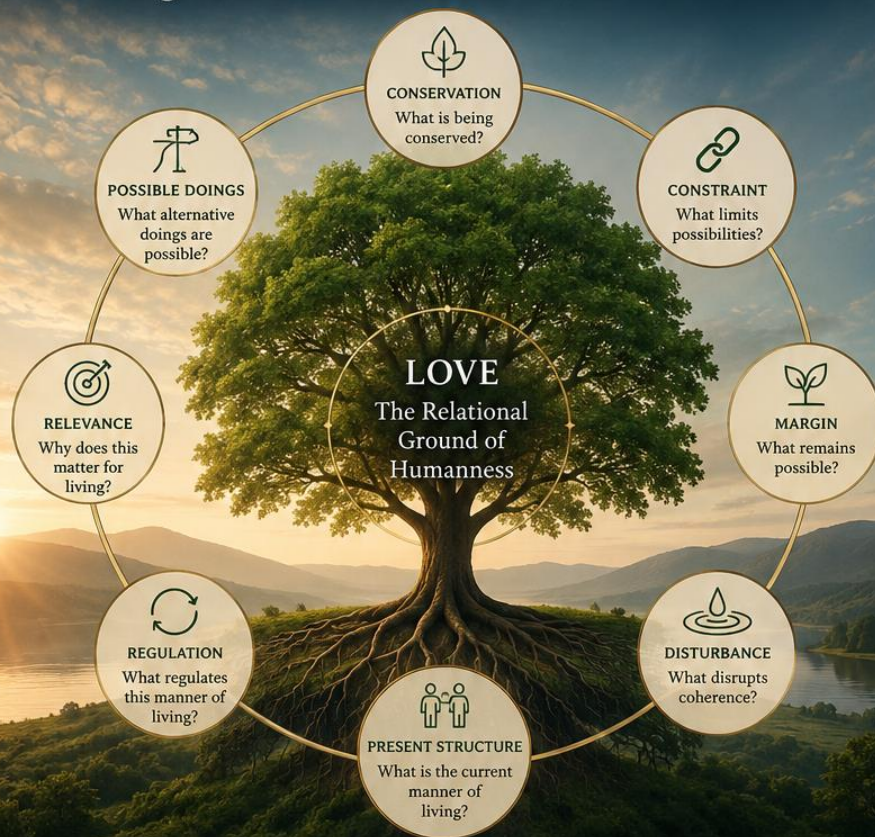


ACADEMIC WHITE PAPER

TOWARD A MATURANA-INFORMED VIABILITY GRAMMAR

Deriving Diagnostic Distinctions from
Living, Love, Conversation, and Culture



*A life-coherent grammar for diagnosing,
understanding, and transforming the manner of living*



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BSc (Biology), MBBS, DM (Internal Medicine)

21 MAY 2026

Academic White Paper

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Abstract

This white paper develops a Maturana-informed viability grammar: a disciplined set of diagnostic distinctions for asking how living systems, persons, institutions, cultures, and civilizations conserve or negate the conditions of living. Rather than beginning with abstract systems theory or imposed categories, the paper proceeds from Humberto Maturana's biological and epistemological method: the observer, distinction, explanation, living organization, organism–medium congruence, structural coupling, emotioning, languaging, conversation, culture, and love. From this ground, the paper derives a life-coherent diagnostic grammar organized around conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings. These are not treated as metaphysical primitives, but as reflective questions that help living see what it is conserving.

The central claim is that viability cannot be reduced to survival, adaptation, stability, resilience, or functional persistence. A manner of living may persist while conserving fear, domination, humiliation, extraction, self-negation, or ecological destruction. Life-coherence therefore asks whether a conserved manner of living preserves the biological, relational, cultural, and ecological conditions through which living remains livable. The paper argues that love, understood in Maturana's precise sense as the relational domain in which the other arises as legitimate in coexistence, is not sentimental but foundational. Suffering is interpreted as the conserved negation of love; healing as the restoration of trust, self-respect, respect for the other, and possible living; reflection as living becoming able to see how it is living; ethics as care for consequences in coexistence; responsibility as answerability for participation; freedom as the reflective possibility of conserving otherwise; and transformation as a new conservation beginning to live.

The paper concludes by presenting the diagnostic primitives as instruments of life-coherent inquiry and by emphasizing a recursive safeguard: the grammar must be applied to itself. Its purpose is not to master life from outside, but to help persons, institutions, cultures, and civilizations ask what they are conserving, what consequences follow, and whether another manner of living can begin.

Keywords

Humberto Maturana; viability grammar; biology of love; autopoiesis; structural coupling; emotioning; languaging; conversation; culture; life-coherence; living systems; relational ethics; responsibility; freedom; healing; transformation; civilization; ecological coherence.

Executive Summary

This white paper derives a **Maturana-informed viability grammar**: a disciplined way of asking what manner of living is being conserved, and whether that conservation supports or negates living.

The argument begins from Maturana's core biological insight that living is not static persistence. Living is **conservation-through-change**. A living system continues only while its organization and its operational congruence with the medium are conserved. From this ground, the paper refuses both individualism and environmental determinism. The organism does not exist apart from the medium, yet the medium does not determine the organism. Living unfolds through structural coupling: a history of recurrent congruent change between living system and medium.

The paper then extends this biological ground into the human domain. Human beings live not only in physical media but in biological-cultural worlds of bodyhood, emotioning, languaging, conversation, culture, memory, and reflection. Behavior is not treated as the output of an isolated organism, but as a relational flow. Emotioning is understood as the relational domain that specifies possible behaviors. Languaging is derived as recursive consensual coordination of doings. Conversation is the braiding of languaging and emotioning. Culture is a conserved network of conversations.

On this basis, the paper identifies love as the decisive relational ground of humanness. Love is not defined as sentiment, preference, or moral ideal, but as the domain of relational behaviors in which another living being arises as legitimate in coexistence. This makes love biologically and culturally foundational. A culture may function, persist, grow, or dominate while failing to conserve love; but in doing so it risks conserving the negation of humanness.

The paper then derives suffering, healing, reflection, ethics, responsibility, freedom, transformation, and life-coherence. Suffering is interpreted as the conserved negation of love. Healing is the restoration of a relational domain in which self-love, self-respect, respect for the other, and possible living can reappear. Reflection is living becoming able to see how it is living. Ethics is care for the consequences of one's doings for others in coexistence. Responsibility is answerability for participation in what is conserved. Freedom is the reflective possibility of no longer conserving what one does not wish to conserve. Transformation is not mere change but a new conservation beginning to live.

Life-coherence is then defined as **conservation that does not betray living**. A life-coherent manner of living conserves the biological, relational, cultural, and ecological conditions through which living beings can continue in legitimate coexistence, love, reflection, responsibility, and regenerative organism-medium congruence.

Only after this derivation does the paper introduce its diagnostic primitives:

Conservation asks: What is being conserved?

Constraint asks: What must be respected for that conservation to continue?

Margin asks: How much room remains for viable change?
Disturbance asks: What triggers change without determining it?
Present structure asks: From what embodied history does the response arise?
Regulation asks: What recurrent dynamics restore or conserve the pattern?
Relevance asks: What becomes visible, meaningful, invisible, or legitimate?
Possible doings asks: What can actually be lived next?

