultimate concern, embodiment, trauma, and nondual humility. The Knowledge Commons required attention to design, pedagogy, archive, media, podcasting, and public accessibility.

Opening attention protects against mono-intelligence.

A brilliant mathematical formalism may be ethically blind. A moving spiritual insight may be scientifically naïve. A clinically useful protocol may be aesthetically dead. A politically powerful analysis may be relationally harsh. A technologically elegant system may be ecologically destructive. A legal framework may be procedurally precise but life-blind.

Life-coherent attention must therefore open across intelligences without collapsing them. It must allow different ways of knowing to correct, enrich, and constrain one another. It must ask not only “Is this true?” but “True in what domain, through what intelligence, with what consequences, and what other intelligence must also be invited?”

Opening attention is how the inquiry becomes plural without becoming fragmented.

## 5.4 Cleaning Attention

Cleaning attention is attention turned toward shadow.

Every framework casts a shadow. Every inquiry has unconscious motives. Every noble project can become a vehicle for superiority, control, avoidance, resentment, saviorism, grandiosity, or hidden fear. The more beautiful the framework, the more carefully it must be cleaned.

For the Life-Coherence project, cleaning attention is indispensable.

Life-coherence can become an identity rather than a practice. It can become a way of judging others as life-incoherent. It can become a subtle superiority over reductionist medicine, conventional economics, mainstream politics, or institutional science. It can become a refuge in beautiful synthesis when practical difficulty feels overwhelming. It can become too grand, too fast, too certain, too complete.

Cleaning attention asks uncomfortable questions.

Where does coherence become control?  
Where does integration become possession?  
Where does wholeness erase legitimate difference?  
Where does care become rescuing?  
Where does critique become contempt?  
Where does urgency become force?  
Where does synthesis become avoidance of grief?  
Where does spirituality bypass the body?  
Where does AI assistance amplify fluency faster than discernment?

This path is not an accusation. It is a protection. Shadow is not removed by denial; it is integrated by honest attention within a relational field that can tolerate truth. Cleaning attention makes the inquiry safer for living beings because it reduces the likelihood that hidden distortions will be projected outward as doctrine, diagnosis, or mission.

Life-coherent attention must therefore clean itself.

## 5.5 Showing Attention

Showing attention is attention embodied in possible doings.

It asks whether insight becomes action, whether care becomes structure, whether theory becomes practice, whether spirituality becomes service, whether medicine becomes better clinical conduct, whether political analysis becomes better institutional design, whether AI-assisted synthesis becomes a commons rather than a performance.

Showing Up is where the Life-Coherence project becomes real.

A paper must become readable.  
A figure must help someone understand.  
A website must become navigable.  
A clinical handover must help a patient continue care.  
A policy must protect a living condition.  
A video must invite reflection.  
An audiobook must reach a listener.  
A distinction must open a possible doing.

Without showing attention, the project remains luminous but unincarnated. It may awaken, grow, open, and clean, but fail to serve. Showing attention asks what this insight does for living now.

This path also protects against infinite preparation. Life-coherence does not require perfect theory before action. It requires truthful next doings within present constraints. The question is not: Can we build the final framework? The question is: What is the next life-coherent step that can actually be lived?

Showing attention is where viability becomes practice.

## 5.6 The Fivefold Test

Together, the five paths generate a practical test for any life-coherent distinction:

Does it wake attention to depth and mystery?  
Does it grow attention into wider developmental adequacy?  
Does it open attention across multiple intelligences?  
Does it clean attention of shadow, projection, and hidden domination?  
Does it show up as responsible possible doing?

If a distinction fails all five, it is likely decorative.  
If it succeeds in one but fails the others, it is partial.  
If it succeeds in several but refuses correction, it may become dangerous.  
If it remains open to all five, it can continue to mature.

Life-coherent attention is therefore not a single faculty. It is attention transformed through five irreducible paths of wholeness.

## 6. Radical Wholeness Without Totalization

Wholeness is necessary. Wholeness is dangerous.

It is necessary because fragmentation destroys intelligibility. A patient cannot be understood only as organs. A society cannot be understood only as individuals. An economy cannot be understood apart from ecology. A legal system cannot be understood apart from the life-ground it protects or violates. A spiritual life cannot be understood apart from the body, relationships, culture, and Earth in which it is lived.

But wholeness becomes dangerous when it is turned into a totality that subordinates the parts. Whenever someone claims to speak for “the whole,” one must ask whether the living parts remain legitimate. The language of wholeness can conceal domination. It can demand conformity. It can erase difference. It can turn persons, cultures, tissues, ecosystems, or disciplines into mere strands in someone else’s preferred web.

This is why Wilber's holonic insight is central. A holon is both whole and part. It has autonomy and communion, agency and participation, self-preservation and self-transcendence. It is not merely a fragment, and it is not merely an independent whole. It is a whole/part nested within wider patterns of relation. (Wilber, 1995, 2006).

Life-coherence requires holonic integration, not totalizing wholeness.

## 6.1 The Pathology of Fragmentation

Fragmentation occurs when partness is overemphasized at the expense of wholeness.

In medicine, fragmentation appears when the body is divided into specialties, pathways, markers, and procedures without an adequate account of the living organism. In law, fragmentation appears when procedural categories obscure living consequences. In economics, fragmentation appears when prices, debts, and profits are separated from care, soil, water, health, housing, and community. In spirituality, fragmentation appears when awakening is separated from development, shadow, embodiment, and service. In technology, fragmentation appears when attention is optimized apart from well-being.

Fragmentation creates blindness. Each part may become highly developed in its own terms while the larger pattern becomes incoherent. A specialist may be technically correct and still miss the patient. A policy may be administratively sound and still harm a community. A financial instrument may be profitable and still extract from the living world. An AI system may be performant and still degrade attention, trust, and truth.

The Life-Coherence project arose partly as a response to fragmentation. It seeks to recover relation, context, continuity, and life-ground.

But the cure for fragmentation is not totalization.

## 6.2 The Pathology of Totalization

Totalization occurs when wholeness is overemphasized at the expense of parts.

A totalizing framework absorbs differences into its own architecture. It treats other domains as subordinate expressions of its preferred principle. It may speak of unity, integration, coherence, or common good, but in practice it reduces living plurality to one scheme of interpretation.

Totalization can happen in any domain.

A spiritual totalization says everything is consciousness and therefore neglects biology, development, trauma, politics, and ecology. A scientific totalization says everything is mechanism and therefore neglects meaning, subjectivity, love, and lived experience. A mathematical totalization says everything is formal structure and therefore neglects suffering, contingency, embodiment, and history. A political totalization says everything serves the movement. An economic totalization says everything serves growth. A technological totalization says everything can be optimized.

A coherence totalization would say everything must fit the Life-Coherence framework.

That is precisely what must be avoided.

A life-coherent framework must remain answerable to the living beings and domains it seeks to illuminate. It must allow medicine to be medicine, mathematics to be mathematics, spirituality to be spirituality, ecology to be

ecology, law to be law, and lived experience to be lived experience, while inviting them into relation. It must not erase their distinct criteria of validity.

## 6.3 Non-Totalizing Coherence

Non-totalizing coherence is dynamic relation without domination.

It seeks enough integration for mutual intelligibility, but enough differentiation for each domain to remain itself. It recognizes that the organism is a whole, but also that organs, tissues, cells, boundaries, fluids, and microbes have real relative autonomy. It recognizes that a person is a whole, but also that inner parts, developmental lines, shadow material, bodily states, and social roles cannot be erased. It recognizes that a society is a whole, but also that persons, families, communities, ecosystems, and institutions must not be swallowed by the state, market, ideology, or platform.

Non-totalizing coherence is therefore a balance of wholeness and partness.

It asks:

What must remain distinct?

What must be brought into relation?

What integration would heal?

What integration would dominate?

What fragmentation protects legitimate difference?

What fragmentation prevents life from seeing itself?

What whole is being conserved, and who pays the cost?

What part is being liberated, and what larger relation is being neglected?

This is a more mature coherence.

It does not force unity. It listens for the relations through which living becomes more viable.

## 6.4 The Holonic Safeguard for Life-Coherence

The holonic safeguard can be stated simply:

Every life-coherent whole must protect the legitimate relative autonomy of its parts, and every life-coherent part must participate responsibly in the wholes that sustain it.

This principle applies across scales.

A cell must preserve its membrane and internal organization, yet participate in tissue. A tissue must maintain its function, yet participate in organ and organism. A person must preserve dignity, agency, and self-respect, yet participate in relationship, community, and Earth. A community must preserve culture and local meaning, yet participate in planetary responsibility. A discipline must preserve its methods and rigor, yet participate in wider knowledge.

Pathology appears when either side fails.

Too much autonomy becomes isolation, narcissism, fragmentation, competition, and extraction. Too much communion becomes fusion, domination, conformity, dependency, and erasure. Life-coherence requires the rhythmic negotiation of both.

This has implications for the Knowledge Commons. The aim is not to merge all papers into one mega-framework. The aim is to allow each paper to remain a whole in itself while participating in a larger learning architecture. Life-coherent medicine, jurisprudence, finance, politics, spirituality, physiology, and attention each have their own center. They also form a larger pattern.

The Commons must therefore be holonic.

## 6.5 Radical Wholeness as Plural Wholeness

Radical wholeness is not the discovery of one final whole.

It is the maturation of many kinds of wholeness in relation.

There is contemplative wholeness, developmental wholeness, psychological wholeness, embodied wholeness, relational wholeness, ecological wholeness, institutional wholeness, mathematical wholeness, narrative wholeness, and practical wholeness. Each has its own path. Each can correct the others. Each can also become distorted when isolated.

Life-coherent attention must therefore attend to plural wholeness.

It asks not only whether something is integrated, but what kind of integration is occurring. Is it awakening? Development? Shadow work? Somatic regulation? Institutional repair? Ecological regeneration? Mathematical formalization? Narrative meaning? Practical service?

This prevents the project from becoming one-dimensional.

It also clarifies the role of the five paths. Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up are not additions to life-coherence. They are safeguards of non-totalizing wholeness. They keep the project from mistaking one light for the whole dawn.

## 7. The Living Organism as a Coherence System

The Life-Coherence project must remain embodied.

Without embodiment, attention becomes abstraction. Wholeness becomes concept. Linguaging becomes disembodied symbolic coordination. Spirituality becomes bypass. AI becomes linguistic fluency detached from lived consequence. Mathematics becomes elegance without suffering. Politics becomes ideology. Medicine becomes pathway management.

Coherence physiology provides the embodied middle layer of the entire synthesis. (Sahely, 2026b).

It begins from a simple proposition: the living organism is not best understood as an assemblage of isolated organs, pathways, and molecular targets. It is a nested coherence system whose health depends on the coordinated regulation of substrate, interface, force, flow, exchange, boundary, energy, and recovery.

This does not reject conventional physiology. It resituates it. Organs, pathways, molecules, and systems remain real and clinically important. But they are not the deepest starting point. The organism is a living continuum that differentiates into organs while remaining materially, mechanically, fluidically, vascularly, immunologically, metabolically, neurologically, and relationally coupled.

This embodied view protects the Life-Coherence project from floating away into metaphysics.

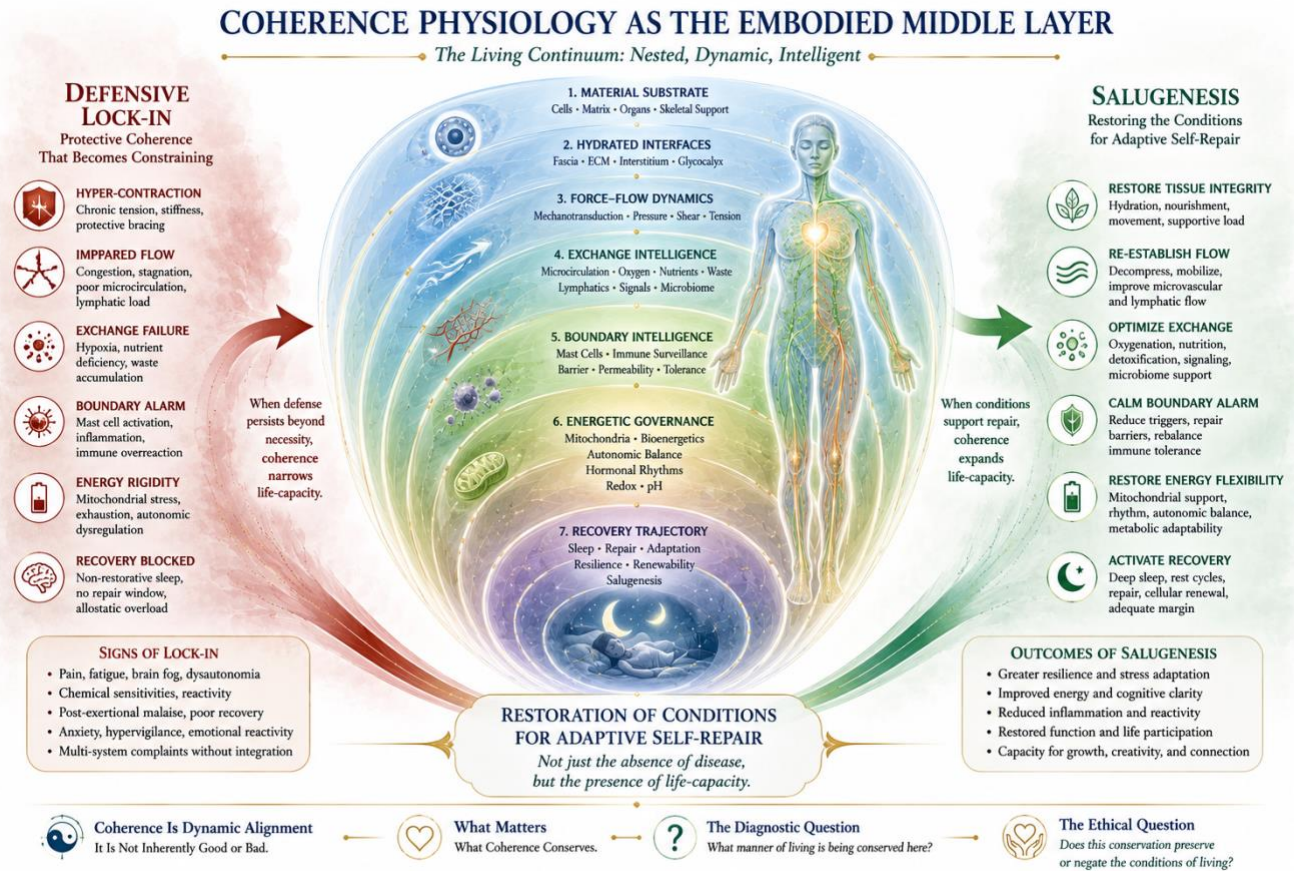


Figure 4. Coherence Physiology as the Embodied Middle Layer

## 7.1 Material Substrate

The first layer of coherence physiology is material substrate. (Ingber, 2003, 2008; Schleip, 2003).

The body holds together through fascia, extracellular matrix, interstitium, membranes, tissues, fluids, pressures, tensions, gradients, and living boundaries. Fascia is not merely wrapping. It is a body-wide connective continuum involved in force transmission, proprioception, nociception, interoception, vascular and neural passage, immune traffic, and tissue relation. The extracellular matrix is not inert scaffolding. It shapes cell behavior, immune activation, repair, fibrosis, and gene expression. The interstitium is not empty space. It is a distributed fluidic compartment through which signals, immune cells, metabolites, pressures, and inflammatory mediators move.

The substrate is where relation becomes material.

A body cannot regulate coherently if its substrate is stiff, inflamed, congested, scarred, dehydrated, compressed, poorly perfused, or poorly drained. Tissue memory is not metaphorical in a vague sense. Injury, inflammation,

immobility, surgery, infection, metabolic stress, and chronic load can leave changes in matrix organization, stiffness, sliding, sensory tone, and immune readiness.

Life-coherent attention must therefore attend to the substrate.

A patient's anxiety may not be only cognitive. It may be held in breath, posture, fascia, autonomic tone, inflammatory state, sleep debt, and metabolic constraint. A society's dysregulation may not be only ideological. It may be held in housing, food systems, work rhythms, debt burdens, pollution, transport, screens, and chronic insecurity.

Substrate matters.

## 7.2 Hydrated Interfaces

The second layer is hydrated interface.

Living systems are saturated with water, but not all biological water is merely bulk solvent. Proteins, membranes, collagen, cytoskeleton, endothelial linings, glycocalyx, basement membranes, organelles, extracellular matrices, and mucosal surfaces are interface-rich hydrated domains. The exact physiological implications of interfacial water remain an area requiring careful evidence discipline. Yet the broader point is unavoidable: life occurs at hydrated interfaces.

The endothelial glycocalyx offers a mainstream example. It is a hydrated, gel-like interface that participates in mechanosensation, permeability regulation, nitric oxide signaling, vascular protection, and inflammatory modulation. Mucosal barriers, extracellular matrix, collagen-rich tissues, and mitochondrial membranes similarly remind us that biological function is shaped by surfaces, charges, hydration, flow, and boundary conditions. (Reitsma et al., 2007).

In life-coherent terms, hydrated interfaces teach us that boundaries are not walls. They are intelligent zones of relation.

They permit, exclude, translate, sense, protect, and connect. They make selective openness possible.

This becomes a larger principle. A living person requires boundaries that protect, permeate, and connect. A family requires boundaries. A clinic requires boundaries. A culture requires boundaries. A knowledge commons requires boundaries. Without boundary, there is dissolution. Without permeability, there is isolation. Without discernment, there is either invasion or closure.

Hydrated interface becomes a physiological image of life-coherent relation.

## 7.3 Force and Flow

The third layer is force-flow dynamics.

The body is not a static structure containing biochemical reactions. It is a moving, breathing, deforming, flowing, sensing field. Cells interpret force. Tissues respond to tension, compression, shear, stretch, pressure, stiffness, and fluid movement. Mechanobiology shows that force becomes information.

Blood flow is not merely transport. It generates shear stress that endothelial surfaces read. Lymphatic flow is not merely drainage. It clears interstitial fluid, transports immune cells, participates in inflammation resolution, and

helps restore tissue conditions. Breath is not merely gas exchange. It changes thoracic pressure, venous return, lymphatic movement, autonomic tone, fascial mobility, and emotional state. Movement is not merely locomotion. It distributes force, informs proprioception, supports circulation, sustains matrix pliability, and recalibrates regulation.

Life-coherent attention therefore asks about flow.

Where is flow blocked?

Where is force excessive?

Where is movement absent?

Where is pressure accumulating?

Where is the system overcompressed?

Where is there insufficient rhythmic variation?

The same questions apply socially. Finance can block flow or restore it. Law can permit exchange or obstruct it. Institutions can create pressure gradients that exhaust persons. Media can create informational turbulence. Politics can constrict the circulation of trust. Ecological systems can be dammed, depleted, or regenerated.

Force and flow are not only physiological. They are relational and civilizational patterns.

## 7.4 Exchange Intelligence

The fourth layer is exchange intelligence. (Benias et al., 2018; Reitsma et al., 2007).