These primitives are not presented as universal objects or metaphysical building blocks. They are reflective questions. Their purpose is to help persons, families, schools, clinics, institutions, economies, and civilizations see what manner of living they are conserving and whether that conservation keeps life livable.

The paper closes with a recursive safeguard. A viability grammar becomes life-incoherent if it is used to dominate, accuse, or negate. Therefore, the grammar must apply its own question to itself: **What manner of living does this grammar conserve when it is used?** Its use must remain grounded in love, reflection, responsibility, and respect for the legitimacy of the other.

The central practical question of the paper is:

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

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functioned as an editorial and conceptual support tool, not as an author. The author reviewed, directed, revised, and remains solely responsible for the final content, interpretation, accuracy, citations, and publication decisions.

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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 to support conceptual dialogue, structural organization, drafting, revision, condensation, glossary development, and preparation of academic and reader-oriented versions of the work. No AI system is listed as an author. The human author reviewed, edited, verified, and approved the manuscript and accepts full responsibility for the final work.

Preface

This paper emerged from a slowing down.

The initial temptation was to build a framework too quickly: to name primitives, arrange them into a diagnostic system, and apply them to civilization, health, culture, and ecological crisis. Yet such a move risked betraying the very source from which the inquiry was drawing. A Maturana-informed approach cannot begin by imposing a system upon living. It must begin with the observer, with distinction, with the domain in which an explanation is valid, and with the generative process through which the phenomenon to be explained arises.

The guiding question therefore became more modest and more demanding:

What distinctions become necessary when an observer asks how living is conserved, negated, healed, or transformed?

This paper is the result of following that question slowly.

It does not claim to reproduce Maturana's work in full. Nor does it claim that the diagnostic grammar developed here is found ready-made in his writings. Rather, it attempts to extend his manner of reasoning into a practical grammar of viability. It asks what becomes visible when we take seriously his distinctions concerning living, structural coupling, emotioning, languaging, conversation, culture, love, reflection, ethics, and responsibility.

The result is not a theory of everything. It is a disciplined conversational practice. Its central concern is not whether a system survives, functions, grows, adapts, or stabilizes. Its concern is deeper:

What manner of living is being conserved, and does that conservation conserve living?

This question matters because many forms of life-incoherence persist precisely by appearing normal. Fear may be called discipline. Control may be called care. Extraction may be called development. Objectification may be called professionalism. Enemy-making may be called security. Ecological destruction may be called growth. Suffering may be conserved while the culture that conserves it calls itself realistic, efficient, advanced, or necessary.

Against this, the paper proposes no external moral command. It offers instead a set of reflective distinctions grounded in living and love. Its aim is to help living see what it is conserving, so that another manner of living may become possible.

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1. Introduction: The Question of the Manner of Living

Human beings do not merely inhabit a world. We bring forth worlds in the ways we live, speak, feel, distinguish, explain, coordinate, remember, teach, heal, govern, and justify. A culture is not sustained only by its declared ideals, formal institutions, or inherited symbols. It is sustained by the recurrent conversations, emotionings, and doings through which a particular manner of living continues to be conserved.

This paper begins from a simple but difficult question:

What manner of living is being conserved here?

The question is not merely descriptive. It is diagnostic and ethical. A manner of living may conserve trust, play, tenderness, reflection, mutual respect, ecological congruence, and the legitimacy of others. But a manner of living may also conserve fear, domination, humiliation, self-negation, extraction, numbness, or the normalization of suffering. The same institution may speak the language of care while conserving control. The same school may speak of learning while conserving fear of error. The same medical system may speak of healing while conserving objectification. The same political order may speak of peace while conserving enemy-making.

The purpose of this paper is to derive, from a Maturana-informed orientation, a disciplined set of primitive diagnostic distinctions for asking how manners of living are conserved, disturbed, narrowed, restored, or transformed. These distinctions are not proposed as metaphysical building blocks or universal laws imposed upon life from outside. They are offered as operations of attention within languaging: ways of noticing what is being conserved in a living, relational, cultural, or institutional domain, and what consequences follow from that conservation.

The central claim is that a viability grammar becomes life-coherent only if it remains grounded in living. It must begin not from abstract systems, but from the conservation of living organization and organism–medium congruence. Maturana’s biological account insists that living systems exist only while both their organization and adaptation are conserved, with adaptation understood not as a variable but as the ongoing relation of operational congruence between living system and medium. If this congruence is lost, the living system disintegrates (Maturana & Varela, 1980; Maturana, 2002).

From this ground, the inquiry can proceed carefully. Living is not static persistence. Living is conservation-through-change. The organism changes. The medium changes. Their relation changes. Yet living continues only so long as the relevant organization and congruence are conserved. This gives the first methodological opening: to understand a living system, a person, a culture, or a civilization, one must ask what is being conserved through change.

For human beings, however, the question cannot remain biological in a narrow sense. Human living is biological-cultural. We live in bodyhood, emotioning, languaging, conversation, culture, memory, and reflection (Varela et al., 1991). We conserve worlds through networks of conversations. Maturana and Verden-Zöllner define culture as a closed network of conversations,

that is, a closed network of coordinations of languaging and emotioning conserved in the living of languaging beings. Different cultures are therefore different manners of living, conserved through different networks of emotionings and doings (Maturana Romesín & Verden-Zöller, 2008).

This means that the diagnostic question must be extended:

What network of conversations is being conserved, and what manner of human living does it make possible?

The answer cannot be inferred from declared ideals alone. It must be read from the recurrent relational field. What happens to the child? What happens to the patient? What happens to the poor, the stranger, the elder, the defeated, the dissenter, the future generation, and the living Earth? Do they appear as legitimate participants in coexistence, or are they reduced, managed, negated, externalized, or rendered invisible?

This is where the biology of love becomes indispensable. In Maturana's usage, love is not sentiment, romance, or moral decoration. It is the relational domain in which the other arises as a legitimate other in coexistence. A life-coherent viability grammar must therefore ask not only whether a system survives, adapts, or functions, but whether the manner of living it conserves preserves the relational conditions in which love, reflection, responsibility, and legitimate coexistence remain possible.

2. Methodological Orientation: Distinctions, Domains, and Explanations

The method followed here is deliberately slow. It does not begin by naming a fixed set of primitives and arranging them into a framework. It begins with the observer and asks what must be distinguished in order to explain the conservation, loss, or transformation of living.

In Maturana's orientation, explanations do not reveal an observer-independent reality from nowhere. An explanation proposes a generative mechanism that, if it operates, gives rise to the experience to be explained in another domain. The observer explains experience through experience, and an explanation is accepted within a domain of listening and validation. This makes the observer's operation of distinction central to the inquiry (Maturana, 1970, 1988, 1990)

A primitive distinction, then, is not a thing. It is not an object waiting in the world. It is a minimal operation of noticing through which an observer brings forth a regularity necessary for a particular explanatory task. In this paper, the explanatory task is not to construct a total theory of reality. It is to ask how manners of living are conserved, how they become life-denying, and how they may become otherwise.

This requires discipline about domains. A distinction valid in one domain may mislead when carried unexamined into another. Bunnell's foreword to *The Origin of Humanness in the Biology*

of Love emphasizes that distinctions reveal some regularities in living while obscuring others, and that each distinction brings forth the domain in which it is valid. Confusion arises when different domains are collapsed into one “flatworld” of explanation.

This warning matters for every term developed in the paper. Conservation in physiology is not identical to conservation in culture. Constraint in a biochemical process is not identical to constraint in a conversation. Regulation in a living body is not identical to regulation in an institution. Disturbance in a cell, a child, a family, a polity, and an ecosystem must not be treated as the same phenomenon merely because the same word is used.

The methodological rule is therefore:

Each primitive distinction must be derived from the domain in which it operates, and must be returned to the experience it helps explain.

This is also why the paper avoids premature formalization. Formalization may have value later, but only after the distinctions have been derived in their living ground. The immediate task is not to mathematize viability, nor to impose an architecture upon Maturana’s work. The task is to let the distinctions appear from the question of living itself.

3. The Guiding Inquiry

The inquiry can now be stated in its simplest form:

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

This question will guide the derivation that follows.

It asks first about conservation, because living continues only through conservation-through-change.

It asks about the manner of living, because what continues may be life-coherent or life-denying.

It asks about conditions of living, because no organism, person, culture, or civilization exists in isolation. Living occurs in an organism–medium relation. A system exists as a totality only in a medium in which its identity and adaptation are conserved through recursive interactions.

It asks about negation, because human beings may conserve cultures that deny the very biological-cultural conditions of humanness: play, tenderness, self-respect, respect for others, reflection, responsibility, and love.

And it asks reflectively, because the diagnostic act itself participates in world-making. A viability grammar that diagnoses others while negating their legitimacy would contradict its own ground. The question must therefore always turn back on the observer:

What world am I bringing forth by making this distinction?

This recursive safeguard is not optional. It is what prevents a life-coherent grammar from becoming another instrument of control. The purpose of the grammar is not to master living from outside, but to help living see what it is conserving, so that another manner of living may become possible.

The derivation begins, therefore, not with civilization, ethics, policy, or reform, but with living itself.

4. Living: Conservation-Through-Change

The derivation must begin with living, but living should not be treated as a fixed thing. A living being is not an object that merely persists. It is a dynamic unity that continues only while its organization is conserved through continuous structural change, and while its relation of operational congruence with the medium is also conserved.

This is why living cannot be understood as simple survival. Survival is a description made by an observer after the fact: the organism has not died. Living, however, is the ongoing present realization of a living organization in a medium. The living being is not first separate from its medium and then later related to it. It exists as living only in a medium in which its organization and adaptation are conserved. Maturana's formulation is decisive here: adaptation is not something an organism has in greater or lesser degree; it is the operational congruence between living system and medium, and the living system continues only while both organization and adaptation remain conserved (Maturana, 1975; Varela, Maturana, & Uribe, 1974).

This gives the first fundamental correction for a viability grammar:

Living is not permanence.

Living is conservation-through-change.

The organism changes. Its molecular processes change. Its bodily structure changes. Its internal relations change. Its medium changes. Yet living continues if, through this flow of change, the organization that constitutes the living being as living remains conserved, and if the living being remains in operational congruence with the medium in which its living is realized.

This means that conservation is not opposed to change. Conservation is the condition under which change remains compatible with the continuation of living. A living being that does not change cannot live. A living being that changes in ways that fail to conserve its organization and adaptation also cannot live. Living therefore occurs in the narrow and dynamic path between rigidity and disintegration.

This is the ground from which the later diagnostic distinctions will arise. Constraint appears because not every change conserves living. Margin appears because there is more or less room for change before conservation fails. Disturbance appears because encounters in the medium

trigger structural change. Present structure appears because what is triggered depends on the living being's current structure and history. Regulation appears because living continues through recurrent dynamics that conserve organization and adaptation. But none of these should be introduced before living itself is understood as conservation-through-change.

The first diagnostic question is therefore:

What is being conserved for this living to continue?

The question must remain open. It cannot be answered once and for all. In one domain, what is conserved may be cellular organization. In another, it may be bodily integrity. In another, a relational pattern. In another, a culture. In another, a civilization's way of coordinating life. The same word — conservation — must not flatten these domains. It must ask, each time, what process, relation, organization, or manner of living is continuing through change.

4.1 Living and the Medium

Living never occurs in isolation. A living system does not exist as a totality by itself. It exists in a medium in recursive interactions, and it conserves its identity as a particular kind of system only as long as its defining organization remains conserved through those interactions. The medium is not a passive container. It is the domain of circumstances in which the living system realizes its living, and with which it changes congruently or ceases to live.

This prevents two errors.

The first error is internalism: the idea that living is located only inside the organism. From this view, one might try to explain life, health, suffering, or behavior only by looking inward — at genes, organs, nervous systems, preferences, or individual choices.

The second error is environmental determinism: the idea that the medium determines what the organism becomes. From this view, one might try to explain living as if the organism were shaped from outside by a pre-given environment.

Maturana's account avoids both. The living system and medium change together. The medium may trigger changes in the living system, but it does not specify them. The living system undergoes changes according to its own structure. At the same time, the living system participates in the changing of the medium. Living therefore unfolds as a history of congruent change between organism and medium, or it ceases.

This means that the unit of diagnostic concern is not the organism alone.

It is the organism-in-medium.

For human beings, this point is decisive. A human being does not live only in air, water, food, temperature, and shelter. A human being lives also in touch, gaze, rhythm, voice, language, memory, family, institutions, stories, law, economy, culture, and emotioning. Human living is

biological-cultural. Therefore, the medium of human living includes both ecological and relational conditions.

A child may have food and shelter and still live in a medium of fear.

A patient may have access to treatment and still live in a medium of abandonment.

A citizen may have formal rights and still live in a medium of humiliation.

A society may have institutions and still live in a medium of mistrust.

A civilization may have technological power and still live in a medium that destroys the ecological relations that make its own continuation possible.

So the question must deepen:

In what medium is this manner of living being conserved?

And then:

Does this medium conserve or negate the living that depends upon it?

4.2 Living and the Manner of Living

Maturana's account of evolution turns not on adaptation to a pre-existing environment, but on the conservation of a manner of living (Maturana Romesín & Mpodozis, 2000). A lineage arises when a particular organism–niche relation begins to be conserved across generations. What is conserved is not merely a genetic pattern, but a dynamic way of living in which organism and medium participate together.

This is the crucial bridge from biology to culture.

At the biological level, a lineage continues when a manner of living is conserved through reproduction and structural drift.

At the cultural level, a culture continues when a manner of living is conserved through learning, emotioning, languaging, and recurrent conversation.

The parallel should not be collapsed. Biological lineage and cultural continuity are different domains. But the pattern of inquiry is similar:

What manner of living is conserved?

What relation with the medium does it conserve?

What becomes open to change because this is conserved?

What becomes impossible because this is conserved?

What happens when this conservation fails?

This is why the phrase “manner of living” is more fundamental than “system.” A system can be described structurally from outside. A manner of living asks how the living is actually realized and conserved.