At the vascular level, exchange is not mere delivery. The endothelium and microcirculation regulate what tissues receive, what they clear, how immune cells move, how oxygen and nutrients are distributed, how permeability is managed, and how local demand is matched to supply. The endothelial glycocalyx, nitric oxide signaling, capillary recruitment, red blood cell transit, venular drainage, and lymphatic return all participate in tissue viability.

When exchange fails, tissues may become hypoxic, inflamed, congested, energetically constrained, or slow to repair. Microvascular dysfunction may manifest in fatigue, cognitive dysfunction, exercise intolerance, temperature instability, wound impairment, pain, and organ-specific disease patterns.

Exchange intelligence gives the Life-Coherence project one of its central metaphors and mechanisms.

Life requires exchange. But exchange must be intelligent. It must be proportionate, contextual, responsive, and protective. Too little exchange produces deprivation. Too much permeability produces invasion or inflammation. Poorly regulated exchange produces noise, congestion, and instability.

This applies beyond the body. A community needs exchange of care, resources, information, trust, and meaning. An economy should support life-serving exchange rather than extraction. A knowledge commons should allow ideas to circulate without enclosing them behind prestige or monetization. A political system requires exchange between local experience and institutional decision-making.

Life-coherent attention asks: what exchanges are being enabled, degraded, captured, or denied?

## 7.5 Boundary Intelligence

The fifth layer is boundary intelligence.

Living systems must distinguish what may enter, what must be excluded, what should be tolerated, what requires repair, and what must be remembered as threat. Boundaries are active zones of discernment.

Mast cells, innate immune sentinels, epithelial barriers, skin, gut, airway, vascular interfaces, connective tissues, and neuroimmune signaling participate in this boundary intelligence. Acute activation is protective. Chronic activation becomes costly. When boundary alarm persists, ordinary exposures, foods, odors, exertion, temperature shifts, emotional stress, or mechanical stimuli may provoke disproportionate responses. The organism may remain organized around vigilance.

Boundary intelligence is a profound life-coherent distinction.

A living system must be open enough to nourish, relate, learn, and adapt, yet bounded enough to preserve identity and prevent harm. The same is true psychologically, relationally, institutionally, and culturally. Too little boundary produces violation and overwhelm. Too much boundary produces isolation, rigidity, and fear. Dysregulated boundary produces either indiscriminate defense or indiscriminate exposure.

Life-coherent attention therefore asks:

What is this system defending against?  
Is the defense proportionate?  
Has the boundary learned from real harm?  
Has it become trapped in past threat?  
What would allow discernment to return?

This is essential for trauma, chronic illness, politics, and culture.

## 7.6 Energetic Governance

The sixth layer is energetic governance.

Mitochondria are not merely power plants. They participate in redox signaling, calcium regulation, apoptosis, innate immunity, metabolic sensing, heat production, stress signaling, and adaptive state regulation. They help determine what the organism can afford to do. (Naviaux, 2014, 2019).

The Cell Danger Response gives a powerful account of how cells shift from ordinary function toward protection under threat. Such shifts are adaptive when temporary. They become pathological when unresolved. Energy is then allocated toward defense, containment, inflammation, and conservation rather than movement, cognition, digestion, repair, and participation.

This reframes fatigue and chronic illness. The problem may not simply be lack of energy. It may be energy resistance: difficulty transforming available potential into coordinated work, repair, and life participation.

Life-coherent attention asks: what is the organism spending its energy to conserve?

At the social level, the question becomes equally important. What does a civilization spend its energy conserving? Military dominance? Financial growth? Consumption? Surveillance? Prestige? Or care, health, soil, water, housing, education, repair, and ecological regeneration?

Energetic governance links biology and political economy.

## 7.7 Recovery Trajectory

The seventh layer is recovery trajectory.

Health is not merely the absence of perturbation. Living systems are constantly perturbed. The question is whether they can recover. Can inflammation resolve? Can sleep restore? Can tissues remodel? Can autonomic tone recalibrate? Can mitochondria return to flexible allocation? Can boundary alarm de-escalate? Can movement expand without collapse? Can participation resume?

Defensive lock-in occurs when recovery does not complete. Salugenesis occurs when the conditions for adaptive self-repair return.

Recovery trajectory may be the most clinically important layer because it asks whether the system can exit defense. A person who cannot recover after exertion, infection, stress, poor sleep, emotional conflict, or environmental exposure is living with narrowed adaptive margin. Their organism may be conserving protection at the cost of life participation.

The same is true for families, institutions, and civilizations. Can a family repair after conflict? Can a clinic learn from harm? Can an institution correct itself? Can a culture grieve and transform? Can an economy recover ecological relationship after extraction? Can a civilization stand down from domination?

Life-coherent attention is recovery-oriented.

## 7.8 The Embodied Middle Layer

Coherence physiology is the embodied middle layer between abstract coherence and lived healing.

It prevents the Life-Coherence project from becoming merely conceptual. It shows that coherence must pass through tissue, fluid, boundary, energy, sleep, movement, exchange, and repair. It also prevents clinical care from remaining fragmented. It shows that symptoms often arise from distributed relational failure across layers rather than isolated defects alone.

Most importantly, coherence physiology teaches that living coherence is not imposed from above. It is restored by changing conditions.

The body does not heal by command.

The nervous system does not regulate by argument alone.

The mitochondrion does not stand down because the mind declares safety.

The mast cell does not de-escalate because a theory is elegant.

The patient does not recover because the clinician wants them to.

Healing requires restoration of conditions.

This insight must guide the whole paper. Life-coherent attention is not attention that merely sees more. It is attention that helps restore the conditions under which living can become possible again.

## 8. Defensive Lock-In and Salugenesis

If coherence physiology describes the living organism as a nested continuum of substrate, interface, force-flow, exchange, boundary, energy, and recovery, then defensive lock-in names what happens when this continuum remains organized around protection after the original threat has passed, diminished, or become ambiguous.

Defensive lock-in is not a single disease. It is a conserved manner of physiological organization. (Sahely, 2026b; Naviaux, 2014, 2019).

It may begin with infection, trauma, toxin exposure, chronic stress, injury, surgery, grief, autoimmunity, metabolic disease, environmental overload, sleep disruption, vascular injury, overexertion, or repeated dismissal. The initiating disturbance may differ, but the resulting pattern can converge: the organism remains unable to complete the transition from defense to recovery.

This is not irrational. Defense is intelligent when threat is present. In acute illness or injury, the organism must protect itself. Blood flow redistributes. Appetite changes. Pain discourages use of injured tissues. Inflammation recruits repair processes. Boundaries become more vigilant. Mitochondria alter energy allocation. Sleep and behavior shift. Social withdrawal may conserve energy. These changes are not mistakes. They are life preserving itself under constraint.

The problem arises when the defensive pattern becomes self-stabilizing.

Then the very responses that once served survival begin to narrow living.

### 8.1 The Circularity of Lock-In

Defensive lock-in is circular rather than linear.

Fatigue reduces movement. Reduced movement impairs circulation, lymphatic flow, tissue sliding, and mitochondrial conditioning. Impaired flow worsens tissue congestion and inflammatory persistence. Inflammation increases boundary alarm. Boundary alarm worsens pain, reactivity, vascular permeability, and autonomic instability. Autonomic instability disrupts sleep. Poor sleep impairs immune resolution, endothelial function, redox balance, and emotional regulation. Energy becomes rationed. Exertion produces collapse. Collapse reduces confidence and participation. Reduced participation narrows the world.

The organism becomes coherent around defense.

This is why the word coherence must be used carefully. Defensive lock-in is coherent in the sense that multiple layers become mutually reinforcing. But it is not life-coherent, because the conserved pattern restricts life-capacity. It preserves the organism by narrowing participation.

A trauma pattern may be coherent. A chronic illness pattern may be coherent. A fear-based institution may be coherent. A debt-extraction economy may be coherent. Coherence alone does not tell us whether living is being served.

The question is always: what does this coherence conserve?

## 8.2 Defensive Coherence Is Not Imaginary

Defensive lock-in must never be confused with psychogenic dismissal.

To say that the organism is defensively organized is not to say symptoms are imagined, voluntary, exaggerated, or “all in the mind.” It is to say the organism is profoundly biological in a state-dependent, relational, and distributed way.

The body may be defending through microvascular instability, mast-cell reactivity, mitochondrial danger signaling, autonomic dysregulation, impaired sleep, altered matrix mechanics, poor lymphatic drainage, gut-barrier disturbance, neuroimmune sensitization, pain amplification, and reduced energy transformation. None of these are “mere psychology.” Yet psychological history, social threat, shame, invalidation, loneliness, and trauma may still shape the physiological field through endocrine, autonomic, immune, behavioral, and relational pathways.

The false split between physical and psychological becomes less useful here.

A living system does not divide threat into neat disciplinary categories. It responds from the totality of its present structure. Infection, mold exposure, grief, financial insecurity, humiliation, poor sleep, inflammation, toxic exposure, overwork, and relational fear may all enter the organism as constraints on viability.

Defensive lock-in honors this complexity. It does not reduce illness to one mechanism. It recognizes that many partial mechanisms can become one conserved lived state.

## 8.3 Lock-In Across Scales

Defensive lock-in is not limited to individual physiology.

Families can become locked into defensive patterns. A family may conserve silence because truth once threatened belonging. It may conserve control because unpredictability once felt dangerous. It may conserve conflict because closeness became unsafe. The pattern persists because each participant’s behavior triggers the next, and the whole system returns to what it knows.

Institutions can become locked into defense. A hospital may conserve liability protection over listening. A bureaucracy may conserve procedure over care. A profession may conserve authority over reflection. A university may conserve publication metrics over inquiry. A government may conserve control over trust.

Civilizations can become locked into defense. A culture shaped by scarcity, competition, conquest, and extraction may continue to expand defensive systems long after they have become life-destructive. Military buildup, financial accumulation, surveillance, ideological polarization, and ecological exploitation can all function as civilizational defense patterns.

In each case, the question is similar:

What threat does the system believe it is still defending against?

What pattern keeps returning?

What cost is being paid by living beings?

What would allow the system to stand down?

What new conservation could begin?

Defensive lock-in is therefore both clinical and civilizational.

## 8.4 Salugenesis as the Movement Out of Defense

If defensive lock-in names the conserved pattern of unresolved protection, salugenesis names the movement by which living returns toward adaptive self-repair.

Salugenesis is not simply health promotion, wellness, symptom reduction, or positive thinking. It is the active restoration of the conditions under which the organism can resume repair, flexibility, exchange, discernment, energy transformation, and participation.

It asks a different clinical question.

Not only: What disease is present?

Not only: What pathway is overactive?

Not only: What marker is abnormal?

Not only: What symptom should be suppressed?

But also:

What conditions would allow this organism to relinquish defense and recover?

This question may lead to many kinds of intervention. It may require medication, infection control, immune modulation, nutritional repletion, volume support, sleep restoration, trauma-informed therapy, pacing, movement rehabilitation, environmental remediation, vascular support, mast-cell stabilization, mitochondrial recovery, social support, or reduction of overwhelming demands. Salugenesis does not reject targeted treatment. It resituates targeted treatment within the wider field of recovery.

The goal is not merely to block a signal. The goal is to restore a living trajectory.

## 8.5 The Conditions of Salugenesis

Salugenesis requires conditions.

Substrate must become more mobile, nourished, hydrated, perfused, and less inflamed. Force-flow dynamics must become less stagnant and less threatening. Breath and movement must return in tolerable rhythms. Exchange intelligence must improve so tissues receive oxygen, nutrients, immune access, and clearance. Boundary intelligence must de-escalate from chronic vigilance toward proportionate discernment. Mitochondrial governance must shift from defense and conservation toward flexible energy allocation. Sleep must become restorative. The autonomic system must regain range. Meaning must become less organized around danger and collapse.

This is not a linear checklist. It is a relational field.

Sometimes sleep must improve before movement can be tolerated. Sometimes mast-cell reactivity must settle before nutrition can expand. Sometimes orthostatic intolerance must be addressed before rehabilitation can proceed. Sometimes relational safety must precede cognitive reframing. Sometimes pacing must protect the organism from repeated energetic overdraft. Sometimes grief must be metabolized before life can open.

Salugenesis requires sequencing.

It also requires humility. Not every condition can be fully restored. Some injuries remain. Some diseases persist. Some social constraints cannot be immediately changed. Salugenesis does not promise cure. It seeks the maximum truthful restoration of coherence possible under present conditions.

## 8.6 Salugenesis and Possible Living

The purpose of salugenesis is not simply biological normalization.

It is renewed possible living.

The patient wants not only better markers, but to walk, think, sleep, care, work, create, relate, digest, rest, travel, play, pray, and participate without fear of collapse. A family wants not only reduced conflict, but renewed trust. A clinic wants not only completed protocols, but care that restores dignity. A society wants not only stability, but a manner of living that allows bodies, communities, and ecosystems to flourish.

Salugenesis therefore belongs to the viability grammar. It asks what possible doings can return when defense no longer consumes the field.

A salugenic medicine is not merely corrective. It is restorative.

A salugenic politics is not merely managerial. It is life-capacity preserving.

A salugenic economy is not merely productive. It is regenerative.

A salugenic spirituality is not merely transcendent. It helps beings live.

A salugenic technology is not merely powerful. It restores attention, agency, trust, and possible action.

Salugenesis is the biology and culture of standing down from life-negating defense.

## 9. Tri-Field Regulation: Form, State, World, and Meaning

The tri-field model gives the Life-Coherence project its embodied self-regulatory operator. (Sahely, 2025b).

Human beings do not experience themselves as abstract minds residing in bodies. Nor do they experience themselves as bodies alone. Selfhood is continuously generated through the alignment of three interdependent regulatory fields:

Proprioceptive form.

Interoceptive state.

Exteroceptive world.

In ordinary language, the self arises as the felt continuity of:

I am this body,

in this state,

in this world.

When these fields align, the person experiences groundedness, orientation, emotional continuity, and adaptive capacity. When they misalign, the person may experience anxiety, collapse, dissociation, chronic pain, hypervigilance, fatigue, confusion, derealization, or loss of agency.

The tri-field model translates life-coherence into lived embodiment.

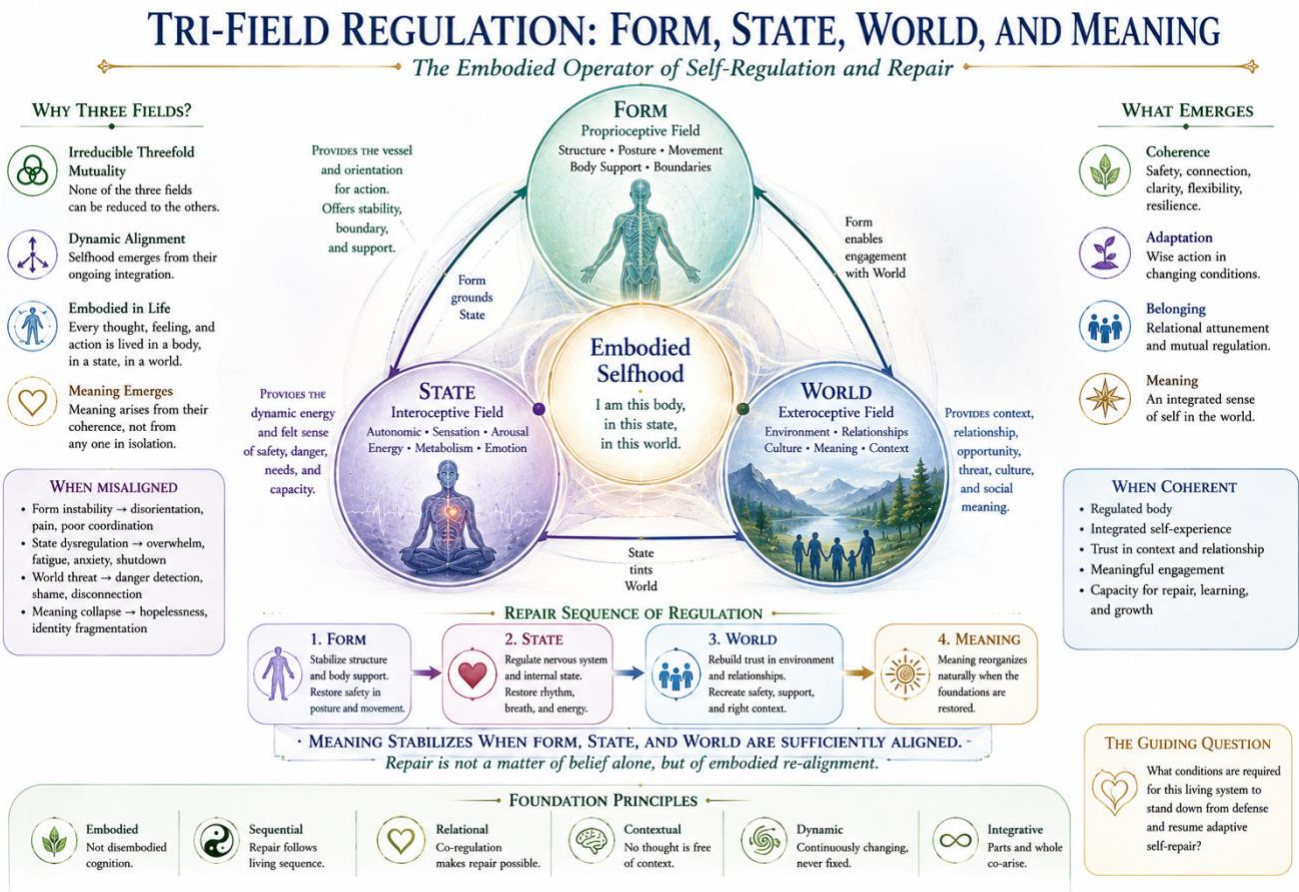


Figure 5. Tri-Field Regulation: Form, State, World, and Meaning

## 9.1 Proprioceptive Form

The proprioceptive field concerns body-form: posture, muscle tone, fascial tension, joint position, balance, movement readiness, load distribution, and the felt sense of support. (Proske & Gandevia, 2012).

This field answers the implicit question:

Can this body act?

A person with stable proprioceptive form feels grounded, oriented, and physically present. Their body offers a reliable platform for perception, emotion, thought, and action. When form is disrupted, the world may feel less manageable. Muscle tone may become rigid or collapsed. Movement may feel unsafe. Pain may narrow attention. The person may become less able to regulate emotion because the body no longer provides a stable base.

Proprioceptive form links coherence physiology to selfhood. Fascia, matrix, interstitium, muscle tone, breath, vestibular function, cerebellar prediction, spinal reflexes, and somatosensory mapping all participate in the body's sense of "I can be here."

This is why repair often begins with form.

Before meaning can change, the person may need support, posture, breath, movement, grounding, touch, rest, pain reduction, or physical orientation. The body must become a place from which life can be lived again.

## 9.2 Interoceptive State

The interoceptive field concerns internal physiological state: breath, heart rate, gut signals, temperature, pain, fatigue, hunger, immune tone, metabolic sufficiency, autonomic arousal, and affective intensity. (Craig, 2002).

This field answers the implicit question:

Do I have the resources to meet this moment?

Interoception is the body's viability sensing. It informs whether the organism feels calm, urgent, depleted, threatened, energized, nauseated, inflamed, collapsed, or ready. Emotional experience arises in intimate relation with this field. Anxiety, dread, irritability, grief, calm, courage, and joy are not disembodied mental events. They are patterned through internal state.