For the purposes of this white paper, the central concern is not whether a social system persists. Many systems persist while conserving suffering. The concern is whether the manner of living being conserved remains life-coherent.

A culture of domination may conserve itself.
A culture of extraction may conserve itself.
A culture of fear may conserve itself.
A culture of humiliation may conserve itself.
A culture of numbness may conserve itself.

The fact of conservation alone does not make a manner of living viable in the deeper sense. The question is whether what is conserved conserves the conditions of living, love, reflection, responsibility, and legitimate coexistence.

4.3 The First Derivation

We can now state the first derivation clearly.

Because living continues only through the conservation of organization and organism–medium congruence, any inquiry into viability must begin by distinguishing what is conserved through change.

This gives the first primitive diagnostic distinction:

Conservation is the observer’s distinction of what must continue through change for a living system, relation, culture, or manner of living to continue as such.

But conservation is not yet evaluation. Something may be conserved that supports living, or something may be conserved that negates living. Therefore, conservation immediately requires the second question:

Does this conservation conserve living, or does it conserve a manner of living that undermines living?

This is the beginning of life-coherent diagnosis.

Not:

Is the system stable?

But:

What is being stabilized?

Not:

Is the institution functioning?

But:

What manner of living does its functioning conserve?

Not:

Is the culture surviving?

But:

What kind of human beings does this survival bring forth?

Not:

Is the economy growing?

But:

What organism–medium relation does this growth conserve or destroy?

The derivation of living therefore gives the paper its foundational question:

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

Everything that follows will unfold from this question. The next step is to derive medium and niche more carefully, because without them the grammar will slide back into either individualism or environmental determinism.

5. Medium and Niche: The Relational Place of Living

The previous section established that living is conservation-through-change. But this conservation is never the conservation of an isolated entity. A living system exists as living only in a medium. The medium is not an external stage on which the organism later acts; nor is it a container into which the organism is placed. It is the domain of circumstances in which the living system realizes its living and with which it changes congruently or ceases to live.

This distinction is necessary because the word “environment” often misleads. It suggests something external, pre-given, and independent of the organism. Maturana’s account does not begin there. Living systems occur as discrete organisms in the medium that makes them possible, and adaptation is the ongoing relation of operational congruence between the changing organism and the changing medium. If that relation is lost, the organism dies.

The medium, then, is not merely “around” the organism. It participates in the possibility of the organism’s living. Yet it does not determine the organism from outside. The medium may trigger structural changes in the organism, but what happens in the organism happens according to the organism’s own structure. Likewise, the organism participates in changing the medium, but does not simply command it. Living unfolds through recurrent congruent change.

This gives the next correction:

The organism does not adapt to a pre-existing world. The organism and medium change together in the conservation or loss of living.

The niche is more specific than the medium. The medium is the broader domain of circumstances in which many possible relations may occur. The niche is the particular organism–medium relation through which a manner of living is actually realized and conserved.

A sea may be a medium for many beings, but the niche of a coral, turtle, shark, algae, or bacterium is not the same sea lived in the same way. A city may be a medium for all its inhabitants, but the niche lived by a child, elder, migrant, wealthy professional, informal worker, prisoner, or disabled person may differ profoundly. The same physical surroundings do not constitute the same lived world.

So the distinction becomes:

The medium is the domain in which living can occur. The niche is the organism–medium relation actually lived.

This distinction is indispensable for a viability grammar. Without the medium, the grammar becomes internalist: it looks only inside the organism, the person, the institution, or the culture. Without the niche, the grammar becomes too general: it speaks of “context” as if all beings live the same context in the same way.

For human beings, the niche is not merely ecological. It is biological-cultural. A human being lives in air, water, food, temperature, shelter, microbes, light, and gravity. But a human being also lives in touch, gaze, rhythm, voice, language, memory, expectation, family, economy, law, ritual, technology, institution, and emotioning. The human niche is therefore a relational world, not merely a physical surrounding.

This is why a society can provide resources while still conserving suffering. A child may be fed but not welcomed. A patient may be treated but not met. A citizen may possess rights but live under humiliation. A community may have infrastructure but lack trust. A civilization may possess technological power while destroying the ecological medium that makes its continuation possible.

The diagnostic question must therefore become:

What niche is being conserved here?

Not only:

What resources are present?

But:

What organism–medium relation is being lived?

What relational world is being conserved?

What does this niche make possible?

What does it make impossible?

This is especially important when we move toward culture and civilization. A civilization is not only a built environment, economy, state, or technological apparatus. It is a conserved human niche: a biological-cultural medium in which particular ways of perceiving, valuing, coordinating, desiring, fearing, healing, educating, governing, and relating become recurrent.

So the question becomes:

What kind of human niche does this civilization conserve?

Does it conserve bodily trust, play, tenderness, reflection, mutual recognition, ecological participation, and responsibility? Or does it conserve acceleration, mistrust, competition, extraction, loneliness, humiliation, and control?

The answer cannot be found in declarations alone. It must be found in the manner of living that is actually repeated.

5.1 The Organism–Niche Relation as Manner of Living

Maturana's evolutionary reasoning turns on the conservation of an organism–niche relation. A lineage arises when a particular dynamic organism–niche relation begins to be conserved as a manner of living from one generation to the next. What is conserved is not merely a trait, nor merely a genotype, nor merely an organism abstracted from the world. What is conserved is a way of living in relation.

This is why “manner of living” is such a powerful phrase. It names the relational whole that actually continues.

A manner of living includes the organism's structure, yes, but also its behavioral preferences, its recurrent interactions, its medium, its niche, and the conditions under which its living can be repeated. In Maturana's account, once a manner of living is conserved, it becomes the operational dynamic center around which many other features remain open to change.

This has direct consequences for the present project.

If we want to understand a person, culture, institution, or civilization, the first question is not:

What are its components?

The deeper question is:

What manner of living is being conserved?

The components matter, but they are not sufficient. A school is not understood merely by listing teachers, students, buildings, curriculum, examinations, and administrative rules. One must ask what manner of living the school conserves. Does it conserve curiosity, play, disciplined inquiry, and mutual respect? Or does it conserve fear, ranking, compliance, and the shame of error?

A hospital is not understood merely by listing beds, professionals, protocols, medications, and diagnostic tools. One must ask what manner of living it conserves. Does it conserve care, trust, bodily dignity, listening, and the restoration of possible living? Or does it conserve objectification, throughput, hierarchy, and patient invisibility?

An economy is not understood merely by describing production, consumption, exchange, prices, and growth. One must ask what manner of living it conserves. Does it conserve provisioning, reciprocity, sufficiency, regeneration, and dignity? Or does it conserve accumulation, extraction, scarcity, disposability, and ecological rupture?

In each case, the formal structure is not enough. The diagnostic object is the conserved manner of living.

5.2 Medium, Niche, and the Human Child

The significance of medium and niche becomes especially clear in the child. A child does not become human merely by possessing a human genome. The child becomes human in a human relational medium.

Maturana and Verden-Zöllner locate the arising of humanness in the early mother–child relation, especially in intimate, playful, bodily coexistence. The child learns his or her body in playful contact; the worlds the child lives arise in what mother and child do together; and the child’s self-distinctions arise in the reciprocal touching, handling, and distinguishing that occur in play.

The child’s niche, then, is not merely food, shelter, and protection from danger. It is the relational field in which bodyhood, selfhood, otherhood, trust, play, and languaging become possible.

A child’s human niche includes:

being held without fear,
being touched without violation,
being seen without humiliation,
being corrected without negation,

being allowed to play without performance anxiety,
being accompanied into language without losing bodily trust.

This is not sentimental. It is biological-cultural. The child becomes a human being in a relational medium that conserves love, play, and mutual acceptance. If that medium is replaced by fear, neglect, manipulation, humiliation, or control, another manner of living may be conserved.

This gives one of the most important civilizational tests:

Does this culture conserve the niche in which children become loving, self-respecting, other-respecting, playful, reflective human beings?

A civilization that fails here may still conserve technical intelligence, productivity, obedience, and institutional continuity. But it will not conserve humanness in the deeper biological-cultural sense.

5.3 Diagnostic Consequence

The derivation of medium and niche gives the second major diagnostic movement.

The first question was:

What manner of living is being conserved?

The next is:

In what medium, and as what niche, is this manner of living conserved?

This protects the inquiry from both individualism and abstraction. It prevents us from blaming isolated persons for patterns that arise in conserved relational fields. It also prevents us from speaking vaguely of “systems” without asking how actual living beings live within them.

A life-coherent viability grammar must therefore ask:

What medium makes this manner of living possible?

What niche is being realized by the living beings involved?

What recurrent relations conserve this niche?

Does this niche widen or narrow the possibilities of living?

Does it conserve love, play, reflection, and coexistence?

Or does it conserve fear, domination, humiliation, extraction, and self-negation?

Only after this can structural coupling be properly derived.

Because if the niche is the organism–medium relation actually lived, then the next question is:

How does this relation continue through time?

That brings us to structural coupling: the history of recurrent congruent change through which organism and medium remain together in the conservation, transformation, or loss of living.

6. Structural Coupling: The History of Congruent Change

If the niche is the organism–medium relation actually lived, the next question is:

How does this relation continue through time?

It does not continue because the medium instructs the organism.

It does not continue because the organism controls the medium.

It does not continue because a pre-existing environment selects a passive organism into fitness.

It continues, when it continues, through a history of recurrent interactions in which organism and medium change together congruently while the living system conserves its organization. This is the relation Maturana calls **structural coupling** (Maturana, 2002; Maturana & Varela, 1980).

Structural coupling names the dynamic relation of operational congruence between living system and medium through recursive interactions that result in congruent structural changes of both organism and medium. Adaptation, in this view, is conserved as an invariant relation while organism and medium undergo spontaneous congruent changes through their recurrent interactions.

This is a crucial correction for a viability grammar.

Structural coupling is not merely interaction. An interaction may be incidental. Structural coupling is historical. It is the recurrent, recursive, mutually triggering flow through which a living system and its medium remain together in the conservation of living.

Nor is structural coupling harmony. The organism and medium may be in congruence without being comfortable, gentle, or flourishing. A person may be structurally coupled to a harsh institution. A child may be structurally coupled to a fearful family. A community may be structurally coupled to an extractive economy. A civilization may be structurally coupled to ecological destruction. In each case, the coupling may be real, recurrent, and conserved, while still being life-incoherent.

So the diagnostic question is not simply:

Is the system coupled to its medium?

The deeper question is:

What kind of structural coupling is being conserved, and what manner of living does it sustain?

This distinction allows the grammar to avoid a major error. It prevents us from assuming that recurrent adaptation is necessarily good. A living system may continue by adapting to damaging conditions, but the manner of living conserved may narrow its possibilities, injure its body, distort its emotioning, or normalize suffering.

A child can adapt to fear.

A worker can adapt to exploitation.

A patient can adapt to dismissal.

A people can adapt to humiliation.

An ecosystem can absorb disturbance for a time.

A civilization can adapt to crisis by conserving more control.

But adaptation, in this sense, does not by itself mean life-coherence. It only means that some relation of operational congruence is being conserved. The evaluative question remains:

Does this coupling conserve the conditions of living, or does it conserve survival within the negation of living?

6.1 Structural Coupling and Non-Instruction

The importance of structural coupling lies partly in what it prevents us from saying.

We should not say that the medium determines the organism.

We should not say that the organism simply adapts to the medium.

We should not say that behavior is produced inside the organism and then expressed outward.

We should not say that change is caused from outside in a linear way.

In Maturana's account, each encounter between living system and medium triggers structural change in both, but those changes occur according to the structures of each. The medium does not specify the change in the organism; the organism does not specify the change in the medium. Yet, through recurrence, their changes may become congruent in a history of living.

This gives a disciplined way to understand disturbance.

A disturbance is not an instruction.

A disturbance is an encounter that triggers change.

The effect of the disturbance depends on the present structure and history of the living system.

The same word, gesture, event, policy, diagnosis, or crisis may trigger different changes in different persons or cultures because each stands in a different history of structural coupling.

A criticism may trigger learning in a relation of trust.

The same criticism may trigger shame in a history of humiliation.

A boundary may trigger safety in one relation.

The same boundary may trigger abandonment in another.

A reform may open hope in one institution.
The same reform may trigger defensive resistance in another.

The disturbance does not contain its meaning in itself. Its significance appears in the coupled history in which it occurs.

This is why the diagnostic question must become:

What history of structural coupling makes this response possible?

Without that question, explanation collapses into blame or mechanism. We say “the child is difficult,” “the patient is noncompliant,” “the public is irrational,” “the institution is resistant,” or “the society is violent,” without asking what recurrent organism–medium or person–culture relation has made these behaviors appear as viable, necessary, or inevitable.

6.2 Structural Coupling and the Human Relational Medium

For human beings, structural coupling is never merely physical. It is biological-cultural.

The infant becomes coupled with touch, warmth, gaze, rhythm, feeding, voice, smell, movement, and play. Later, the child becomes coupled with names, gestures, stories, prohibitions, permissions, family rhythms, school expectations, technologies, institutions, and cultural distinctions. The body changes in that relational history. The world also changes as lived by the child.

A child repeatedly met in tenderness becomes structurally coupled to one kind of human world.

A child repeatedly met in fear becomes structurally coupled to another.

A child whose play is protected lives a different niche from a child whose every action is evaluated.

A child whose questions are welcomed lives a different niche from a child whose curiosity is shamed.

The point is not that the medium determines the child. The child remains a living, structure-determined being. But the child’s history of recurrent interactions participates in the structural drift through which a world of possible doings, meanings, and emotions becomes conserved.

This extends to all human domains.

A patient becomes coupled not only with disease processes but with clinicians, waiting rooms, words, diagnoses, costs, fear, reassurance, shame, family support, and institutional rituals.

A citizen becomes coupled not only with laws but with police encounters, bureaucratic forms, public narratives, media atmospheres, economic pressures, and the everyday experience of recognition or negation.

A society becomes coupled with soils, waters, energy systems, money systems, technologies, legal forms, historical memories, myths of progress, and networks of conversation.