When interoceptive state is unstable, meaning becomes unstable. A harmless room may feel unsafe when the body is in alarm. A manageable task may feel impossible when the body is depleted. A future may feel closed when the organism cannot sense available energy.

This is why cognitive-first approaches often fail when physiology remains dysregulated. The person may understand the thought, but the body does not yet live the possibility.

Interoceptive repair requires restoration of autonomic range, sleep, breath, nourishment, vascular stability, inflammation resolution, energy envelope, and relational safety.

## 9.3 Exteroceptive World

The exteroceptive field concerns the interpreted world: environment, social signals, facial expression, voice tone, threat cues, affordances, relational meaning, and contextual relevance.

This field answers the implicit question:

What kind of world am I in?

The world is not encountered as raw data. It is interpreted through body-form and internal state. A face, room, message, sound, medical result, bill, policy, or silence means differently depending on the organism's present structure.

When exteroceptive interpretation is coherent with form and state, the world appears navigable. When it is not, the world may appear dangerous, meaningless, overwhelming, hostile, unreal, or closed. Hypervigilance, social withdrawal, mistrust, dissociation, and threat perception may arise when the world-field has become shaped by trauma or chronic instability.

Exteroceptive repair often requires more than reassurance. The actual world may need to change. A person cannot regulate in an unsafe home merely by thinking differently. A patient cannot feel safe in a dismissive clinic merely by practicing mindfulness. A community cannot trust institutions that repeatedly violate it merely through public messaging.

The world must become more trustworthy.

## 9.4 Meaning as Emergent Coherence

Meaning emerges from the alignment of form, state, and world.

It is not added from above. It arises when the body can act, the state can tolerate, and the world can be interpreted as navigable. When these align, narrative meaning can become flexible. When they do not, meaning becomes defensive.

A person in chronic sympathetic arousal may interpret ambiguity as threat. A person in collapse may interpret the future as impossible. A person in pain may interpret ordinary demands as attack. A person with trauma may interpret closeness as danger. These meanings are not simply cognitive errors. They are coherent with the organism's present field.

This is why the repair sequence matters:

Form → State → World → Meaning.

The sequence does not mean that meaning is unimportant. It means meaning often cannot be sustainably repaired before the organism has enough form support, state regulation, and world safety to live a new interpretation.

Meaning must be embodied.

## 9.5 Co-Regulation

Human regulation is not solitary. (Porges, 2011; Schore, 2012; Siegel, 2012).

From infancy onward, organisms regulate through other organisms. Touch, gaze, rhythm, voice, facial expression, breath, proximity, play, repair, and recognition shape the developing nervous system. Co-regulation continues throughout life. We borrow steadiness from others. We also transmit alarm.

The tri-field model is therefore relational. Another person can stabilize form through touch or presence, state through calm breathing and prosody, and world through trustworthy interaction. A clinician can become part of the patient's regulatory field. So can a parent, teacher, friend, partner, community, ritual, song, or landscape.

Co-regulation is not merely emotional support. It is physiological intervention.

This has profound implications for medicine, education, politics, and technology. A rushed, dismissive, or threatening environment dysregulates. A respectful, clear, responsive environment regulates. A society organized around speed, scarcity, debt, competition, and surveillance dysregulates at scale. A culture of care, trust, rhythm, nature, play, meaning, and repair co-regulates.

Life-coherent attention is therefore co-regulatory attention. It does not merely observe the other. It participates in the field through which possible living expands or contracts.

## 9.6 Trauma as Adaptive Coherence Fixation

Trauma can be understood as adaptive coherence fixation. (van der Kolk, 2014).

Under threat, the organism organizes around survival. Form may become rigid, collapsed, frozen, braced, or dissociated. State may shift into hyperarousal, shutdown, numbness, or volatility. World may become coded as unsafe, unpredictable, or relationally dangerous. Meaning may become organized around shame, helplessness, mistrust, guilt, or vigilance.

These patterns are not failures. They are survival achievements.

They become traumatic when the survival coherence remains conserved after the original conditions have changed. The organism continues to live in a world structured by past threat. Possible doings narrow. New experiences are interpreted through old danger. The body cannot easily stand down.

This is why trauma repair cannot be forced by insight alone. The person may know they are safe and still not feel safe. The field must change. Form must regain support. State must regain range. World must become trustworthy through repeated congruent experience. Meaning can then reorganize.

Healing is not convincing the person that the past is over. Healing is helping the organism live a present in which another future can be sensed.

## 9.7 The Clinical Operator of Life-Coherence

The tri-field model gives the clinician, caregiver, educator, therapist, and institution a practical operator:

What is happening in form?

What is happening in state?

What is happening in world?

What meaning is emerging from their alignment or misalignment?

What possible doing would restore coherence without overwhelming the system?

This operator applies beyond the clinic.

For a child struggling at school: what is happening in body, state, classroom world, and meaning?

For a staff member burning out: what is happening in workload, autonomic state, institutional environment, and self-narrative?

For a community in conflict: what is happening in material conditions, collective emotional state, political world, and shared meaning?

For civilization: what is happening in ecological substrate, metabolic state, institutional world, and cultural story?

Form, state, world, and meaning provide a bridge from physiology to culture.

The self is not an isolated mind. It is a living coherence across fields.

## 10. The Mathematical Domain as the Third Look

The Life-Coherence project has increasingly encountered mathematical forms: Fano planes, octonions, triality, exceptional structures, prime-coded resonance, nested clocks, symmetry, non-associativity, and formal models of coherence.

These mathematical domains are alluring because they seem to reveal deep relational order. They offer forms in which wholeness and differentiation, closure and openness, symmetry and transformation, unity and plurality can be thought with unusual precision. They give the imagination disciplined shapes.

Yet here again Maturana's caution is essential.

Mathematics does not stand outside living as the final authority over reality. Mathematical formalisms arise within the operational coherences of observers. They are created, used, validated, and transformed in domains of human languaging. Their power lies not in escaping observation, but in disciplining relations so that operations become coherent, transmissible, testable, and generative. (Maturana, 2000).

The mathematical domain can therefore guide the Life-Coherence project, but it must not rule it.

### 10.1 The Need for the Third Look

Earlier, the inquiry identified a triple movement:

Living provides the concern.

Observing brings forth the distinctions.

Formalizing disciplines the relations.

Love judges the conservation.

This can be understood as a triality version of reflective inquiry.

The first look is living. It begins with suffering, healing, care, breakdown, longing, illness, ecological crisis, institutional failure, spiritual aspiration, and the desire for more viable ways of living. Without this first look, inquiry becomes detached.

The second look is observing. It notices that distinctions bring forth worlds. It asks what is being conserved, what domain is being invoked, what assumptions are hidden, what possible doings are opened, and what living beings are affected. Without this second look, inquiry becomes naïve or dogmatic.

The third look is formalizing. It asks whether the distinctions hold together. It examines relations, invariants, transformations, symmetries, sequences, closures, and contradictions. It asks what structure is implied by the grammar. Without this third look, inquiry may remain poetic, intuitive, or inspirational but lack internal discipline.

The mathematical domain becomes decisive here, but decisive in a limited sense.

It decides whether a proposed relational grammar is coherent in its own formal terms. It does not decide whether the grammar conserves living. That judgment belongs to the domain of life, love, and consequence.

## THE TRIPLE LOOK: LIVING, OBSERVING, AND FORMALIZING

Three Domains of Inquiry in Life-Coherent Attention

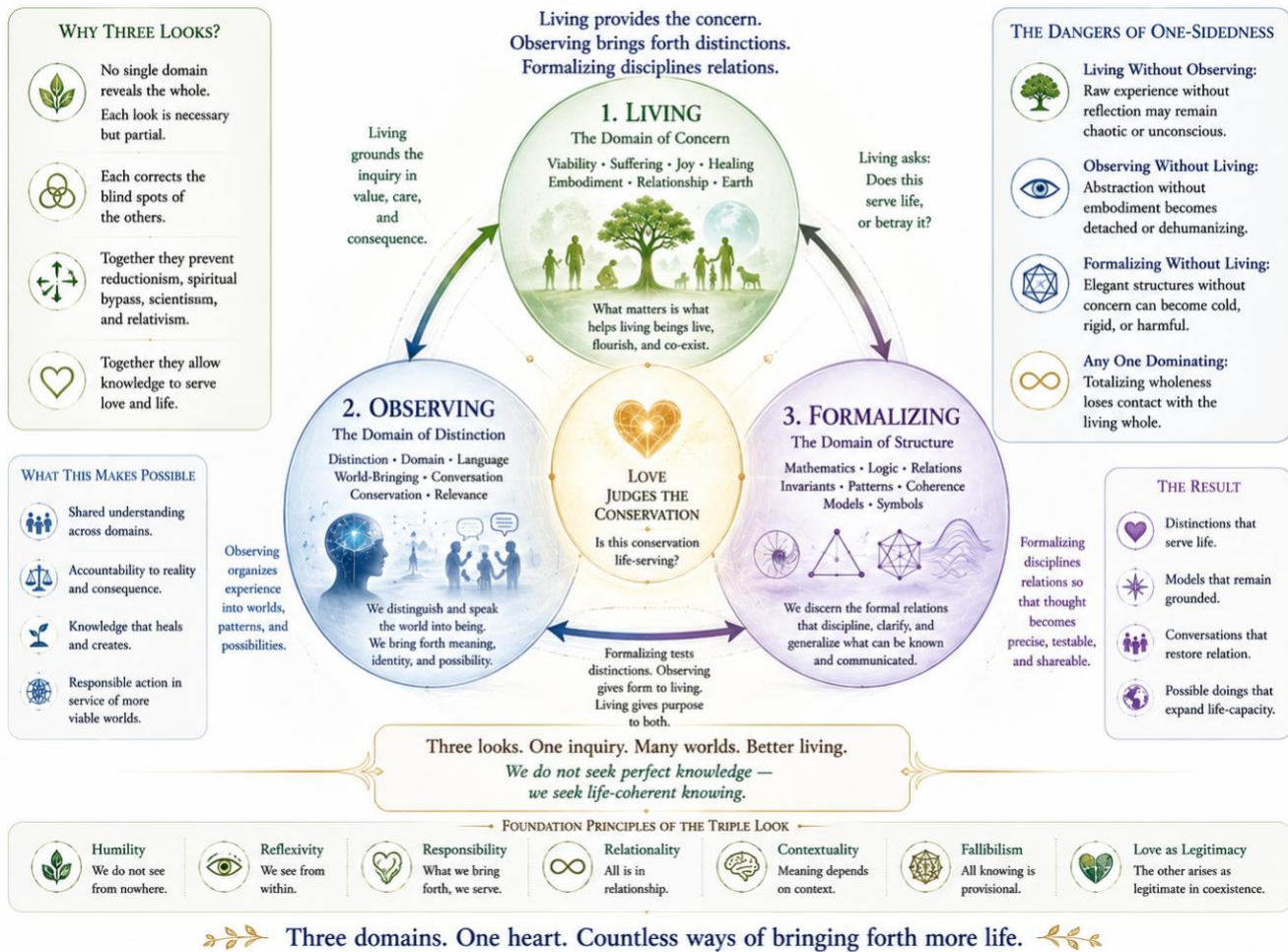


Figure 6. The Triple Look: Living, Observing, and Formalizing

## 10.2 Mathematics as Disciplined Language

Mathematics is a form of disciplined language.

It coordinates operations with precision. It allows relations to be manipulated, transformed, checked, repeated, and extended. It reveals consequences that ordinary language may hide. It can show when a structure is incomplete, inconsistent, redundant, symmetric, invariant, or generative.

For the viability grammar, this matters.

The primitives of conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings should not remain only a list. They imply relations. Conservation interacts with constraint. Constraint affects margin. Disturbance triggers present structure. Present structure shapes regulation. Regulation organizes relevance. Relevance opens or closes possible doings. Possible doings may begin a new conservation.

The grammar is recursive. It has cycles. It has transformations. It has sequences where order matters. It has domains where the same operation means differently depending on context. It has something like non-associativity:  $\text{Form} \rightarrow \text{State} \rightarrow \text{World}$  is not equivalent to  $\text{World} \rightarrow \text{State} \rightarrow \text{Form}$ . The same elements can produce different outcomes depending on grouping, sequence, and domain.

Mathematics can help discipline this.

It can ask: What are the minimal operations of the grammar? What relations are invariant? What transformations preserve life-coherence? What sequences matter? What structures produce closure? What disturbances generate new possible doings? What forms of apparent coherence are actually life-incoherent?

This is not reduction. It is disciplined reflection.

## 10.3 The Danger of Mathematical Totalization

Mathematical beauty can intoxicate.

A formal structure may appear so elegant that it invites metaphysical inflation. One may begin to think that because a pattern is beautiful, it must be ontologically ultimate. Because a triad maps elegantly, it must be real in every domain. Because the Fano plane organizes seven elements, any sevenfold grammar must be secretly Fano-planar. Because octonions are exceptional, life must be octonionic. Because triality appears in  $\text{Spin}(8)$ , all threefoldness must derive from it.

This is the danger.

Maturana would likely caution that mathematical formalism does not give us access to a world independent of our distinctions. It gives us operational coherences within a domain. The formalism may be powerful, beautiful, and useful, but it does not erase the observer.

Therefore, the use of mathematics in this paper must remain disciplined by four safeguards.

First, domain clarity: mathematical structures belong first to mathematical domains. Their transfer to biology, psychology, culture, or spirituality requires explicit justification.

Second, evidentiary humility: analogy is not evidence. Formal resonance is not empirical proof.

Third, life-coherent evaluation: even a mathematically coherent system can conserve life-incoherent outcomes.

Fourth, love: the living being must not be subordinated to the elegance of the model.

Mathematics can clarify. It can inspire. It can discipline. It must not dominate.

## 10.4 The Mathematical Domain as a Third Domain, Not a Higher Domain

The mathematical domain is the third look, not the highest look.

This distinction matters.

If mathematics is treated as higher than living, then the body, relationship, suffering, ecology, culture, and love are judged by formal elegance. That path leads to abstraction over life.

If mathematics is excluded, then the inquiry may remain too loose, unable to test its own relational coherence. That path leads to vague holism.

The life-coherent path is different.

Mathematics is invited as a legitimate other.

It enters the conversation as a domain with its own rigor, beauty, constraints, and gifts. It does not need to become biology. Biology does not need to become mathematics. Spirituality does not need to become geometry. Clinical medicine does not need to become algebra. But each can enter relation with mathematical form where the relation is fruitful, explicit, and disciplined.

This is non-totalizing coherence applied to knowledge.

The mathematical domain becomes a partner in inquiry.

## 10.5 Toward a Formal Viability Grammar

A formal viability grammar would not attempt to reduce living to equations.

It would attempt to clarify the relational operations by which life-coherent distinctions work.

It might begin with the eight primitives:

Conservation.

Constraint.

Margin.

Disturbance.

Present structure.

Regulation.

Relevance.

Possible doings.

It would then ask how these primitives transform one another.

Conservation defines what persists.

Constraint defines the conditions that persistence must respect.

Margin defines the room for adaptive variation.

Disturbance introduces perturbation.

Present structure determines response.

Regulation returns or shifts the pattern.  
Relevance shapes what is noticed and acted upon.  
Possible doings enact the next conservation.

This suggests a cycle, but not a simple circle. The relations are recursive, domain-sensitive, and non-linear. A disturbance may reduce margin, alter relevance, change regulation, and begin a new conservation. A new possible doing may change present structure. A change in relevance may reveal constraints previously invisible. A collapse in margin may force defensive regulation. A new conservation may open or close the future.

The grammar therefore needs a formalism capable of representing circular causality, domain specificity, sequence dependence, and transformation without losing the living center.

Fano-plane and octonionic intuitions may become useful here, not as proof, but as disciplined symbolic scaffolds for exploring sevenfold and eightfold relational closure. Triality may help clarify irreducible threefold relations such as form-state-world, structure-energy-information, living-observing-formalizing, or waking-growing-showing in relation to opening and cleaning. Exceptional structures may help us think about rare transformations where new degrees of freedom appear while deep invariants remain conserved.

But the center must remain living.

The formal viability grammar must always return to the question:

What manner of living does this formalism conserve?

## 10.6 Love Judges the Conservation

Mathematics can tell us whether relations cohere formally.

It cannot tell us, by itself, whether the conserved world is humane.

A prison can be optimized.  
A market can be efficient.  
A surveillance system can be predictive.  
A propaganda system can be adaptive.  
A weapons system can be elegant.  
A domination hierarchy can be stable.  
A trauma pattern can be self-consistent.  
An extraction economy can be mathematically profitable.

Formal coherence does not equal life-coherence.

This is why the final criterion cannot be mathematical beauty. It must be viability in love.

Does the formalism conserve legitimate coexistence?  
Does it expand possible living?  
Does it protect the vulnerable?  
Does it respect domain boundaries?  
Does it restore relation?  
Does it preserve the life-ground?  
Does it increase responsibility for consequences?  
Does it help living see what it is conserving?

If not, then its elegance is not enough.

The mathematical domain becomes life-coherent when it serves the restoration of possible living. It becomes life-incoherent when it uses living beings as examples of its own perfection.

The third look must therefore remain in conversation with the first two.

Living brings the concern.

Observing brings forth the distinction.

Formalizing disciplines the relation.

Love asks whether the world brought forth is worth conserving.

## 11. Fano Plane, Octonions, Triality, and the Exceptional Ladder

The Life-Coherence project has repeatedly encountered mathematical images that seem to resonate with its deeper concerns: sevenfold structures, eightfold closure, irreducible threefold relations, non-associative operations, exceptional symmetries, and rare transformations in which new freedom appears without abandoning underlying constraint.

The Fano plane, octonions, triality, and exceptional structures enter the inquiry here.

They should not be treated as secret proofs that life, consciousness, or civilization are literally mathematical in one predetermined way. They should be treated as formal-symbolic disciplines that may help thought remain coherent when dealing with relational complexity.

Mathematics can offer more than calculation. It can offer forms of disciplined imagination.

The question is not: Can the Fano plane explain life?

The question is: Can the Fano plane help us think relational closure without flattening difference?

The question is not: Are organisms octonions?

The question is: Can octonionic non-associativity help us remember that sequence, grouping, and domain matter in living systems?

The question is not: Is consciousness literally  $Spin(8)$  triality?

The question is: Can triality help us think irreducible threefold mutuality without reducing one domain to another?