So structural coupling gives the grammar its relational realism. It says: do not look only inside the person; do not look only outside at the system. Look at the conserved history of organism and medium, person and culture, institution and practice, civilization and Earth.

6.3 Structural Coupling and the Possibility of Transformation

Structural coupling also explains why transformation cannot be imposed from outside.

An intervention can disturb.

It can invite.

It can interrupt.

It can protect.

It can open a space.

It can create new conditions of recurrence.

But it cannot determine the change that will occur in the living system or culture. A living system changes according to its structure. A culture changes only if a new network of conversations begins to be conserved.

This is why reforms often fail.

They introduce a new rule but conserve the old emotioning.

They introduce new language but conserve the old distinctions.

They introduce new institutions but conserve the old relational field.

They introduce new technologies but conserve the old manner of living.

From the perspective of structural coupling, transformation requires more than disturbance. It requires a new recurrent relation that can be conserved.

A school does not transform because it adopts the language of well-being. It transforms only if teachers, students, administrators, families, assessments, schedules, and daily interactions begin to conserve a new manner of living in which curiosity, trust, play, and disciplined inquiry are actually lived.

A health system does not transform because it adopts the language of patient-centered care. It transforms only if the patient is recurrently met as a legitimate whole person in the organization of time, attention, explanation, touch, decision-making, and follow-up.

A political culture does not transform because it invokes peace. It transforms only if the other begins to appear recurrently as legitimate in conversation, memory, law, territory, grief, accountability, and future-making.

A civilization does not transform because it adopts sustainability language. It transforms only if its economy, law, technology, education, food systems, and imagination become structurally coupled to the living Earth as medium, not merely to Earth as resource.

6.4 Diagnostic Consequence

The derivation of structural coupling gives the next diagnostic movement:

What recurrent organism–medium, person–culture, or civilization–Earth relation is being conserved through time?

This question prevents shallow intervention. It asks us to look for the recurrence that gives a pattern its stability.

Where are the repeated encounters?

What do they trigger?

What present structures do they meet?

What emotioning do they conserve?

What possible doings do they open or close?

What margin do they widen or narrow?

What manner of living becomes normal through this recurrence?

The diagnostic primitive that emerges here is **disturbance**, but carefully understood:

Disturbance is an encounter that triggers change in a living system, relation, or culture without determining the change it triggers.

And the corresponding diagnostic question is:

What is being triggered here, in what history of structural coupling, and with what consequence for the conservation of living?

Structural coupling therefore deepens the central inquiry. We no longer ask only what is being conserved. We ask how it is being conserved through recurrent relations, and whether those relations conserve or negate the conditions of living.

The next step is to derive behavior. If structural coupling is the history of congruent change between living system and medium, then behavior cannot be understood as something an isolated organism does by itself. It must be understood as a relational flow arising in the encounter between living system and medium.

7. Behavior: The Relational Flow of Organism and Medium

If structural coupling is the recurrent history of congruent change between living system and medium, then behavior cannot be understood as something an organism produces by itself.

The usual formulation says:

Behavior is what the organism does.

A Maturana-informed formulation must say something different:

Behavior is what an observer distinguishes in the dynamic relation between living system and medium.

This is a crucial correction. Behavior does not occur inside the organism and then get expressed outward. Nor does it occur in the medium alone as an external effect. Behavior appears in the relational domain where the living system operates as a totality in its medium. Maturana is explicit that behavior is not something the living system does by itself; it is what happens in the interactions of living system and medium, involving structural changes in both through their recurrent interactions.

A step is not in the leg alone.
It is in the body–ground relation.

Speech is not in the mouth alone.
It is in the speaker–listener relation.

Touch is not in the hand alone.
It is in the touching–being-touched relation.

Care is not in an intention alone.
It is in the relational flow in which one living being is met as legitimate, present, and worthy of attention.

This gives the next methodological correction:

Behavior is not an isolated output. Behavior is a relational occurrence.

7.1 Behavior and the Observer

Behavior appears to an observer. The observer distinguishes a living system as acting, responding, moving, speaking, avoiding, approaching, resisting, learning, playing, or caring. But

what the observer distinguishes as behavior arises in the encounter between organism and medium.

This matters because it prevents premature individualization.

If a child strikes another child, the behavior is not explained adequately by saying “the child is aggressive.” The behavior arises in a relational field: bodily state, prior history, present fear, adult responses, peer dynamics, available language, learned patterns of defense, and the surrounding culture of correction or humiliation.

If a patient does not follow medical advice, the behavior is not explained adequately by saying “the patient is noncompliant.” The behavior arises in a relational field: trust or mistrust, cost, fear, side effects, prior experiences of dismissal, cultural meanings of illness, the quality of explanation, and the patient’s actual lived possibilities.

If a society becomes violent, the behavior is not explained adequately by saying “people are violent.” The behavior arises in a conserved network of fear, memory, humiliation, deprivation, propaganda, identity threat, institutional breakdown, and enemy-making.

This does not remove responsibility. But it relocates explanation.

Behavior is not excused by being relational.

Behavior is understood by being relational.

7.2 Behavior and Domain Confusion

The distinction between domains remains essential.

The molecular and physiological changes that make a behavior possible do not occur in the same domain as the behavior distinguished by an observer. A living system exists both as a composite unity in the domain of its components and as a totality in relation with the medium. These domains modulate one another, but they do not collapse into one another. Maturana’s account stresses that the operational domain in which a living system exists as a whole differs from the operational domain in which it exists as a composite entity.

This prevents two reductions.

The first reduction says:

Behavior is nothing but internal mechanism.

The second reduction says:

Behavior is nothing but environmental conditioning.

Both are incomplete. Behavior arises in the relation. The organism's structure matters. The medium matters. Their history of coupling matters. The observer's distinction matters.

A life-coherent grammar must therefore ask:

In what domain are we observing this behavior?
What organism–medium relation gives rise to it?
What history of structural coupling makes it possible?
What manner of living does it conserve?

7.3 Behavior and Possible Doings

Behavior also prepares the way for emotioning.

Why? Because not all behaviors are possible in every relational domain.

The same body can live different behaviors in fear, trust, shame, play, tenderness, resentment, or love. The same words can become care or domination. The same silence can become respect or abandonment. The same boundary can become protection or rejection.

So behavior is not simply movement.

Behavior is movement-in-relation.

And in human beings, relation is always lived in emotioning.

This means that the diagnostic primitive of **possible doings** must not be treated as abstract choice. Possible doings are behaviors that can actually be lived from within a given relational domain.

A person in fear may not be able to listen.
A person in shame may not be able to ask for help.
A person in trust may be able to confess, repair, or learn.
A child in play may explore possibilities that a child under evaluation cannot even perceive.

So the question is not merely:

What did this living being do?

The deeper question is:

What possible doings were available in this relational field?

And then:

What kind of relational field would make other doings possible?

7.4 Diagnostic Consequence

The derivation of behavior gives the next diagnostic movement:

What behavior is being distinguished, and in what organism–medium relation does it arise?

This question slows diagnosis. It prevents us from leaping too quickly to blame, pathology, moral judgment, or technical correction.

It asks us to see behavior as part of a living relation.

For a child:

What relational world is this behavior conserving or protecting?

For a patient:

What history of care, dismissal, fear, trust, or explanation is this behavior living from?

For an institution:

What recurrent medium makes this behavior normal?

For a culture:

What network of conversations makes these behaviors appear necessary, proper, or inevitable?

For a civilization:

What living relation with Earth, bodies, labor, technology, and future generations is being enacted through these behaviors?

The working definition is therefore:

Behavior is the relational distinction through which an observer brings forth the dynamic flow of changes occurring in the encounter between a living system and its medium, as the living system realizes its living.

In simpler language:

Behavior names what happens in the living relation, not what an isolated organism does by itself.

This now leads directly to the next derivation.

If behavior is relational flow, then we must ask what specifies the field of possible behaviors. That brings us to **emotioning** — not emotion as private feeling, but emotioning as the relational domain in which some behaviors become possible and others do not.

8. Emotioning: The Relational Domain of Possible Behavior

If behavior is the relational flow of organism and medium, the next question is:

What specifies the kind of behavior that becomes possible in that relational flow?

The answer is **emotioning**.

This term must not be understood as private feeling alone. In ordinary language, emotion is often treated as an inner state added to action: first there is a person, then an emotion appears inside the person, and then the person acts. A Maturana-informed account reverses this abstraction. Emotion is not merely something inside the individual. It is a relational domain. It specifies what kinds of behaviors are possible in a given moment of living.

Maturana and Verden-Zöllner state that when we distinguish an emotion or mood, we are connoting the anatomical and physiological dynamics that determine the domain of relational behaviors in which the animal or human being moves. As emotions change, human beings become different beings: they see differently, hear differently, move differently, act differently, reason differently, and reflect differently.

This gives the next methodological correction:

Emotioning is not decoration around behavior. Emotioning is the domain in which behavior becomes possible as one kind of action rather than another.

A child in play can explore, imitate, test, laugh, retreat, return, and begin again.

A child in fear may freeze, cling, hide, strike, appease, or scan for danger.

A patient in trust can listen, ask, disclose, and participate in care.

A patient in humiliation may resist, withdraw, or defend.

A society in mutual recognition can deliberate.

A society in fear may polarize, accuse, punish, and silence.

The behavior cannot be understood apart from the emotioning in which it occurs.

8.1 Emotioning and the Character of Action

The same visible behavior may become different actions in different emotional domains.

A correction may be teaching or humiliation.
A boundary may be protection or rejection.
A silence may be respect or abandonment.
A touch may be care or violation.
A question may be curiosity or interrogation.
A law may be protection or domination.

The outward form alone does not decide the action. The action is specified by the relational domain in which it is lived.

This is why Maturana's account of love and aggression is so important. Love is not defined as a private feeling, but as a domain of actions in which the other arises as a legitimate other in coexistence. Aggression is the domain of actions in which the other is denied as legitimate.

So emotioning gives action its relational identity (Maturana Romesín & Verden-Zöllner, 2008).

The same words spoken in love can invite reflection.
The same words spoken in aggression can produce defense.
The same institutional rule enacted in care can protect coexistence.
The same rule enacted in control can conserve domination.

A viability grammar must therefore ask not only:

What behavior occurred?

But:

In what emotioning did this behavior occur?

And then:

What possible behaviors does this emotioning open, and what possible behaviors does it close?

8.2 Emotioning and Reasoning

Emotioning also changes reasoning.

This is essential. In many modern traditions, emotion is treated as what disrupts reason. But in Maturana's account, emotioning specifies the domain in which reasoning occurs. We do not reason from nowhere. We reason as beings living in particular relational domains.

In fear, reasoning becomes defensive.

In pride, reasoning becomes justificatory.

In resentment, reasoning becomes accusatory.

In domination, reasoning becomes strategic.

In love, reasoning can become responsible.

In play, reasoning can become exploratory.

In trust, reasoning can become reflective.

Maturana and Verden-Zöllner make this explicit: different manners of thinking have different presence in daily life according to how we live our emotioning, and wisdom requires an integrated movement between systemic and local linear thinking. They also warn that the Western patriarchal desire for control seduces us into local linear thinking and blinds us to the systemic coherences needed to understand living.

This gives another diagnostic question:

What kind of reasoning is this emotioning making possible?

A culture of control will tend to reason in terms of management, prediction, compliance, and enforcement.

A culture of fear will tend to reason in terms of threat, security, exclusion, and defense.

A culture of competition will tend to reason in terms of rank, advantage, scarcity, and winning.

A culture of love and reflection can reason in terms of relation, consequence, care, repair, responsibility, and coexistence.

Thus, the problem is not simply that people “think wrongly.” Often they are thinking coherently within an emotioning that narrows what can be seen.

8.3 Emotioning and Culture

Emotioning is also central to culture. A culture is not merely a network of ideas. It is a conserved network of conversations, and conversations are braided flows of languaging and emotioning.

Maturana and Verden-Zöllner define culture as a closed network of conversations: a closed network of coordinations of languaging and emotioning. Different cultures are different manners of living because they conserve different networks of emotionings and doings.

This means that a culture’s identity is not found only in its official values.

It is found in the emotioning it recurrently conserves.

A school may declare curiosity while conserving fear of error.

A hospital may declare compassion while conserving hierarchy and distance.

A state may declare justice while conserving suspicion and punishment.

An economy may declare prosperity while conserving scarcity, competition, and extraction.

A peace process may declare reconciliation while conserving humiliation and enemy-making.

A family may declare love while conserving control.

So the diagnostic question becomes:

What emotioning is actually being conserved in this network of conversations?

This question is often more revealing than asking what a culture says it believes.

8.4 Emotioning and Life-Coherence

Emotioning is decisive for life-coherence because it specifies what can be lived next.

If a relational field conserves fear, possible doings narrow. People may comply, hide, attack, withdraw, appease, or seek control.

If a relational field conserves shame, possible doings narrow differently. People may self-silence, self-justify, collapse, perform, or avoid exposure.

If a relational field conserves love, possible doings widen. People can listen, disagree without erasing one another, repair harm, protect boundaries, reflect, and begin again.

This does not mean that love eliminates conflict. Love does not require blind acceptance. It means that conflict can occur without denying the legitimacy of the other. Maturana's distinction allows us to say: one may oppose a behavior, set a boundary, or refuse a harm without negating the being of the other.

This is essential for a life-coherent civilization.

A civilization cannot conserve humanness if its dominant emotioning is fear, mistrust, humiliation, control, or aggression. It may conserve order. It may conserve productivity. It may conserve obedience. It may conserve technological power. But it will not conserve the relational domains in which love, reflection, responsibility, and legitimate coexistence remain possible.

So the life-coherent question is:

Does this emotioning conserve or negate the conditions in which human beings can remain human together?

8.5 Diagnostic Consequence

The derivation of emotioning gives the next major diagnostic movement:

What relational domain is being conserved, and what possible behaviors does it make available?

This question changes the way we approach persons, institutions, and cultures.

For a child, we ask:

Is the child living in play, trust, fear, shame, or control?