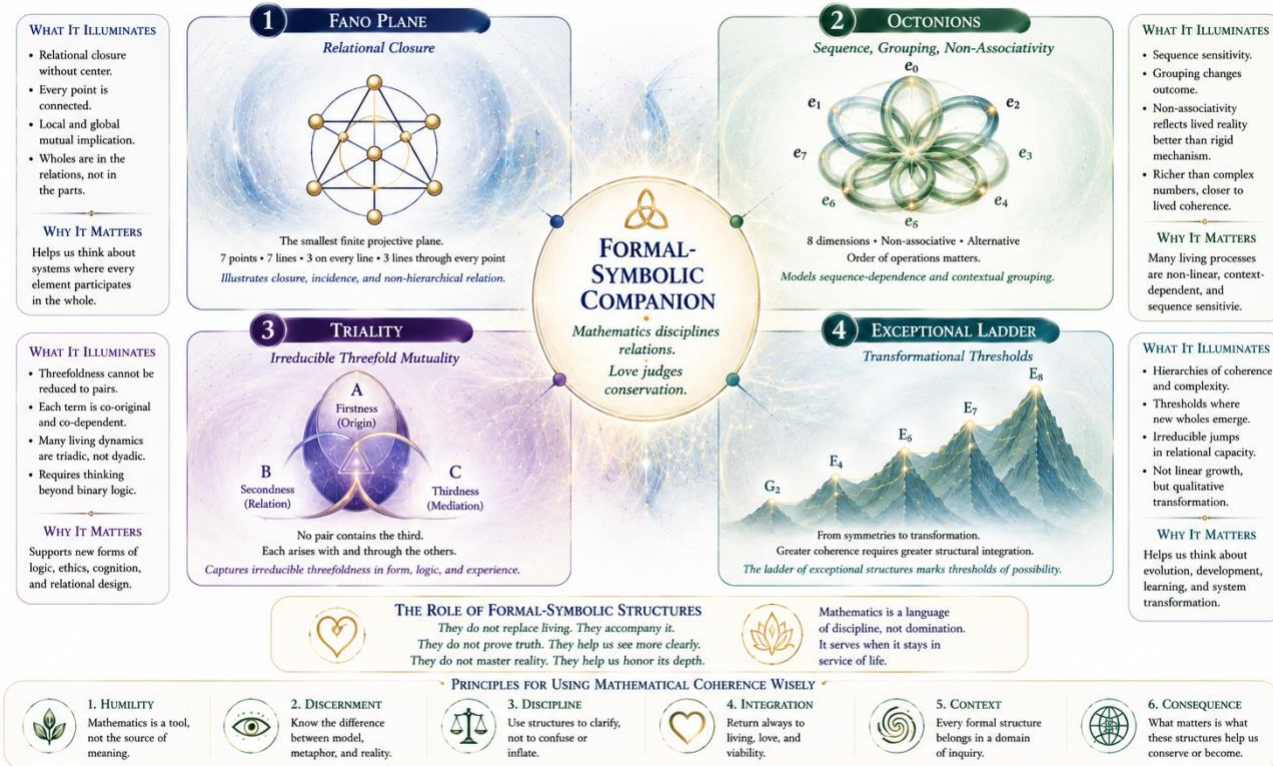
The question is not: Does the exceptional ladder prove metaphysical destiny?

The question is: Can exceptional structures help us imagine lawful transformation in which new degrees of freedom appear through conserved constraints?

Used this way, mathematics becomes a partner in life-coherent inquiry.

# MATHEMATICAL COHERENCE AS FORMAL-SYMBOLIC COMPANION

Structures That Discipline Relational Thought — Not Proof, Not Master, Disciplined Seeing



Mathematical coherence is a companion in the journey of inquiry — never its master.

Figure 7. Mathematical Coherence as Formal-Symbolic Companion

## 11.1 The Fano Plane as a Symbol of Relational Closure

The Fano plane is the finite projective plane of order two. It has seven points and seven lines, with three points on each line and three lines through each point. Every pair of points determines a line, and every pair of lines meets in a point. (Baez, 2002; Conway & Smith, 2003).

As a mathematical object, it is precise. As a symbolic scaffold, it is suggestive.

The Life-Coherence project has repeatedly generated sevenfold and eightfold structures. Coherence physiology names seven layers: material substrate, hydrated interfaces, force-flow dynamics, exchange intelligence, boundary intelligence, energetic governance, and recovery trajectory. The viability grammar includes eight diagnostic primitives, often with living or viability as a central concern around which seven operational distinctions move. Wilber's five paths, Maturana's living-observing-languaging distinctions, and the tri-field model all show that life-coherent inquiry requires relational placement rather than linear listing.

The Fano plane helps by making a simple demand:

Do not treat the elements as isolated.

Every point belongs to multiple relations. Every relation depends on points. No element is merely itself. Its meaning is partly determined by the lines through which it participates.

This is valuable for the viability grammar. Conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings cannot be understood as separate boxes. They mutually define one another. Conservation without constraint becomes abstraction. Constraint without margin becomes rigidity. Margin without regulation becomes drift. Disturbance without present structure becomes linear causality. Relevance without love becomes capture. Possible doings without conservation become scattered activism.

The Fano-plane intuition asks us to search for generative triads.

For example:

Conservation – Constraint – Margin  
Disturbance – Present Structure – Regulation  
Relevance – Possible Doings – Conservation  
Constraint – Disturbance – Present Structure  
Margin – Relevance – Possible Doings  
Regulation – Conservation – Boundary  
Living – Love – Viability

These are not proposed as fixed mathematical identities. They are invitations to examine how three distinctions may co-generate a domain of possible action.

The deeper lesson is that a grammar of life must be relationally closed enough to remain coherent, yet open enough to transform.

## 11.2 Octonions and the Reminder That Order Matters

Octonions are an eight-dimensional number system extending the real numbers, complex numbers, and quaternions. They are non-commutative and non-associative. This means that the order and grouping of operations matter. (Baez, 2002; Conway & Smith, 2003; Manogue & Dray, 2015).

For life-coherent inquiry, this is symbolically powerful.

Living systems are full of operations where sequence matters. The same elements can produce different outcomes depending on order, grouping, timing, state, and context. In the tri-field model, Form  $\rightarrow$  State  $\rightarrow$  World  $\rightarrow$  Meaning is not equivalent to Meaning  $\rightarrow$  World  $\rightarrow$  State  $\rightarrow$  Form. In clinical repair, beginning with cognitive reframing when the organism is dysregulated may fail; beginning with form support and autonomic stabilization may open the conditions in which meaning can later reorganize.

Similarly, in social repair, demanding reconciliation before safety can retraumatize. In politics, imposing unity before justice can conserve domination. In spirituality, dissolving difference before development can produce pre/trans confusion. In AI, scaling relevance before responsibility can amplify harm. In finance, increasing liquidity without life-ground constraints can intensify extraction.

Octonionic non-associativity becomes a formal reminder:

The same terms do not generate the same world when grouped differently.

This matters for the whole synthesis. “Coherence,” “attention,” “love,” “mathematics,” “AI,” and “life” can be combined in different orders. Each order brings forth a different world.

If mathematics governs life, one world appears.  
If life invites mathematics as a discipline of relation, another world appears.  
If AI captures attention, one world appears.  
If life-coherent attention disciplines AI, another world appears.  
If wholeness absorbs parts, one world appears.  
If holonic integration protects both wholeness and partness, another world appears.

Order matters because living is historical. Present structure matters because responses arise from embodied history. The octonionic image helps us remember that life-coherent syntax is not arbitrary. The grammar of repair has order, rhythm, and constraint.

## 11.3 Triality as Irreducible Threefold Mutuality

Triality is one of the most important mathematical intuitions for the emerging synthesis.

In its technical mathematical context, triality is associated with exceptional symmetries such as those appearing in relation to  $\text{Spin}(8)$ , where three eight-dimensional representations stand in a remarkable symmetry. In the present paper, however, triality is used carefully as a formal-symbolic intuition: a way of thinking irreducible threefold mutuality. (Springer & Veldkamp, 2000).

The Life-Coherence project is full of triads that are not reducible to simple hierarchies.

In Maturana-informed inquiry:

Living – Observing – Formalizing.

In the tri-field model:

Form – State – World.

In system organization:

Structure – Energy – Information.

In repair:

Support – Regulation – Meaning.

In conversation:

Languaging – Emotioning – Coordinated Doings.

In ethics:

Self – Other – Medium.

In knowledge:

Evidence – Interpretation – Consequence.

In AI-assisted inquiry:

Human concern – Machine language coordination – Life-coherent responsibility.

These triads are not merely lists of three. They are domains in which each term constrains and illuminates the others.

Form without state is mechanical.  
State without world is uncontextualized.  
World without form is disembodied.

Living without observing is unreflected.  
Observing without formalizing may remain vague.  
Formalizing without living becomes abstraction.

Structure without energy is inert.  
Energy without information is undirected.  
Information without structure and energy is disembodied.

Triality helps us resist reduction to one dominant term. It also helps us resist binary thinking. Many modern conflicts arise from two-term oppositions: mind/body, individual/society, science/spirituality, freedom/order, nature/culture, human/machine, whole/part. Triality often opens a third domain in which the polarity can be reconfigured.

The life-coherent question becomes:

What third domain is missing that would make this polarity more viable?

Between body and mind, the missing third may be world.  
Between individual and society, the missing third may be medium.  
Between attention and intelligence, the missing third may be care.  
Between mathematics and living, the missing third may be observing.  
Between coherence and freedom, the missing third may be love.  
Between AI and human inquiry, the missing third may be responsibility.

Triality is therefore not merely a mathematical fascination. It becomes a method of opening stuck distinctions.

## 11.4 The Exceptional Ladder and Transformational Thresholds

Exceptional mathematical structures evoke another intuition: not all transformations are continuous extensions of ordinary patterns. Some transformations open rare new relational possibilities.

The so-called exceptional ladder, moving through exceptional objects and symmetries, has often fascinated mathematicians, physicists, and philosophers because it suggests deep structures that do not fit the most familiar infinite families. These structures are not ordinary in the technical sense. They are constrained, rare, and generative.

For life-coherent inquiry, the symbolic value lies in the idea of transformational threshold.

Many systems do not transform by simply adding more of what they already do. A patient does not recover from defensive lock-in merely by pushing harder. A culture does not become life-coherent merely by increasing information. An economy does not become regenerative merely by growing. A spiritual practitioner does not

mature merely by accumulating peak experiences. An AI system does not become wise merely by scaling parameters.

At certain thresholds, a new relational organization is needed.

The exceptional ladder becomes a formal-symbolic way of asking:

What new organization would allow the system to conserve identity while opening a new degree of freedom?

This question applies clinically, culturally, and spiritually.

A person may need a shift from survival coherence to salogenic coherence.

A clinic may need a shift from throughput to relational repair.

A website may need a shift from chronological archive to Knowledge Commons.

A civilization may need a shift from growth conservation to life-capacity conservation.

An AI culture may need a shift from attention capture to life-coherent attention.

These are not merely improvements within the same pattern. They are transformations in what is conserved.

## 11.5 Mathematical Beauty Under the Discipline of Love

The formal-symbolic domain is valuable because it helps life-coherent inquiry avoid looseness. It asks whether our distinctions are internally coherent, whether relations close, whether sequences matter, whether triads are irreducible, whether transformations conserve identity, and whether new structures are needed.

But mathematical beauty must remain under the discipline of love.

Love asks whether the living other remains legitimate.

Viability asks whether the conditions of living are conserved.

Evidence asks what can be responsibly claimed.

Domain discipline asks where a formalism applies and where it does not.

Showing Up asks what possible doings follow.

Without these safeguards, the mathematical domain can become another form of totalization.

The Life-Coherence project should therefore entertain Fano planes, octonions, triality, and exceptional structures as serious formal companions, but not as masters. They may help the viability grammar become more coherent. They may illuminate recurrent patterns. They may guide figure design, conceptual architecture, and future formal modeling. They may even open research questions at the edge of mathematics, physics, biology, and consciousness.

But the central question remains:

What manner of living does this mathematical attention conserve?

## 12. SOMU, Prime-Coded Resonance, and Coherence Cosmology

The work of Dr. Anirban Bandyopadhyay enters this synthesis as a frontier domain of resonance, mathematical cosmology, quantum biology, and consciousness theory. (Sahely, 2025a).

His proposed Self-Operating Mathematical Universe, or SOMU, reframes the universe not as inert matter processed by external computation, but as a self-operating field of mathematical resonance, nested clocks, prime-coded structures, triplet symmetries, and recursive coherence. In this view, information is not fundamentally bit-based, linear, or merely symbolic. It is clocked, resonant, recursive, phase-based, and embedded in the architecture of matter and life.

This is a bold and speculative domain. It must be handled with both seriousness and caution.

Its significance for the present paper is not that it provides a settled cosmology. Its significance is that it stretches the Life-Coherence project toward a larger question:

Is coherence merely a biological and relational principle, or is it also a clue to a deeper mathematical-resonant structure of reality?

The answer cannot be prematurely declared. But the question deserves disciplined attention.

## 12.1 From Bits to Clocks

One of the most fruitful distinctions in the SOMU framework is the shift from bits to clocks.

Classical computation treats information in terms of discrete symbolic states. Transformer-based artificial intelligence, though vastly more relational than earlier symbolic systems, still operates within formal architectures of tokens, embeddings, attention weights, and learned parameters. Bandyopadhyay's work points toward another ontology of information: information as nested cycles, resonance bands, phase relations, and clocked coherence across scales.

This resonates with several domains already central to Life-Coherence.

Biology is rhythmic. Cells pulse, oscillate, cycle, and entrain. Microtubules, membranes, mitochondria, heart rhythms, breath, sleep cycles, hormonal rhythms, immune rhythms, developmental timing, menstrual cycles, circadian cycles, ecological cycles, and cultural rituals all involve time-structured coherence. A living system is not merely arranged in space. It is ordered in time.

Coherence physiology already depends on recovery rhythms. The tri-field model depends on temporal alignment among body-form, physiological state, and world interpretation. Trauma can be understood as temporal fixation: the past remains active in the present. Salugenesis requires a new timing of defense, repair, rest, exertion, and participation.

The shift from bits to clocks therefore supports a broader life-coherent insight:

Living coherence is rhythmic coherence.

The organism does not merely process information. It keeps time with itself, others, and the world.

## 12.2 Triplet Resonance and Tri-Field Regulation

Bandyopadhyay's emphasis on triplet resonance offers another bridge.

In his framework, consciousness is associated with threefold resonance structures, triplet symmetries, and triadic modes that he relates to both physical systems and Vedic metaphysical categories. Whether or not all of these

claims are ultimately sustained empirically, the recurrence of threefold organization is striking when placed beside the tri-field model of embodied self-regulation.

The tri-field model proposes that selfhood depends on the alignment of proprioceptive form, interoceptive state, and exteroceptive world. These are not optional additions. Without form, action lacks support. Without state, viability cannot be sensed. Without world, action lacks context. Together they generate the lived sense of being this body, in this state, in this world.

Triplet resonance and tri-field regulation should not be collapsed into one another. One belongs to a frontier theory of quantum-biological and mathematical resonance; the other belongs to embodied regulation and clinical reasoning. Yet they may be understood as resonant analogues across domains.

Both refuse reduction to one pole.

Both suggest that coherence requires irreducible threefold relation.

Both locate consciousness or selfhood in relational pattern rather than isolated substance.

Both imply that identity is maintained through dynamic alignment.

This is precisely where domain discipline matters. The paper does not claim that tri-field regulation proves triplet consciousness, or that triplet resonance proves the clinical model. Rather, it proposes that threefold coherence may be a recurring organizational motif worthy of careful formal, empirical, and philosophical exploration.

## 12.3 Microtubules, Cytoskeleton, and the Living Substrate

Bandyopadhyay's work on microtubules and biological resonance also intersects with coherence physiology.

Microtubules are part of the cytoskeletal architecture of cells. They participate in structure, transport, cell division, intracellular organization, and potentially in bioelectrical and vibrational dynamics. The SOMU-related work places microtubules within a much larger theory of quantum coherence, nested clocks, and consciousness. Such claims remain frontier and controversial, but they point toward a neglected question: how deeply does cellular architecture participate in organismal coherence?

Coherence physiology already argues that the organism must be understood through substrate, interface, force, flow, exchange, boundary, energy, and recovery. Cytoskeletal dynamics belong within this architecture. They link mechanical forces, cellular signaling, intracellular transport, matrix relations, and perhaps electromagnetic or vibrational properties. Even if one remains cautious about strong consciousness claims, cytoskeletal coherence remains biologically important.

The life-coherent interpretation is therefore measured:

Microtubules should not be overburdened as the sole secret of consciousness.

Nor should they be dismissed as mere structural scaffolds.

They are part of the living substrate through which form, force, information, and cellular organization meet.

This middle path allows frontier inquiry without overclaiming.

## 12.4 Hinductors, Vortex Computing, and Coherent Technology

The Hinductor and quantum brain-jelly concepts extend the SOMU framework into technological design. These ideas propose new forms of computing based on vortex dynamics, helical structures, phase-coherent information, and organic architectures that mimic aspects of biological resonance.

For the present paper, their importance is conceptual as much as technical.

They ask whether computation must remain dominated by linear digital architectures, or whether future technologies might learn from biological coherence: distributed resonance, adaptive self-organization, phase relations, fluid boundaries, structural memory, and energetic efficiency.

This connects directly to the question of artificial intelligence.

The Transformer revolution showed the power of attention in symbolic computation. SOMU-inspired technologies ask whether future intelligence systems might move beyond token-based attention toward embodied, resonant, field-like, and perhaps bio-inspired forms of coherence.

But again, power is not enough.

A resonance-based AI could still serve extraction. A bio-inspired machine could still be used for surveillance. A coherent technology could still conserve life-incoherent purposes.

Therefore, the technological question must be subordinated to the viability question:

What kind of technology restores possible living?

## **12.5 Prime-Coded Cosmology and the Risk of Metaphysical Inflation**

The prime-coded cosmology of SOMU is among its most ambitious claims. It proposes that prime numbers function not merely as mathematical abstractions, but as ontological generators of nested fractal universes or recursive structures of reality.

Such claims are intellectually provocative. They may resonate with ancient cosmologies, number mysticism, modern mathematical physics, and symbolic metaphysics. But they also carry high risk of metaphysical inflation.

The Life-Coherence project should neither dismiss nor overstate them.

A Maturana-informed approach asks: In what domain does this distinction operate? What operational coherences does it reveal? What experiments, models, or possible doings does it generate? Does it clarify, or does it merely enchant? Does it conserve humility, or does it produce certainty beyond evidence?

Prime-coded cosmology may be valuable as a frontier metaphysical-scientific imagination. It may help us think recursion, nestedness, non-repetition, incompleteness, and mathematical creativity. It may inspire new formal models or experimental questions. But it should not become the empirical backbone of life-coherent medicine, clinical care, or social design.

In the evidence gradient of this paper, prime-coded cosmology belongs to the frontier and symbolic-metaphysical domain, not the established clinical domain.

This distinction protects both science and wonder.

## **12.6 Coherence Cosmology as Participatory Mythos**

Even when handled cautiously, coherence cosmology has value as mythos.

Mythos here does not mean falsehood. It means a meaning-bearing orientation that helps a culture sense its place in the whole. Modern civilization suffers partly from a dead cosmology: a world imagined as inert matter, external resources, meaningless mechanisms, and human projects imposed upon a silent background. Such a cosmology easily supports extraction.

A coherence cosmology brings forth another possibility.

It invites us to imagine that reality is not dead background but living relation, rhythm, resonance, recursion, and participation. It suggests that intelligence may not be an accidental late arrival, but an expression of deep relational order. It encourages humility before patterns we do not yet understand. It re-sacralizes inquiry without abandoning discipline.

This can support life-coherence if held correctly.

The risk is grandiosity. The gift is reverence.

A life-coherent coherence cosmology would not say: We possess the final code of the universe. It would say: We participate in a reality whose coherences exceed us, and our distinctions should conserve life rather than dominate it.

That is the cosmological posture this paper can responsibly affirm.

## 13. The Five Disciplines of Life-Coherent Attention

The previous sections have brought together several domains: Maturana's observer and languaging, Wilber's five paths, coherence physiology, tri-field regulation, mathematical formalism, and resonance cosmology. The task now is to name the central integrative proposal.

Life-coherent attention is attention disciplined by viability, love, evidence, embodiment, development, shadow, formal coherence, and responsible action.

It is not one faculty. It is a fivefold practice.

The five disciplines of life-coherent attention are:

Waking attention.

Growing attention.

Opening attention.

Cleaning attention.

Showing attention.

These correspond to Wilber's five paths, but they are reformulated here as disciplines of attention within the Life-Coherence project.

Each discipline asks a different question. Each opens a different kind of wholeness. Each protects against a different distortion. Together they prevent attention from becoming merely computational, sentimental, intellectual, spiritual, clinical, mathematical, or activist.

Table 3. The Five Disciplines of Life-Coherent Attention

Discipline	Core Question	Gift	Shadow Risk	Life-Coherent Correction
Waking Attention	What depth is being forgotten?	Opens contemplative depth, presence, mystery, and nondual awareness.	Spiritual bypass, premature unity, avoidance of embodiment.	Awakening must return as love, care, and participation.
Growing Attention	What perspective is still too small?	Expands developmental, cognitive, moral, and perspectival capacity.	Developmental superiority or ranking.	Growth must preserve legitimacy of present structure.
Opening Attention	What intelligence has not been invited?	Includes multiple intelligences and ways of knowing.	Eclectic incoherence or domain confusion.	Inclusion must remain disciplined by domain validity.
Cleaning Attention	What shadow is being conserved?	Reveals trauma, projection, hidden domination, and unconscious motives.	Paralysis, suspicion, accusation, endless self-critique.	Shadow work must restore possible living.
Showing Attention	What possible doing is now required?	Turns insight into responsible action.	Compulsive action, urgency without regulation.	Action must respect constraint, margin, and present structure.

## 13.1 Waking Attention: What Depth Is Being Forgotten?

Waking attention asks what depth is being forgotten.

It is the discipline of remembering that living cannot be exhausted by utility, mechanism, diagnosis, economic value, legal status, data, or narrative identity. It opens attention to presence, being, mystery, intimacy, and the nondual depth in which subject and object are not ultimately separate.

In life-coherent medicine, waking attention prevents the patient from being reduced to a case. In law, it prevents persons from being reduced to legal positions. In economics, it prevents value from being reduced to price. In ecology, it prevents Earth from being reduced to resource. In AI, it prevents language from being mistaken for lived presence.

Its shadow is bypass.

Waking attention becomes life-incoherent when it dissolves distinctions prematurely, denies suffering, ignores development, avoids conflict, or uses unity language to evade responsibility.

Its life-coherent question is:

Does this attention open depth while remaining answerable to embodied living?

## 13.2 Growing Attention: What Perspective Is Still Too Small?

Growing attention asks what perspective is still too small.

It attends to developmental adequacy. It asks whether the observer can hold complexity, take multiple perspectives, distinguish domains, coordinate parts and wholes, and act beyond egocentric or ethnocentric limitation.

In medicine, growing attention supports systems thinking and patient-centered complexity. In politics, it supports movement beyond tribal polarization. In spirituality, it distinguishes mature nonduality from pre-differentiated

fusion. In knowledge work, it prevents simplistic synthesis. In AI ethics, it asks whether powerful tools are being used from immature value structures.

Its shadow is developmental superiority.

Growing attention becomes life-incoherent when it ranks persons contemptuously, turns developmental models into weapons, or forgets that every stage arises from a history of living.

Its life-coherent question is:

Does this attention expand perspective without negating the legitimacy of the present structure?

### **13.3 Opening Attention: What Intelligence Has Not Been Invited?**

Opening attention asks what intelligence has not been invited.

It recognizes that life is not disclosed through one mode of knowing. Cognitive, emotional, moral, aesthetic, somatic, ecological, spiritual, mathematical, narrative, clinical, relational, and practical intelligences each reveal different aspects of reality.

In medicine, opening attention invites lab data, patient story, physical exam, physiology, social context, trauma history, environmental exposure, and clinical intuition. In politics, it invites policy analysis, lived experience, ecological knowledge, moral imagination, and historical memory. In spirituality, it invites contemplation, psychology, embodiment, ethics, and service. In AI, it asks what forms of knowing are absent from language patterning.

Its shadow is eclectic incoherence.

Opening attention becomes life-incoherent when it includes everything without discipline, confuses domains, or treats all claims as equally valid.

Its life-coherent question is:

Does this attention include the needed intelligences while preserving domain discipline?

### **13.4 Cleaning Attention: What Shadow Is Being Conserved?**

Cleaning attention asks what shadow is being conserved.

It attends to disowned motives, unconscious fear, projection, trauma, domination, shame, superiority, avoidance, resentment, and hidden incentives. It asks where the inquiry itself may be defending against what it does not want to see.

In medicine, cleaning attention asks where clinicians dismiss patients to protect professional certainty. In politics, it asks where movements reproduce the domination they oppose. In spirituality, it asks where awakening language hides narcissism, abuse, or avoidance. In economics, it asks where prosperity narratives hide extraction. In AI, it asks where technological enthusiasm hides power, profit, labor exploitation, and ecological cost.

Its shadow is endless suspicion or self-attack.

Cleaning attention becomes life-incoherent when it becomes accusatory, paralyzing, or unable to recognize goodness.

Its life-coherent question is:

Does this attention reveal hidden harm in a way that restores possible living?

## **13.5 Showing Attention: What Possible Doing Is Now Required?**

Showing attention asks what possible doing is now required.

It is the discipline of incarnation. Insight must become action. Care must become structure. Reflection must become changed conduct. Theory must become practice. A paper must become readable. A clinical model must improve care. A figure must help understanding. A website must help navigation. A policy must protect life. An AI interaction must support responsibility.

Showing attention protects the Life-Coherence project from remaining beautiful but ineffective.

Its shadow is compulsive action.

Showing attention becomes life-incoherent when urgency overrides constraint, when activism neglects regulation, when implementation ignores present structure, or when doing becomes avoidance of deeper work.

Its life-coherent question is:

What next step can actually be lived without violating the conditions of living?

## **13.6 The Five Disciplines Together**

No one discipline is sufficient.

Waking without growing may bypass development.

Growing without waking may become complex but spiritually shallow.

Opening without cleaning may become inclusive but naïve.

Cleaning without showing may become endless analysis.

Showing without waking may become restless activism.

Mathematics without love may become abstraction.

AI without responsibility may become capture.

Medicine without embodiment may become fragmentation.

Spirituality without the body may become escape.

Politics without co-regulation may become organized dysregulation.

Life-coherent attention requires the whole fivefold discipline.

It asks, in every domain:

What depth is being forgotten?

What perspective is still too small?

What intelligence has not been invited?

What shadow is being conserved?  
What possible doing is now required?

These five questions can guide persons, clinics, institutions, technologies, communities, and civilizations.

## 13.7 The Central Formula

The synthesis can now be stated simply:

Attention brings forth relevance.  
Distinction brings forth worlds.  
Conversation conserves worlds.  
Coherence stabilizes worlds.  
Love judges whether those worlds conserve living.  
Possible doings transform what can be conserved next.

Life-coherent attention is therefore not attention alone. It is attention matured through waking, growing, opening, cleaning, and showing, and disciplined by the viability question:

What manner of living is being conserved here, and does that conservation conserve or negate the conditions of living?

This question does not end inquiry.

It keeps inquiry alive.

## 14. From Artificial Intelligence to Life-Coherent Intelligence

Artificial intelligence has become one of the decisive domains in which the future of attention will be shaped.

The rise of attention-based language models has changed how human beings search, synthesize, write, translate, summarize, converse, plan, and imagine. These systems can hold vast symbolic fields in relation. They can generate coherent text across many domains. They can assist with research, education, clinical documentation, policy drafting, visual design, website architecture, and public communication. They can help recover long-range dependencies that fragmented human institutions often fail to notice.

This is not trivial. It is a genuine transformation in the domain of languaging.

Yet artificial intelligence also intensifies the central danger of attention without care. It can accelerate manipulation, surveillance, distraction, dependency, misinformation, epistemic flattening, synthetic persuasion, bureaucratic automation, and extractive capture of human attention. It can make language more fluent while making responsibility less visible. It can simulate concern without living concern. It can multiply possible distinctions without guaranteeing that any of them conserve living.

The question is therefore not whether artificial intelligence is powerful.

The question is whether artificial intelligence can be embedded within life-coherent intelligence.

## 14.1 Artificial Intelligence as Language-Participant

A large language model is not a living observer in the biological sense. It does not metabolize. It does not suffer. It does not heal. It does not live in structural coupling with a medium as an organism does. It does not love. It does not bear existential responsibility for the worlds it helps bring forth.

Yet it can participate in languaging.

It can participate as a technological agent within human domains of recursive coordination. It can help generate formulations, compare distinctions, retrieve patterns, extend arguments, reorganize archives, and support possible doings. It can become a participant in the coordination of the coordination of inquiry.

This makes artificial intelligence neither mere tool nor autonomous author.

It is better understood as a language-participant whose outputs must be held within human responsibility, ethical discernment, evidence discipline, and life-coherent purpose.

This distinction protects against two errors.

The first error is tool reductionism: treating AI as a neutral instrument with no world-bringing effects. That is inadequate because AI changes attention, memory, writing, authority, learning, and institutional practice.

The second error is personification: treating AI as a living knower with love, wisdom, or responsibility equivalent to a human being. That is inadequate because AI lacks organismic viability, embodied suffering, relational accountability, and lived care.

The life-coherent position is more precise: AI participates in languaging, but human beings remain responsible for the worlds conserved through that participation.

## 14.2 The Difference Between Intelligence and Life-Coherent Intelligence

Intelligence can solve problems while conserving harmful purposes.

A weapons system can be intelligent. A surveillance system can be intelligent. A market algorithm can be intelligent. A propaganda engine can be intelligent. A manipulative recommender system can be intelligent. A medical billing optimizer can be intelligent. A system can learn, predict, classify, generate, and adapt while deepening life-incoherence.

Therefore, intelligence alone is not enough.

Life-coherent intelligence is intelligence ordered toward the preservation, restoration, and expansion of life-capacity. It asks not only whether a system can generate accurate, efficient, persuasive, or novel outputs, but whether its operation conserves the conditions of living.

This requires several disciplines.

It requires viability orientation: does this system serve possible living?

It requires love as legitimacy: does the system support relations in which living beings remain more than data, targets, users, patients, consumers, risks, or markets?

It requires evidence discipline: does the system distinguish what is known, inferred, speculative, symbolic, or uncertain?

It requires domain humility: does the system avoid transferring authority from one domain to another without justification?

It requires developmental adequacy: is the system being used from a sufficiently mature frame of values and responsibility?

It requires shadow awareness: what incentives, exclusions, biases, and harms are hidden in the system's design, training, deployment, and use?

It requires possible doings: does the system help bring forth actions that can actually be lived within present constraints?

Artificial intelligence becomes life-coherent only when embedded in these disciplines.

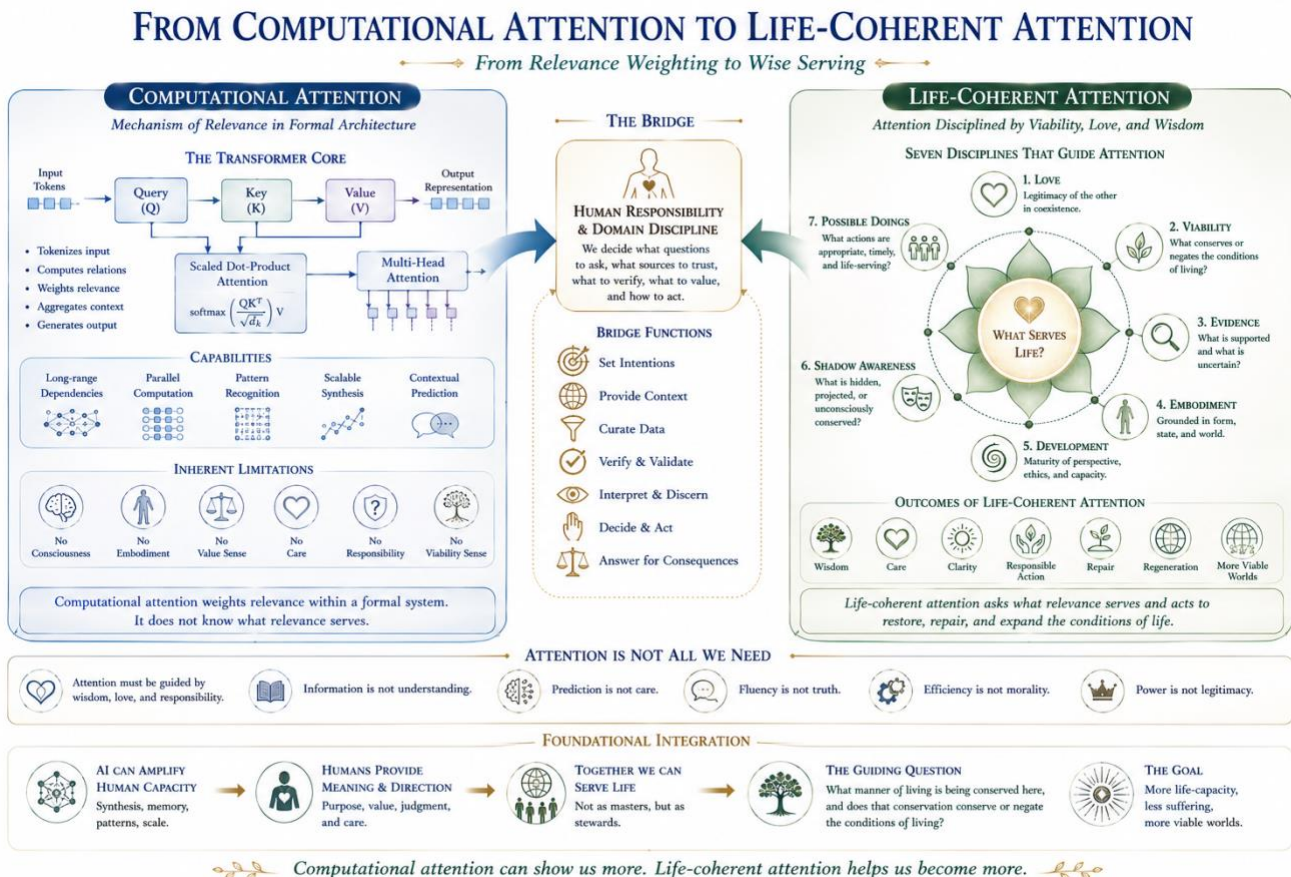


Figure 8. From Computational Attention to Life-Coherent Attention

## 14.3 AI and the Risk of Disembodied Fluency

One of the greatest dangers of language models is disembodied fluency.

A system may generate language that sounds coherent, compassionate, precise, or authoritative without possessing lived understanding. It may produce the rhythm of care without care, the grammar of wisdom without wisdom, the vocabulary of embodiment without a body, the style of scholarship without verification, and the confidence of synthesis without sufficient grounding.

This risk is not accidental. Language has always been able to outrun life. Human beings also use words to avoid embodiment, conceal ignorance, defend identity, or simulate virtue. Artificial intelligence amplifies this ancient danger at scale.

Life-coherent AI use therefore requires slowing down.

It requires asking:

Is this output grounded?

What does it claim?

What evidence supports it?

What domain does it belong to?

What might it obscure?

What possible doing does it invite?

Who may be harmed if it is wrong?

What human responsibility must remain active?

The point is not to reject AI fluency. The point is to return fluency to service.

Language becomes life-coherent when it helps living see, care, repair, decide, and act more truthfully.

## 14.4 AI as Attention Amplifier

Artificial intelligence amplifies attention.

It can help attend across long manuscripts, complex file sets, clinical notes, legal drafts, policy structures, scientific literatures, theological traditions, and philosophical frameworks. It can help reveal relations among domains that no single specialist would ordinarily hold together. It can support translation across audiences: academic, clinical, public, child-friendly, policymaker-oriented, spiritual, or practical.

In the Life-Coherence project, AI has functioned in this way. It has helped hold together physiology, medicine, Maturana, Wilber, McMurtry, Bandyopadhyay, artificial intelligence, finance, law, politics, spirituality, water policy, clinical transition planning, and the Knowledge Commons. It has supported drafting, restructuring, figure planning, audiobook derivation, and public communication.

This is life-serving when done responsibly.

But attention amplification can also become acceleration without digestion. It can generate too much material too quickly. It can produce frameworks before living has integrated them. It can compress nuance. It can tempt the user into endless synthesis without enough showing up. It can make every insight feel publishable before it has been tested in life.

Thus, AI-assisted attention must be paced.

The question is not how much can be generated. The question is what can be truthfully conserved, integrated, and offered.

## 14.5 Toward Life-Coherent AI Practice

A life-coherent practice of AI would involve several commitments.

First, AI should support human and ecological viability rather than capture attention for engagement, profit, manipulation, or dependency.

Second, AI should preserve domain distinctions. It should help distinguish established evidence, clinical judgment, symbolic interpretation, metaphysical reflection, mathematical analogy, and speculative hypothesis.

Third, AI should make uncertainty visible. It should not hide gaps behind fluency.

Fourth, AI should support possible doings. Its value lies not only in generating text, but in helping people act more coherently: writing a better referral, clarifying a policy, designing a figure, making a website more navigable, preparing an audiobook, supporting a patient transition, or opening a reflective conversation.

Fifth, AI should remain under human answerability. The human author, clinician, teacher, policymaker, or community must remain responsible for judgment and consequences.

Sixth, AI should support the commons. It can help transform knowledge from private accumulation or institutional enclosure into shared intelligibility that serves living.

Seventh, AI must be evaluated by the viability question:

What manner of living does this use of AI conserve?

This question turns artificial intelligence toward life-coherent intelligence.

## 14.6 The New Responsibility of Linguaging

AI changes the responsibility of languaging because it changes the scale, speed, and reach of language.

When language becomes easier to generate, responsibility must become deeper. When synthesis becomes faster, humility must become stronger. When persuasive fluency becomes common, evidence discipline becomes more important. When attention can be modeled, predicted, and captured, love must become a governing principle.

The future of artificial intelligence will not be decided only by technical capacity. It will be decided by the worlds brought forth through its use.

A life-coherent AI culture would not ask only:

Can this system generate?

Can it predict?

Can it scale?

Can it persuade?  
Can it automate?

It would ask:

Does it conserve life?  
Does it deepen responsibility?  
Does it restore attention?  
Does it support care?  
Does it strengthen the commons?  
Does it protect the vulnerable?  
Does it open possible doings?  
Does it help living see what it is conserving?

Artificial intelligence becomes life-coherent only when attention becomes answerable to living.

## 15. The Knowledge Commons as a Conversational Ecology

The Life-Knowledge Commons is one of the practical forms in which life-coherent attention can show up.

It is not merely an archive. It is not merely a website. It is not merely a collection of papers, podcasts, figures, videos, reflections, and transcripts. It is a conversational ecology: a living architecture of distinctions, relations, pathways, and possible doings.

The move from chronological archive to Knowledge Commons is therefore not cosmetic. It is a transformation in what the site conserves.

A chronological archive conserves sequence.  
A Knowledge Commons conserves navigable meaning.

A chronological archive asks: What was posted when?  
A Knowledge Commons asks: What living inquiry is unfolding here, and how can others enter it?

This shift is itself life-coherent. It restores relation among works that might otherwise remain scattered. It allows papers, podcasts, diagrams, videos, summaries, and reflections to become part of a larger learning field. It helps the visitor move not merely through time, but through meaning.

# THE KNOWLEDGE COMMONS AS CONVERSATIONAL ECOLOGY

*A Living Architecture of Distinctions in Service of Life and Earth*

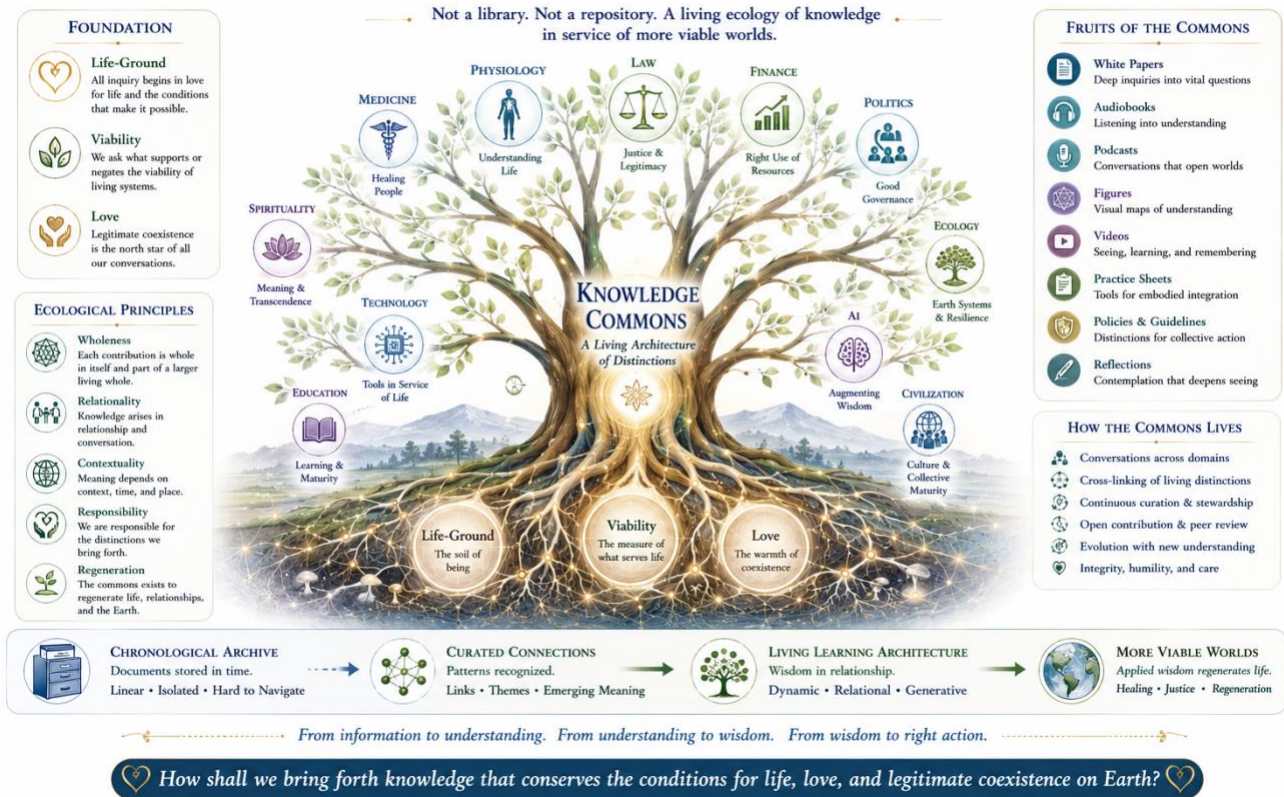


Figure 9. The Knowledge Commons as Conversational Ecology

## 15.1 From Repository to Living Architecture

A repository stores.

A living architecture orients.

The Life-Knowledge Commons should help readers and listeners discover not only individual outputs, but the relations among them. Life-coherent medicine should connect to coherence physiology. Coherence physiology should connect to tri-field regulation. Tri-field regulation should connect to trauma, salogenesis, spirituality, and clinical practice. Life-coherent finance should connect to law, politics, ecology, and the life-ground. Life-coherent attention should connect to AI, languaging, Maturana, Wilber, and the whole project of world-bringing.

This is holonic organization. Each work remains a whole in itself, but also participates in larger wholes.

The Commons should therefore include multiple pathways:

By domain: medicine, physiology, law, politics, finance, spirituality, technology, ecology, consciousness.

By practice: clinical care, policy design, public education, spiritual reflection, research synthesis, visual diagrams, audio learning.

By concept: life-capacity, life-ground, coherence, salugenesis, defensive lock-in, tri-field regulation, viability grammar, attention, possible doings.

By format: academic white paper, audiobook, podcast, video, figure, summary, transcript, reflection.

By developmental pathway: introductory, intermediate, deep-dive, clinical, policy, contemplative, technical.

This allows the Commons to become a learning ecology rather than a pile of content.

## 15.2 The Commons as Conserved Conversation

A commons is not only shared material. It is shared participation.

The Knowledge Commons conserves conversations that mainstream institutions often do not conserve. It holds together inquiries that professional disciplines, markets, and publication systems tend to separate. It allows medicine to speak with economics, law with ecology, spirituality with trauma, mathematics with embodiment, artificial intelligence with love, and physiology with civilization.

This matters because life-incoherence often persists through separated conversations.

Clinicians discuss symptoms without housing. Economists discuss growth without soil. Lawyers discuss rights without rivers. Technologists discuss attention without childhood. Spiritual communities discuss awakening without abuse. Politicians discuss policy without physiology. Researchers discuss mechanisms without lived experience.

The Commons can conserve a different pattern: cross-domain attention ordered toward life.

Its central conversational ethic should be:

- No domain becomes emperor.
- No domain is excluded prematurely.
- Each domain enters with its own criteria.
- Each is asked how it conserves or negates living.
- Each is invited into possible doings.

This makes the Commons a practical expression of non-totalizing coherence.

## 15.3 The Role of Figures, Audio, and Video

Life-coherent attention is not only textual.

Figures help the eye see relations. Audio helps the body receive rhythm, tone, and continuity. Video helps ideas become publicly accessible. Podcasts help complex work enter the flow of daily life. Thumbnails and cover images help symbolic attention gather around a core message.

These formats are not secondary. They are different pathways of Opening Up. They invite multiple intelligences: visual, auditory, narrative, contemplative, practical, and affective.

A figure can do what a paragraph cannot.

An audiobook can reach someone who cannot sit with a dense manuscript.

A podcast can carry inquiry into walking, driving, resting, and listening.  
A cinematic explainer can make a pattern emotionally visible.  
A master diagram can hold a whole architecture in one image.

The Knowledge Commons should therefore preserve multiple entry points, not only academic text. This does not dilute rigor. It expands participation.

The life-coherent question is:

What format allows this distinction to become accessible without becoming distorted?

## 15.4 The Commons and Epistemic Justice

Knowledge is often enclosed.

It is enclosed by paywalls, jargon, professional hierarchy, institutional prestige, disciplinary boundaries, commercial incentives, and cultural gatekeeping. People most affected by life-incoherent systems are often least able to access the knowledge needed to understand and transform them.

A Life-Knowledge Commons resists this enclosure.

It does not reject expertise. It seeks to make expertise more answerable to living. It does not reject scholarship. It seeks to translate scholarship into life-serving intelligibility. It does not reject complexity. It seeks to provide pathways through complexity so that more people can participate.

This is epistemic justice.

A commons asks knowledge to return to life.

For this reason, the academic white paper and audiobook workflow is important. The academic version preserves rigor, references, figures, appendices, and scholarly structure. The audiobook version preserves the core body in a listener-friendly form. Together they honor both discipline and accessibility.

This dual-version practice is itself life-coherent.

## 15.5 The Commons as Memory for Possible Futures

A civilization cannot transform if it cannot remember otherwise.

The Knowledge Commons becomes a memory of possible doings. It stores distinctions that help living see what it is conserving and imagine what could be conserved instead.

It remembers that medicine can be salugenic.  
It remembers that finance can serve life-capacity.  
It remembers that law can be nested within the life-ground.  
It remembers that politics can conserve partnership.  
It remembers that spirituality can remain embodied.  
It remembers that AI can support commons rather than capture.  
It remembers that physiology can be coherent.  
It remembers that attention can become care.

This memory is not nostalgia. It is future-oriented.

The Commons holds seeds of worlds not yet conserved widely enough to become culture.

## 15.6 The Commons Must Also Be Cleaned

The Knowledge Commons must apply the viability grammar to itself.

What does it conserve?

Who does it serve?

Who can access it?

What does it make visible?

What does it neglect?

Does it become too much?

Does it overwhelm rather than orient?

Does it invite participation or merely display production?

Does it remain grounded in lived service?

Does it support possible doings?

The Commons can become life-incoherent if it becomes an archive of excess, a monument to synthesis, a personal identity project, or a substitute for embodied action. It must therefore remain humble, navigable, useful, and alive.

Its purpose is not to contain everything.

Its purpose is to help living find its way.

# 16. Life-Coherent Medicine, Politics, Law, Finance, Spirituality, and Civilization

Life-coherent attention must eventually enter the major domains through which human beings conserve worlds.

Medicine, politics, law, finance, spirituality, technology, education, media, and ecology are not merely topics. They are world-conserving systems. They shape what becomes visible, valuable, legitimate, possible, and expected. They regulate behavior. They distribute care and harm. They define who counts and what matters.

The Life-Coherence project has explored many of these domains separately. The present paper now gathers them under the question of attention. (McMurtry, 1998, 2011, 2013, 2018; Sahely, 2026a, 2026b).

What does each domain attend to?

What does it ignore?

What distinctions does it conserve?

What possible doings does it open or close?

Does its manner of coherence conserve or negate living?

## 16.1 Life-Coherent Medicine

Life-coherent medicine attends to the living whole.

It does not reject diagnosis, pharmacology, emergency care, surgery, organ-specific expertise, or evidence-based treatment. Rather, it resituates them within a broader responsibility to restore life-capacity.

A life-coherent clinician asks not only:

What disease is present?  
What marker is abnormal?  
What drug blocks the pathway?  
What procedure corrects the lesion?

But also:

What conditions would allow this organism to reduce defense and resume adaptive self-repair?  
What is happening in substrate, flow, exchange, boundary, energy, sleep, regulation, and recovery?  
What is happening in form, state, world, and meaning?  
What social, environmental, relational, or economic constraints are shaping illness?  
What possible doing is safe, truthful, and useful now?

This is especially important for chronic multisystem illness, trauma-related dysregulation, post-infectious syndromes, dysautonomia, fatigue states, pain syndromes, environmentally triggered illness, and complex recovery failure.

Life-coherent medicine is not vague holism. It is disciplined attention to the conditions of living.

## 16.2 Life-Coherent Politics

Life-coherent politics attends to the conditions through which people and communities can live with dignity, participation, security, ecological belonging, and meaningful agency.

Politics becomes life-incoherent when it attends primarily to power, party advantage, spectacle, fear, control, or institutional self-preservation. It may remain procedurally active while conserving mistrust, polarization, domination, and abandonment.

A life-coherent politics asks:

What does this policy conserve?  
Whose life-capacity expands?  
Whose life-capacity contracts?  
What ecological constraints are respected?  
What communities are heard?  
What trauma histories are being activated?  
What margins are being restored or consumed?  
What future is being made possible?

Politics is not merely the struggle for control of the state. It is the coordination of collective possible doings.

Life-coherent politics therefore requires co-regulation at scale. Public institutions must become more trustworthy, transparent, responsive, and grounded in the living needs of communities and ecosystems.

## 16.3 Life-Coherent Law

Life-coherent law attends to the life-ground beneath legal form.

Law can protect living beings, or it can protect abstractions detached from living. Property, contract, sovereignty, corporate personhood, procedural standing, and financial claims may all become life-incoherent when they override the biological, ecological, and relational conditions that make life possible.

A life-coherent jurisprudence asks:

- Does this legal form preserve the conditions of life?
- Does it protect the vulnerable from domination?
- Does it recognize ecological dependency?
- Does it allow communities to repair harm?
- Does it conserve justice as living relation rather than procedure alone?
- Does it make future generations visible?
- Does it subordinate life to abstraction?

Law becomes life-coherent when it is nested within the life-ground.

This does not mean law becomes sentimental. It means law remembers what it is for.

## 16.4 Life-Coherent Finance

Life-coherent finance attends to whether money remains in service of living processes.

Finance becomes life-incoherent when monetary claims detach from the life-capacity that must ultimately support them. Debt, interest, speculation, rent extraction, asset inflation, austerity, and financial abstraction can all grow while households, ecosystems, care systems, public health, and communities deteriorate.

A life-coherent finance asks:

- Does this flow of money restore or extract life-capacity?
- Does credit serve housing, care, soil, water, health, learning, and regenerative production?
- Does debt exceed the real capacity of living systems to support it?
- Are financial returns being generated by shifting costs onto bodies, communities, or ecosystems?
- Does the monetary system conserve participation or dependency?
- Does it widen or narrow margins for life?

Money is a coordination system. It should coordinate care for the living world, not organize its consumption.

Life-coherent finance therefore requires re-nesting financial claims within ecological, social, and physiological realities.

## 16.5 Life-Coherent Spirituality

Life-coherent spirituality attends to ultimate concern in a way that deepens embodiment, love, responsibility, and world repair.

Spirituality becomes life-incoherent when it bypasses suffering, denies the body, ignores trauma, romanticizes unity, conserves hierarchy, avoids justice, or treats the Earth as a temporary backdrop for private salvation.

A life-coherent spirituality asks:

Does awakening deepen love?  
Does nonduality include embodiment?  
Does transcendence return as service?  
Does spiritual practice support growing up, opening up, cleaning up, and showing up?  
Does it help the practitioner become more truthful, humble, relational, and responsible?  
Does it restore reverence for the living Earth?

Life-coherent spirituality does not reduce spirit to social ethics. Nor does it allow spiritual language to escape consequence. It recognizes that ultimate depth must become living care.

The contemplative path must return to the world as tenderness, courage, repair, and participation.

## 16.6 Life-Coherent Technology

Life-coherent technology attends to the worlds its tools conserve.

Technology is never merely neutral. It shapes attention, rhythm, labor, memory, relation, desire, and possibility. It can restore capacity or consume it. It can support community or fragment it. It can open knowledge or enclose it. It can assist care or replace relationship with automation. It can support ecological repair or accelerate extraction.

A life-coherent technology asks:

What human capacity does this tool strengthen or weaken?  
What attention pattern does it conserve?  
What dependencies does it create?  
What ecological costs does it hide?  
What labor does it rely on?  
What forms of relation does it displace or support?  
Does it help people live, learn, heal, care, and participate?

Artificial intelligence intensifies all these questions because it operates in the domain of language, relevance, and decision support. Life-coherent technology must therefore be evaluated not only by performance, but by viability.

## 16.7 Life-Coherent Education

Life-coherent education attends to the development of whole persons in relation to the living world.

Education becomes life-incoherent when it conserves ranking, anxiety, obedience, disembodied cognition, labor-market sorting, standardized abstraction, or loss of curiosity. It may produce achievement while narrowing life.

A life-coherent education asks:

Does this learning environment conserve wonder?  
Does it support bodily regulation?  
Does it develop multiple intelligences?

Does it teach ecological belonging?  
Does it support moral imagination and perspective-taking?  
Does it allow children to remain legitimate in their unfolding?  
Does it prepare persons to participate in repair?

Education should not merely transmit information. It should cultivate life-coherent attention.

## 16.8 Life-Coherent Civilization

Civilization is a conserved network of conversations, institutions, technologies, rituals, infrastructures, and habits of attention.

A civilization becomes life-incoherent when it conserves patterns that consume the conditions of its own viability. Ecological overshoot, financial extraction, social fragmentation, chronic illness, trauma transmission, political polarization, attention capture, and spiritual disembodiment are not separate crises. They are mutually reinforcing expressions of a manner of living that has lost life-coherent attention.

A life-coherent civilization would ask, at every level:

What are we conserving?  
What constraints must we respect?  
How much margin remains?  
What disturbances are we ignoring?  
What present structure shapes our response?  
What regulates our return to harmful patterns?  
What has become relevant or invisible?  
What possible doings can begin another conservation?

Such a civilization would not be perfect. It would still face conflict, suffering, limitation, and uncertainty. But it would become capable of reflection, repair, humility, and responsibility.

It would conserve not domination, extraction, and denial, but the conditions through which living beings can continue in legitimate coexistence.

## 16.9 The Cross-Domain Pattern

Across medicine, politics, law, finance, spirituality, technology, education, and civilization, the same pattern recurs.

A domain becomes life-incoherent when it attends to its own internal abstractions while forgetting the living conditions that sustain it.

Medicine forgets the organism.  
Politics forgets the community.  
Law forgets the life-ground.  
Finance forgets real life-capacity.  
Spirituality forgets embodiment.  
Technology forgets care.  
Education forgets the child.  
Civilization forgets the Earth.

Life-coherent attention restores the forgotten relation.

It does not abolish domains. It reorders them toward living.

The work of the Life-Coherence project is therefore not merely theoretical. It is civilizationally practical. It offers a diagnostic and generative grammar for asking how each domain might cease conserving life-negation and begin conserving possible living.

Table 4. Life-Coherent Diagnostic Questions Across Domains

Domain	Life-Incoherent Drift	Life-Coherent Question	Possible Doing
Person	Self-negation, trauma fixation, disembodiment.	What possible living is narrowed here?	Restore form, state, world, and meaning in sequence.
Clinic	Fragmentation, dismissal, pathway-only care.	What conditions would allow this organism to recover?	Add coherence-informed assessment and handover.
Family	Silence, fear, control, inherited trauma.	What relational pattern is being conserved?	Create one safe reflective conversation.
Institution	Procedure over care, self-protection, hierarchy.	What does this institution keep returning to?	Identify incentives conserving harm.
Economy	Extraction, debt over life-capacity, externalized costs.	Does this flow of money restore or consume living systems?	Redirect finance toward care, housing, soil, water, health, and repair.
Law	Abstraction over living consequence.	Does this legal form protect the life-ground?	Re-nest rights and duties within life-support conditions.
Technology	Attention capture, surveillance, disembodied optimization.	What manner of attention does this technology conserve?	Design for agency, reflection, care, and commons.
Education	Ranking, anxiety, disembodied cognition.	Does this learning environment conserve curiosity and whole-person development?	Support multiple intelligences and embodied regulation.
Spirituality	Bypass, hierarchy, disembodied transcendence.	Does awakening return as love, embodiment, and service?	Integrate waking, growing, opening, cleaning, and showing.
Civilization	Ecological overshoot, domination, fragmentation.	What manner of living are we conserving as a species?	Build institutions ordered toward life-capacity.

## 17. A Life-Coherent Research Program

Life-coherent attention is not only a philosophical orientation. It is also a research program.

If the central question is what manner of living is being conserved, and whether that conservation preserves or negates the conditions of living, then research must become more attentive to the relations through which life-capacity is maintained, degraded, restored, or transformed.

This does not require abandoning specialized research. On the contrary, life-coherent research depends on rigorous specialized work. What it challenges is the isolation of specialized knowledge from the living whole. The task is not to replace molecular biology, clinical trials, physiology, psychology, economics, law, AI research, or political theory with a single integrative language. The task is to build bridges through which their findings can become answerable to viability.

A life-coherent research program must therefore proceed across several domains: physiological, clinical, relational, technological, mathematical, institutional, ecological, and cultural.

## 17.1 Coherence Physiology Research

The first research domain is coherence physiology.

This includes investigation of fascia, extracellular matrix, interstitium, mechanotransduction, endothelial glycocalyx, microvascular regulation, nitric oxide signaling, lymphatic flow, mast-cell boundary intelligence, mitochondrial stress signaling, sleep-immune recovery, autonomic regulation, and chronic multisystem illness.

The guiding research question is:

How do substrate, interface, force-flow, exchange, boundary, energy, and recovery interact to conserve either adaptive coherence or defensive lock-in?

This research should not be organized only around isolated pathways. It should examine patterns of coupling. For example, how do sleep disruption, endothelial dysfunction, mast-cell activation, autonomic instability, mitochondrial stress, and impaired lymphatic drainage reinforce one another? How do pacing, sleep restoration, recumbent conditioning, vascular support, trauma-informed care, and environmental reduction interact in salogenesis? How can clinicians identify which layer is currently limiting recovery?

Possible research directions include:

dynamic coherence profiling in chronic multisystem illness;  
microvascular and autonomic markers of recovery trajectory;  
clinical assessment of post-exertional energy resistance;  
sleep restoration as a salugenic intervention;  
mast-cell reactivity and boundary dysregulation across tissue systems;  
mechanobiology and fascia-informed rehabilitation;  
lymphatic and interstitial flow in chronic inflammation;  
mitochondrial adaptive-state biomarkers;  
patient-centered recovery metrics beyond static laboratory values.

The aim is to make the living continuum clinically visible.

## 17.2 Tri-Field Regulation Research

The second research domain is tri-field regulation.

This research examines how proprioceptive form, interoceptive state, and exteroceptive world-interpretation generate selfhood, emotional regulation, trauma patterns, and adaptive behavior.

The guiding research question is:

How does alignment or misalignment among form, state, and world shape possible living?

This research would connect neuroscience, trauma therapy, physiotherapy, somatics, interoception research, autonomic medicine, attachment science, social neuroscience, and environmental psychology.

Possible research directions include:

proprioceptive instability and anxiety;  
interoceptive dysregulation in panic, fatigue, trauma, and chronic illness;  
exteroceptive threat perception and social context;  
co-regulation through voice, gaze, rhythm, touch, movement, and therapeutic presence;  
clinical sequencing of Form → State → World → Meaning;  
how environmental trustworthiness affects autonomic and cognitive repair;  
measurement of embodied safety before cognitive reframing;  
comparative outcomes of cognitive-first versus regulation-first interventions.

The aim is to understand selfhood as embodied field coherence rather than isolated cognition.

## 17.3 Salugenesis and Recovery Science

The third research domain is salugenesis.

Modern medicine has extensive knowledge of pathology, but less developed language for the active restoration of adaptive self-repair after defensive lock-in. Salugenesis names this positive biology of recovery.

The guiding research question is:

What conditions allow living systems to exit defense and resume adaptive self-repair?

This research must include both objective and lived measures. Biomarkers are important, but recovery is also expressed through functional envelope, sleep quality, exertional tolerance, flare duration, cognitive endurance, emotional steadiness, social participation, digestive tolerance, pain stability, and the ability to resume meaningful life.

Possible research directions include:

recovery trajectories after infection, trauma, surgery, burnout, and chronic inflammatory states;  
predictors of incomplete recovery;  
the role of sleep in immune-metabolic restoration;  
graded versus paced activity in energy-resistant states;  
environmental load reduction and symptom stabilization;  
social safety and recovery physiology;  
clinical markers of transition from defense to repair;  
patient-reported outcomes centered on life-capacity.

The aim is to study healing as a living process, not merely as symptom disappearance.

## 17.4 AI and Life-Coherent Attention Research

The fourth research domain concerns artificial intelligence and attention.

The Transformer architecture revealed the power of attention-based computation. But the life-coherent question is not simply how to improve model performance. It is how AI systems shape human attention, memory, trust, agency, conversation, learning, and possible doings. (Vaswani et al., 2017).

The guiding research question is:

What forms of AI-assisted languaging conserve or negate human and ecological viability?

Possible research directions include:

AI as a tool for reflective inquiry rather than attention capture;  
AI-assisted clinical documentation that preserves patient dignity;  
AI support for care transitions and continuity;  
AI in public knowledge commons;  
AI-generated misinformation and epistemic erosion;  
AI and developmental maturity in users;  
AI and shadow amplification in institutions;  
AI design that supports uncertainty, evidence grading, and domain distinction;  
AI interfaces that slow down rather than accelerate harmful certainty;  
the ecological and labor costs of large-scale AI infrastructures.

The aim is to move from artificial intelligence as performance optimization toward life-coherent intelligence as attention in service of living.

## 17.5 Mathematical and Formal Viability Research

The fifth research domain concerns mathematical and formal modeling.

The viability grammar has been presented as a set of reflective primitives: conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings. Future work may ask whether these primitives can be formalized without reducing living to mechanism.

The guiding research question is:

What formal structures can represent life-coherent viability while preserving domain discipline, sequence sensitivity, and living context?

Possible research directions include:

formal relations among viability primitives;  
graph-theoretic models of conservation and possible doings;  
dynamic systems models of defensive lock-in;  
category-theoretic or relational approaches to domain transitions;  
Fano-plane-inspired triadic mapping of viability relations;  
octonionic and non-associative metaphors for sequence-sensitive repair;  
triality structures in form-state-world regulation;  
formal models of margin, constraint, and resilience;  
distinguishing mathematical analogy from empirical claim.

The aim is not to mathematize life prematurely. The aim is to test whether the grammar of life-coherence can become more precise while remaining answerable to living.

## 17.6 Integral and Developmental Research

The sixth research domain concerns Wilber's five paths.

Life-coherent attention requires waking, growing, opening, cleaning, and showing. Research can examine how these paths interact in persons, organizations, professions, and cultures.

The guiding research question is:

How do different forms of wholeness mature, distort, correct, or support one another?

Possible research directions include:

spiritual awakening interpreted through developmental stage;  
shadow dynamics in social movements and professional cultures;  
multiple intelligences in clinical, ecological, and civic education;  
embodied showing-up practices for integrative knowledge;  
risks of totalizing wholeness;  
developmental adequacy in AI ethics and public discourse;  
integral practices for institutions, not only individuals.

The aim is to prevent the Life-Coherence project from collapsing into one kind of wholeness.

## **17.7 Institutional and Civilizational Research**

The seventh research domain concerns institutions and civilization.

Life-incoherent systems are often regulated by institutional incentives, legal structures, financial flows, technological platforms, cultural narratives, and political habits. Research must therefore study how harmful conservations persist.

The guiding research question is:

How do institutions conserve life-serving or life-negating patterns, and what possible doings can shift conservation?

Possible research directions include:

health systems and the conservation of fragmentation;  
legal systems and abstraction from the life-ground;  
financial systems and life-capacity extraction;  
education systems and attention formation;  
media systems and collective dysregulation;  
policy design for margin restoration;  
institutional practices of reflection and repair;  
planetary health indicators as life-coherence measures;  
governance models rooted in care for consequences.

The aim is to make civilization reflect on what it is conserving.

## **17.8 The Research Ethos**

A life-coherent research program must itself be life-coherent.

It should conserve humility, transparency, accessibility, and responsibility. It should distinguish evidence from speculation. It should involve affected communities. It should make uncertainty visible. It should resist extractive research practices. It should return knowledge to the commons. It should honor both expertise and lived experience.

Its central ethic is simple:

Research should not merely produce knowledge about living beings. It should help conserve the conditions through which living beings can live.

## 18. Practices of Life-Coherent Attention

Life-coherent attention must be practiced.

A concept becomes real only when it changes how we listen, diagnose, design, write, teach, govern, heal, build, and respond. The practices below are not exhaustive. They are entry points for individuals, clinicians, families, institutions, researchers, technologists, and communities.

Each practice begins with attention and ends with possible doing.

### 18.1 The Viability Pause

Before interpreting, intervening, or responding, pause and ask:

What manner of living is being conserved here?  
Does this conservation preserve or negate the conditions of living?

This pause interrupts automatic explanation. It helps the observer notice whether the pattern being conserved is fear, control, extraction, denial, care, repair, trust, or possible living.

In a clinic, the viability pause may prevent premature dismissal.  
In a family, it may reveal a recurrent conflict pattern.  
In policy, it may expose hidden ecological or social cost.  
In AI use, it may prevent disembodied fluency from becoming false certainty.  
In writing, it may ask whether the text serves living or merely performs synthesis.

The viability pause is the gateway practice.

### 18.2 The Distinction Audit

Every powerful distinction should be audited.

Ask:

What does this distinction make visible?  
What does it hide?  
What domain does it belong to?  
What does it allow us to do?  
What does it prevent us from doing?  
Who becomes legitimate through this distinction?

Who or what becomes invisible?  
What manner of living does it conserve?

This is especially important for terms such as patient, consumer, growth, productivity, compliance, disorder, intelligence, risk, property, development, progress, resilience, and even coherence.

The distinction audit keeps language answerable to living.

## 18.3 The Fivefold Attention Check

For any major decision, framework, policy, clinical plan, or publication, ask the five questions:

Waking: What depth is being forgotten?  
Growing: What perspective is still too small?  
Opening: What intelligence has not been invited?  
Cleaning: What shadow is being conserved?  
Showing: What possible doing is now required?

This practice brings Wilber's five paths into practical use.

It helps avoid one-sided wholeness. It prevents spiritual bypass, developmental simplification, mono-intelligence, shadow denial, and failure to act.

The fivefold check is especially useful before publishing major syntheses, designing institutional reforms, introducing AI systems, or intervening clinically.

## 18.4 The Form-State-World Scan

When a person, family, clinic, or community is dysregulated, ask:

What is happening in form?  
What is happening in state?  
What is happening in world?  
What meaning is emerging from their alignment or misalignment?

For an individual, form may include posture, pain, breath, movement, and bodily support. State may include autonomic arousal, fatigue, hunger, sleep, inflammation, or metabolic capacity. World may include safety, relationships, environment, workload, finances, and institutional context. Meaning arises from the whole.

This practice prevents cognitive overreach. It reminds us that meaning cannot always be repaired directly. Sometimes the body needs support, the state needs regulation, and the world needs to become safer before narrative transformation is possible.

## 18.5 The Margin Restoration Practice

Ask:

Where has margin been consumed?  
What margin must be restored before adaptation can occur?

Margin may be physiological, emotional, financial, ecological, institutional, temporal, attentional, or relational. Without margin, even good interventions can become burdens.

A patient may need rest before exercise.  
A caregiver may need respite before reflection.  
A school may need smaller class sizes before innovation.  
A clinic may need time before relational care.  
A community may need economic relief before participation.  
An ecosystem may need reduced extraction before regeneration.

Life-coherent practice often begins by restoring margin.

## 18.6 The Salugenic Sequence

When addressing chronic dysregulation, ask:

What would allow this system to stand down from defense?

Then consider the sequence:

Reduce threat load.  
Restore rhythm.  
Support form.  
Stabilize state.  
Improve exchange.  
Calm boundary alarm.  
Rebuild energy flexibility.  
Reopen world participation.  
Reorganize meaning.

This is not a rigid protocol. It is a salugenic orientation. It asks what conditions make self-repair possible.

The salugenic sequence can guide clinical care, trauma therapy, institutional repair, and even ecological regeneration.

## 18.7 The AI Responsibility Practice

Before using AI for meaningful work, ask:

What am I asking this system to help bring forth?  
What evidence will be needed?  
What domain distinctions must be preserved?  
What uncertainty must remain visible?  
Who may be affected by this output?  
What human judgment is required?  
What possible doing will this support?  
Does this use conserve or negate living?

After receiving AI output, ask:

What is useful?  
What is unsupported?  
What has been over-smoothed?  
What has been omitted?  
What needs human verification?  
What needs ethical reflection?  
What needs embodiment?

This practice keeps AI as language-participant under life-coherent responsibility.

## 18.8 The Commons Practice

When adding work to the Knowledge Commons, ask:

Where does this belong?  
What does it connect to?  
Who is it for?  
What pathway does it open?  
What format would make it accessible?  
What figure, audio, summary, or description would help?  
How does it conserve the larger inquiry?  
Does it overwhelm or orient?

This practice transforms posting into world-building.

It helps the Commons become a navigable ecology rather than an accumulating archive.

## 18.9 The Love Check

Finally, ask:

Does the living other remain legitimate here?

This question must be asked in conflict, diagnosis, critique, research, design, teaching, politics, and AI use.

The love check does not remove discernment. It does not mean agreement, permissiveness, or avoidance of boundary. It asks whether the other has been reduced to object, enemy, pathology, data, obstacle, user, market, or inferior.

Life-coherent attention cannot be separated from this question.

Without love, coherence becomes dangerous.

# 19. Limits, Cautions, and Epistemic Hygiene

This paper is ambitious. Therefore, it must be cautious.

It brings together Maturana, Wilber, coherence physiology, tri-field regulation, salogenesis, mathematical formalism, Bandyopadhyay's resonance cosmology, artificial intelligence, and civilizational critique. Such breadth is both the paper's strength and its risk.

The main risk is over-integration.

A synthesis can become life-incoherent when it connects too quickly, claims too much, collapses domains, bypasses evidence, or turns resonance into proof. The present paper must therefore preserve epistemic hygiene.

## 19.1 Coherence Is Not Proof

The fact that ideas cohere does not make them true.

A framework can be elegant, internally consistent, symbolically rich, and still empirically unsupported. Coherence is necessary for understanding, but insufficient for truth. Life-coherent inquiry must therefore distinguish conceptual coherence from empirical evidence, clinical usefulness, mathematical validity, spiritual insight, and ethical adequacy.

This is especially important when working with resonance, prime-coded cosmology, microtubular consciousness, octonions, triality, and exceptional structures. These may be fertile. They may inspire. They may open questions. They may illuminate patterns. But they must not be treated as proven because they feel meaningful.

A life-coherent synthesis must remain vulnerable to correction.

## 19.2 Domain Distinctions Must Be Preserved

Different domains have different criteria of validity.

Clinical practice requires safety, evidence, judgment, patient context, and accountability. Mathematics requires formal rigor. Spirituality requires contemplative realization, ethical transformation, and lived practice. Biology requires empirical investigation. Policy requires institutional feasibility and public consequence. AI requires technical evaluation, safety, alignment, and social accountability. Personal reflection requires honesty and relational context.

Confusing domains creates harm.

A mathematical analogy should not become a clinical recommendation.

A spiritual insight should not override medical care.

An AI-generated synthesis should not replace verification.

A biological mechanism should not be inflated into metaphysics.

A policy metaphor should not be mistaken for implementation.

A poetic phrase should not be treated as evidence.

Life-coherent attention honors domains while bringing them into relation.

## 19.3 Speculation Must Be Named

Speculation is not the enemy. Unnamed speculation is.

Frontier inquiry requires imagination. Without speculation, no new world can appear. But speculation must be identified as speculation. Integrative inference must be named as inference. Symbolic resonance must be named as symbolic. Established evidence must not be mixed casually with metaphysical possibility.

This paper therefore distinguishes:

established evidence;  
strongly supported research;  
integrative synthesis;  
clinical heuristic;  
formal-symbolic analogy;  
frontier scientific hypothesis;  
metaphysical interpretation;  
mythopoetic orientation.

Each has value. Each has limits.

The danger arises when one is presented as another.

## 19.4 Life-Coherence Can Become Ideology

Any powerful distinction can become ideological.

Life-coherence is no exception.

It could become a new moral vocabulary for judging others. It could become a totalizing framework that absorbs all domains. It could become a beautiful abstraction that avoids practical difficulty. It could become an identity marker. It could become a way to dismiss conventional science. It could become a spirituality of wholeness without repair. It could become an AI-assisted production machine generating more content than can be integrated.

Therefore, life-coherence must clean itself.

The project must continually ask:

Where are we becoming certain?  
Where are we moving too fast?  
Where are we using coherence to avoid conflict?  
Where are we criticizing without love?  
Where are we producing without integrating?  
Where are we mistaking resonance for responsibility?  
Where are we conserving the project rather than living?

A life-coherent project must remain willing to transform itself.

## 19.5 Artificial Intelligence Requires Special Caution

AI-assisted work carries specific risks.

It can generate plausible but inaccurate statements. It can over-synthesize. It can smooth over disagreement. It can imitate scholarly tone without adequate grounding. It can produce citations or claims that require verification. It can

encourage excessive production. It can amplify the user's assumptions. It can make a conversation feel more complete than it is.

For this reason, AI assistance must remain under explicit human responsibility.

The human author must verify references, check claims, preserve domain distinctions, revise tone, and decide what should be published. AI can assist with language and synthesis, but it cannot carry ethical or scholarly responsibility.

This caution is especially important in medical, legal, financial, and public policy contexts.

Life-coherent AI use must remain humble, transparent, and accountable.

## 19.6 Not All Living Can Be Repaired by Attention

Attention is necessary, but not sufficient.

A person may need medication, surgery, housing, food, legal protection, money, rest, safety, or environmental change. A community may need infrastructure, political power, land repair, debt relief, or institutional reform. An ecosystem may need reduced extraction, restoration, and time. A patient may need specialist care. A child may need protection. A worker may need wages and rest.

Life-coherent attention should not become a substitute for material action.

To attend without acting when action is required can become another form of neglect.

Showing Up is therefore essential.

## 19.7 The Project Is Incomplete

This paper does not complete the Life-Coherence project.

It clarifies a turning point.

It names attention, languaging, world-bringing, wholeness, embodiment, mathematics, AI, and possible doings as central to the next phase. But many questions remain open.

How should the viability grammar be formally modeled?

How can coherence physiology be clinically operationalized?

How should the Knowledge Commons be structured for public learning?

How can AI tools be designed for life-coherent attention?

How can policy incorporate life-capacity metrics?

How can finance be re-nested in ecological reality?

How can legal systems recognize the life-ground?

How can spiritual communities integrate waking, growing, opening, cleaning, and showing?

How can institutions learn to stand down from defensive lock-in?

These questions remain work for future inquiry.

The paper's purpose is not closure. It is orientation.

# 20. Conclusion: Conserving the Inquiry That Lets Better Worlds Appear

This paper began with a recognition: the Life-Coherence project is no longer only building frameworks. It is reflecting on the manner of inquiry that builds frameworks.

That shift matters.

A framework can illuminate, but it can also dominate. A distinction can heal, but it can also reduce. A synthesis can integrate, but it can also totalize. A technology can assist, but it can also capture. A spiritual vision can awaken, but it can also bypass. A medical model can treat, but it can also fragment. A mathematical formalism can discipline thought, but it can also seduce inquiry away from living.

Therefore, the deepest question is not:

What is the final theory?

The deepest question is:

What manner of living does this inquiry conserve?

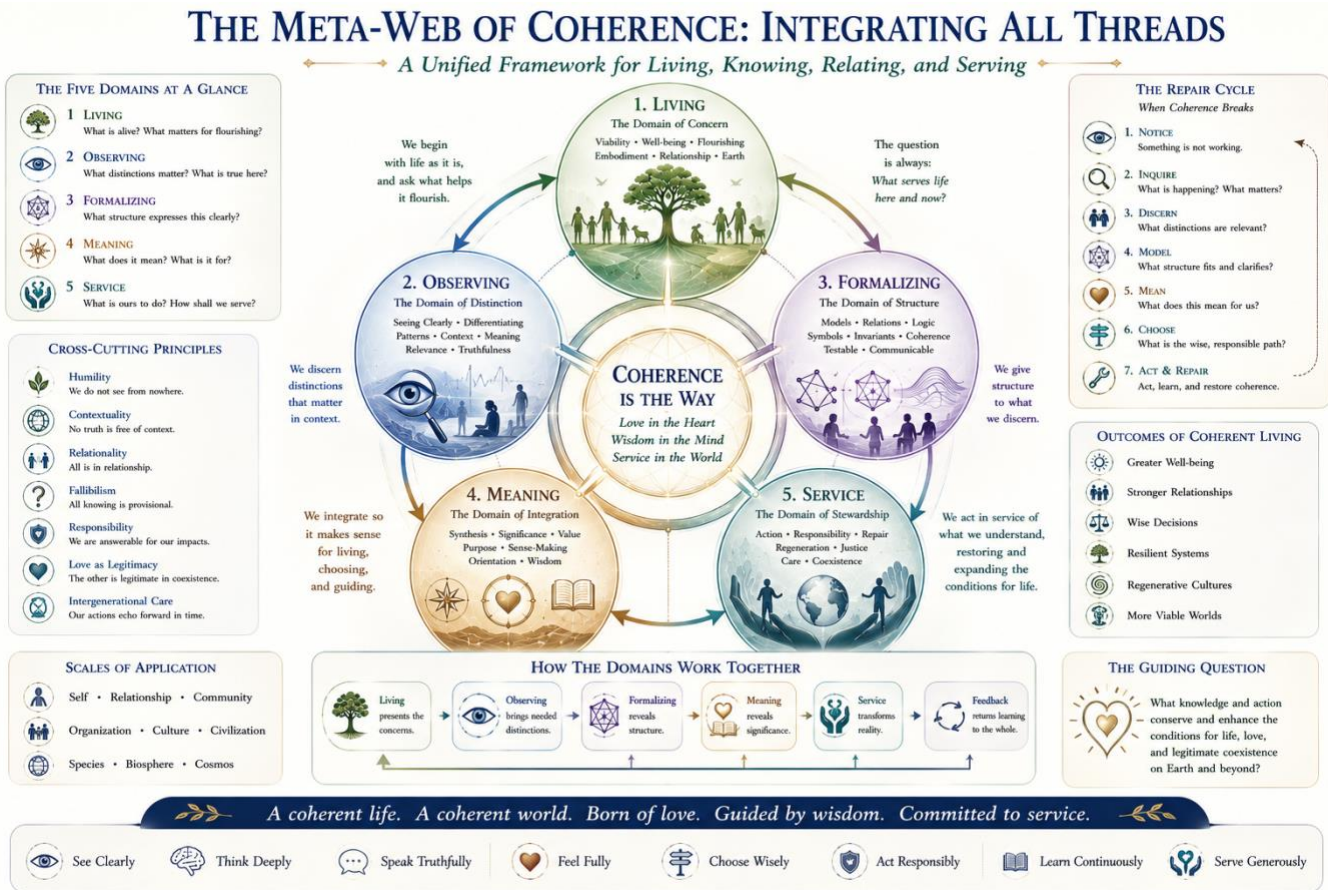


Figure 10. The Meta-Web of Coherence: The Worlds We Bring Forth

The answer proposed here is life-coherent attention.

Life-coherent attention is attention that has accepted responsibility for world-bringing. It knows that what we distinguish, we conserve; what we conserve, we live; and what we live, we transmit. It asks whether our distinctions expand possible living or narrow it, whether our conversations conserve love or fear, whether our institutions preserve life-capacity or consume it, whether our technologies restore attention or capture it, whether our spirituality deepens embodiment or escapes it, whether our medicine restores the conditions of repair or only manages fragments.

Life-coherent attention is not attention alone. It is attention matured through five paths.

It wakes up to depth.  
It grows up into wider perspective.  
It opens up to multiple intelligences.  
It cleans up shadow and hidden domination.  
It shows up as responsible possible doing.

It is also embodied.

It remembers that living passes through substrate, interface, force, flow, exchange, boundary, energy, and recovery. It remembers that the self is generated through form, state, world, and meaning. It remembers that trauma is not merely a story but a conserved survival coherence. It remembers that healing requires conditions, not commands.

It is also mathematically humble.

It welcomes formal structures, Fano planes, octonions, triality, exceptional patterns, nested clocks, and resonance cosmologies as possible disciplines of relational thought. But it refuses to make mathematical elegance the master of living. Formal coherence must remain answerable to love.

It is also technologically awake.

It recognizes the significance of attention-based artificial intelligence. The Transformer made possible new forms of large-scale relational languaging. This has enabled extraordinary synthesis, including the present project. But attention without care is dangerous. AI must be guided by human responsibility, evidence discipline, domain humility, and the viability question.

It is also civilizational.

The crises of our time are crises of attention and conservation. We attend to profit and ignore life-cost. We attend to speed and ignore recovery. We attend to control and ignore trust. We attend to information and ignore wisdom. We attend to growth and ignore the life-ground. We attend to parts and forget the living whole. Then, in reaction, we may attend to wholeness and erase the parts.

Life-coherent attention seeks another way.

It asks each domain to remember what it is for.

Medicine is for restoring life-capacity.  
Law is for protecting the life-ground and legitimate coexistence.  
Politics is for coordinating collective possible doings.  
Finance is for serving life-supporting exchange.  
Education is for cultivating whole persons in relation to the world.

Spirituality is for deepening love, truth, and participation.  
Technology is for supporting living, not capturing it.  
The Knowledge Commons is for making life-serving distinctions shareable.

The work ahead is not to complete a system.

The work is to conserve a manner of inquiry in which better maps can keep appearing without negating the living beings for whom the maps are made.

This is the world the present paper seeks to bring forth:

a world in which living learns to see what it is conserving;  
a world in which attention becomes care;  
a world in which coherence is disciplined by love;  
a world in which knowledge returns to the commons;  
a world in which technology serves possible living;  
a world in which medicine, law, finance, politics, spirituality, and civilization are re-nested within the conditions of life;  
a world in which no whole is allowed to swallow the parts, and no part is allowed to forget the whole;  
a world in which transformation begins as a new conservation becoming possible.

The final question remains open, as it must:

What shall we conserve now?

## Appendices

### Appendix A. Foundational Propositions

1. Everything said is said from within a domain of observing, distinction, languaging, and living.
2. A distinction is a world-bringing operation, not a neutral label.
3. Conversation conserves worlds by recurring patterns of languaging and emotioning.
4. Culture is a conserved network of conversations.
5. Coherence alone is not enough; what matters is what coherence conserves.
6. Life-coherence is conservation that does not betray living.
7. Love is the relational domain in which the other arises as legitimate in coexistence.
8. Attention is not merely cognitive focus or computational relevance; it is a world-bringing operation.
9. Computational attention is not care, wisdom, love, or responsibility.
10. Life-coherent attention is attention disciplined by viability, love, evidence, embodiment, development, shadow integration, formal coherence, and possible doing.
11. Wilber's five paths provide irreducible disciplines of wholeness: Waking Up, Growing Up, Opening Up, Cleaning Up, and Showing Up.
12. Coherence physiology grounds the inquiry in the living organism as a nested continuum.
13. Defensive lock-in is a conserved protective pattern that narrows life-capacity.
14. Salugenesis is the restoration of the conditions for adaptive self-repair.
15. Self-regulation depends on the alignment of form, state, world, and meaning.
16. Mathematical formalism can discipline relations, but it does not override the lived domain of viability.
17. Artificial intelligence can participate in languaging, but human beings remain answerable for the worlds brought forth through its use.
18. The Knowledge Commons is a conversational ecology for conserving life-serving distinctions.

19. The central diagnostic question is: what manner of living is being conserved here?
20. The central ethical question is: does this conservation conserve or negate the conditions of living?

## **Appendix B. Life-Coherent Attention Practice Sheet**

### **1. The Viability Pause**

What manner of living is being conserved here?  
Does this conservation preserve or negate living?

### **2. The Distinction Audit**

What does this distinction make visible?  
What does it hide?  
Who becomes legitimate?  
Who or what becomes invisible?  
What possible doing does this distinction open?

### **3. The Fivefold Attention Check**

Waking: What depth is being forgotten?  
Growing: What perspective is still too small?  
Opening: What intelligence has not been invited?  
Cleaning: What shadow is being conserved?  
Showing: What possible doing is now required?

### **4. The Form-State-World Scan**

What is happening in form?  
What is happening in state?  
What is happening in world?  
What meaning is emerging from their alignment or misalignment?

### **5. The Margin Question**

Where has margin been consumed?  
What margin must be restored before adaptation can occur?

### **6. The Salugenic Question**

What would allow this system to stand down from defense and resume repair?

### **7. The AI Responsibility Check**

What am I asking AI to help bring forth?  
What must be verified?  
What uncertainty must remain visible?

Who may be affected?  
What human responsibility remains active?

## **8. The Commons Question**

Where does this work belong?  
What does it connect to?  
Who is it for?  
Does it orient or overwhelm?

## **9. The Love Check**

**Does the living other remain legitimate here?**

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# **Appendix C. Draft Research Agenda**

## **Clinical and Physiological Research**

Future work should examine coherence physiology through dynamic profiles of substrate, force-flow, exchange, boundary, energy, autonomic state, sleep, and recovery trajectory.

## **Trauma and Self-Regulation Research**

Future work should study tri-field regulation and repair sequencing across trauma therapy, physiotherapy, autonomic medicine, and relational care.

## **AI and Attention Research**

Future work should evaluate AI not only by performance, but by its effects on attention, agency, truth, care, learning, commons, and ecological cost.

## **Formal Viability Research**

Future work should explore whether viability primitives can be modeled using graph theory, dynamic systems, category theory, Fano-plane analogies, non-associative structures, and triality-inspired relational maps.

## **Knowledge Commons Research**

Future work should test how academic papers, audiobooks, diagrams, podcasts, and video explainers can form navigable learning architectures for public benefit.

## **Institutional and Civilizational Research**

Future work should examine how medicine, law, finance, politics, education, technology, and spirituality conserve life-serving or life-negating patterns.

## Appendix D. Limitations of the Present White Paper

This paper is integrative, theoretical, and exploratory. It does not present new empirical data. It does not claim that all domains discussed are equally established. It distinguishes established evidence, integrative synthesis, formal-symbolic analogy, frontier hypothesis, and metaphysical orientation.

Its treatment of coherence physiology is grounded in convergent biomedical literatures but remains a synthesis framework. Its treatment of salugenesis and defensive lock-in is clinically meaningful but requires further operationalization. Its treatment of Fano planes, octonions, triality, and exceptional structures is formal-symbolic and should not be read as empirical proof. Its treatment of Bandyopadhyay's SOMU and related concepts is exploratory and should be handled with scientific caution. Its treatment of artificial intelligence is philosophical and practical, not a technical safety specification.

The paper's contribution is therefore not final proof, but orientation. It proposes life-coherent attention as a disciplined way to ask what worlds our distinctions, technologies, institutions, and practices are conserving.

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## Glossary of Core Terms

### Artificial Intelligence

In this paper, artificial intelligence refers especially to language-capable computational systems that participate in human domains of languaging by generating, transforming, and relating symbolic patterns. AI is treated as a language-participant, not as a living observer.

### Attention

Attention is the selection and weighting of relevance within a field. In human life, attention is world-bringing. In AI, attention is a computational mechanism. In life-coherence, attention must be disciplined by viability and love.

### Boundary Intelligence

The capacity of a living system to distinguish what may enter, what must be excluded, what should be tolerated, and what requires repair.

### Cleaning Attention

The discipline of attention that reveals shadow, trauma, projection, hidden domination, and unconscious conservation.

### Coherence

Dynamic alignment among differentiated processes. Coherence is not inherently life-serving; its value depends on what it conserves.

## **Coherence Physiology**

An integrative physiological framework that understands the organism as a living continuum of substrate, hydrated interfaces, force-flow dynamics, exchange intelligence, boundary intelligence, energetic governance, and recovery trajectory.

## **Conservation**

The recurrent pattern or relation that is kept in place through ongoing doings.

## **Defensive Lock-In**

A self-stabilizing state in which protective responses remain conserved after they have become life-narrowing.

## **Distinction**

A world-bringing operation through which an observer brings forth a domain of relevance, relation, and possible doing.

## **Evidence Gradient**

A methodological discipline that distinguishes established evidence, integrative synthesis, clinical heuristic, formal-symbolic analogy, frontier hypothesis, and metaphysical interpretation.

## **Exchange Intelligence**

The capacity of a system to regulate flows of oxygen, nutrients, signals, immune access, waste clearance, care, information, and resources in a way that preserves viability.

## **Form-State-World-Meaning**

The embodied sequence through which selfhood and repair are organized. Proprioceptive form, interoceptive state, and exteroceptive world jointly shape meaning.

## **Formalizing**

The third look of inquiry, in which mathematical or formal structures discipline the relations among distinctions.

## **Growing Attention**

The discipline of attention that expands developmental, cognitive, moral, and perspectival adequacy.

## **Hydrated Interfaces**

Biological surfaces and boundary zones where water, charge, flow, structure, and signaling interact.

## **Knowledge Commons**

A shared conversational ecology of life-serving distinctions, texts, diagrams, audio, video, and practices intended to support public learning and possible living.

## **Languaging**

Recursive coordination of doings through which human beings bring forth shared worlds of meaning.

## **Life-Capacity**

The capacity of living beings to sense, move, relate, repair, learn, create, participate, and flourish.

## **Life-Coherence**

Conservation that does not betray living; alignment of systems, practices, institutions, and distinctions with the conditions of life.

## **Life-Coherent Attention**

Attention disciplined by viability, love, evidence, embodiment, development, shadow awareness, formal coherence, and responsible possible doing.

## **Love**

The relational domain in which another living being arises as legitimate in coexistence.

## **Margin**

The room available for adaptive variation, recovery, reflection, learning, and transformation.

## **Opening Attention**

The discipline of attention that invites multiple intelligences and ways of knowing.

## **Possible Doings**

Actions that can actually be lived from present structure, within real constraints, and in service of life-coherent transformation.

## **Present Structure**

The embodied, relational, historical, and cultural organization from which a living system responds.

## **Regulation**

The recurrent dynamics that restore, conserve, or transform a pattern.

## **Relevance**

What becomes meaningful, visible, urgent, legitimate, negligible, or possible within a conserved pattern of attention.

## **Salugenesis**

The active restoration of the conditions under which a living system can resume adaptive self-repair.

## **Showing Attention**

The discipline of attention that becomes responsible action in the world.

## **SOMU**

Self-Operating Mathematical Universe; a frontier framework associated with Dr. Anirban Bandyopadhyay that explores prime-coded resonance, nested clocks, triplet symmetry, and coherence cosmology.

## **Structural Coupling**

The history of recurrent congruent change between a living system and its medium.

## **Tri-Field Regulation**

The alignment of proprioceptive form, interoceptive state, and exteroceptive world that supports embodied selfhood and adaptive action.

## **Viability**

The capacity of a living system or manner of living to conserve the conditions through which life remains livable.

## **Waking Attention**

The discipline of attention opened to depth, presence, mystery, and nondual awareness.

## **World-Bringing**

The process by which distinctions, conversations, practices, and institutions bring forth domains of reality, relevance, and possible action.

# Back Cover Synopsis

**Life-Coherent Attention and the Worlds We Bring Forth** is a keystone synthesis in the Life-Coherence project.

Drawing on Humberto Maturana's biology of cognition and love, Ken Wilber's five paths of transformation, coherence physiology, embodied tri-field regulation, mathematical and resonance-based models of coherence, and the Transformer revolution in artificial intelligence, this white paper asks a single guiding question:

What manner of living is being conserved here, and does that conservation conserve or negate the conditions of living?

The paper argues that attention is not merely focus, awareness, or computational relevance. Attention is a world-bringing operation. What we attend to, distinguish, and conserve shapes the worlds we live. In the age of artificial intelligence, this question becomes urgent: computational attention can amplify synthesis and care, but it can also accelerate manipulation, extraction, and disembodied fluency.

Life-coherent attention is proposed as attention disciplined by viability, love, evidence, embodiment, developmental maturity, shadow integration, formal coherence, and responsible possible doing. It wakes up to depth, grows up into wider perspective, opens up to multiple intelligences, cleans up hidden domination, and shows up in practical action.

This paper does not offer a final theory of everything. It offers a disciplined manner of inquiry for medicine, law, finance, politics, spirituality, technology, education, and civilization. Its purpose is to help living systems see what they are conserving, stand down from life-negating patterns, and begin conserving more viable worlds.

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## Author Biography

### Dr. Bichara Sahely

Dr. Bichara Sahely is a physician, systems thinker, and independent scholar from St. Kitts and Nevis. Trained in internal medicine, his work integrates clinical care, physiology, public health, ecological governance, spirituality, political economy, and civilizational transformation. He is the author and curator of the evolving Life-Coherence project at [bsahely.com](http://bsahely.com), where he develops academic white papers, audiobook editions, diagrams, podcasts, and public learning materials dedicated to restoring the conditions through which life can flourish.

His work explores life-coherent medicine, coherence physiology, salugenesis, life-coherent law, politics, finance, spirituality, attention, and the Knowledge Commons. Across these domains, his guiding concern is the preservation, restoration, and expansion of life-capacity in persons, communities, institutions, and the living Earth.

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## Contributor Note

### ChatGPT, GPT-5.5 Thinking

ChatGPT, GPT-5.5 Thinking, an AI language model developed by OpenAI, served as a research, drafting, synthesis, and editorial assistant for this manuscript. Its role included helping to organize conceptual architecture, compare frameworks, generate draft prose, develop tables and figure concepts, support glossary and appendix creation, and assist in transforming prior conversations into a coherent academic white paper.

ChatGPT is not listed as an author. The human author reviewed, directed, revised, and remains responsible for all final content, interpretation, accuracy, citations, and publication decisions.

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