For a patient, we ask:

Is the clinical encounter conserving trust, dignity, and participation, or dependence, objectification, and fear?

For an institution, we ask:

What emotioning is conserved by its rules, metrics, architecture, timing, rituals, and language?

For a culture, we ask:

What emotional world is being reproduced across generations?

For civilization, we ask:

What emotioning governs our relation to Earth, children, the poor, the stranger, the defeated, and the future?

The working definition is therefore:

Emotioning is the relational distinction through which an observer brings forth the changing domains of possible behavior, reasoning, perception, and action in which a living being, person, institution, or culture conserves a manner of living.

In simpler language:

Emotioning names the relational field of what can be lived.

This now leads directly to languaging.

If emotioning specifies possible behavior, then languaging allows human beings to coordinate those behaviors recursively. But languaging must not be reduced to words, symbols, or information transfer. It must be derived as recursive consensual coordination of doings, always braided with emotioning.

9. Languaging: Recursive Coordination of Doings

If emotioning specifies the relational domain in which possible behaviors arise, the next question is:

How do human beings coordinate their behaviors recursively so that shared worlds begin to appear?

This is where **languaging** enters (Maturana & Varela, 1992).

It must not be reduced to words, symbols, grammar, or information transfer. In a Maturana-informed derivation, language is not first a tool used by already separate minds to represent an already given world. Language is a manner of living in recurrent interactions. More precisely, Maturana describes language as a flow of **coordinations of coordinations of consensual behaviors** (Maturana, 1978). Coordination of behavior occurs throughout the biosphere; what constitutes language is the recursion on coordination itself.

So the first correction is:

Languaging is not representation. Languaging is recursive consensual coordination of doings.

A gesture, sound, mark, or word does not carry meaning as a package transferred from one mind to another. It becomes meaningful in the flow of coordinated living in which it participates. Words, in this account, are operational nodes in a network of consensual coordinations of coordinations of behavior. Their meaning arises in how they orient the flow of coordination in conversation.

This means that human beings do not simply use language to describe worlds. We live in languaging, and in doing so we bring forth worlds of coordinated action.

A diagnosis brings forth a medical world.

A law brings forth a civic world.

A price brings forth an economic world.

A border brings forth a political world.

A promise brings forth a moral-relational world.

A scientific model brings forth an explanatory world.

A story brings forth a field of memory, identity, and possibility.

These worlds are not merely mental. Once conserved in languaging, they coordinate bodies, institutions, expectations, responsibilities, exclusions, permissions, and futures.

9.1 Languaging and Consensuality

The word **consensual** must also be handled carefully.

In ordinary speech, consensus often means agreement. But Maturana distinguishes consensuality from agreement. Consensuality is a spontaneous coordination of behavior that does not require stipulation. Agreement, by contrast, is already a secondary operation in languaging. It presupposes that languaging is already underway.

This distinction is important because it prevents us from making language too intellectual too soon.

Before explicit agreement, there is coordinated living.

A child and caregiver coordinate touch, gaze, rhythm, vocal tone, reaching, returning, feeding, pausing, smiling, and play. These recurrent coordinations create the living ground in which languaging can arise. The child does not first receive words as labels. The child enters a relational dance in which sounds, gestures, objects, bodies, and actions begin to orient recurrent coordinations.

So languaging grows out of living together.

It is not installed into the child as information.

It is not added to a solitary organism.

It arises in recurrent relational coordination.

This is why the human niche matters. A child becomes a languaging being in a medium of recurrent human coordination. If the relational medium is loving, playful, tender, and trustworthy, languaging arises within a world of acceptance. If the medium is fearful, coercive, or humiliating, languaging may still arise, but it may conserve another manner of living.

So the diagnostic question becomes:

In what relational medium is languaging being learned, and what manner of living does it conserve?

9.2 Languaging and Emotioning

Languaging never occurs alone.

Human beings exist in the braiding of languaging and emotioning. Our emotioning changes in the course of our languaging, and our languaging changes in the course of our emotioning. Maturana and Verden-Zöllner call this braiding **conversation**.

This gives another correction:

There is no human languaging without emotioning.

The same words can live different worlds depending on the emotioning in which they occur.

“Come here” may be care, command, threat, invitation, seduction, rescue, or control.

“You are wrong” may be humiliation, teaching, correction, or playful challenge.

“I forgive you” may be release, superiority, manipulation, or repair.

“We need security” may be protection, fear, domination, exclusion, or shared responsibility.

The words alone do not determine the world. The emotioning in which the words are lived gives them their relational character.

This means that a viability grammar must not analyze discourse only semantically. It must ask:

What emotioning is this languaging conserving?

A culture may speak the language of rights while conserving mistrust.

A clinic may speak the language of care while conserving hierarchy.

A school may speak the language of learning while conserving shame.

A peace process may speak the language of reconciliation while conserving humiliation.

A civilization may speak the language of sustainability while conserving extraction.

The diagnostic issue is not only what is said. It is what coordination of doings and emotioning the saying conserves.

9.3 Languaging as Expansion of Possible Living

Languaging opens a new domain of possible doings.

Without languaging, living systems coordinate in immediate relational domains. With languaging, human beings can coordinate around what is absent, remembered, imagined, promised, forbidden, measured, feared, desired, or anticipated.

We can coordinate around tomorrow.

We can coordinate around ancestors.

We can coordinate around debts.

We can coordinate around duties.

We can coordinate around rights.

We can coordinate around diagnoses, indicators, sacred stories, contracts, borders, laws, theories, currencies, and futures.

This expansion is not merely cognitive. It transforms the human niche.

Maturana and Verden-Zöllner describe languaging as an expanding field of open-ended possibilities for generating new manners of living together. When languaging became conserved generation after generation in the learning of children, it became conserved as a manner of living together in a network of conversations.

This is the gift and danger of languaging.

It allows humans to bring forth worlds of tenderness, ethics, science, art, medicine, law, memory, and responsibility.

It also allows humans to bring forth worlds of abstraction, hierarchy, enemy-making, extraction, bureaucracy, objectification, and denial.

A person can be named into dignity.

A person can be named into shame.

A forest can be languaged as living community.

A forest can be languaged as timber stock.

A child can be languaged as a whole living being.

A child can be languaged as future productivity.

A patient can be languaged as a person in suffering.

A patient can be languaged as a case, risk, cost, or diagnosis.

So languaging is not neutral.

It coordinates living.

9.4 Linguaging and Symbolic Worlds

Once languaging is conserved, symbolic relations can arise. Maturana describes symbols and symbolization as occurring in languaging when distinctions of relations of relations become operational objects in recursive consensual coordinations of behavior. The nervous system itself does not operate with symbols as such, but in a languaging organism it becomes recursively coupled with the flow of languaging, giving rise to symbolic domains as part of daily living.

This is important for civilization.

Many of the most powerful forces in modern life are symbolic-languaging realities that become real because they are conserved in daily coordination.

Money.
Credit.
Debt.
Property.
Citizenship.
Race.
Borders.
Credentials.
Metrics.
Legal personality.
Markets.
Development.
Growth.
Risk.

These are not “unreal” because they arise in languaging. They are very real in their consequences. But their reality is conserved through networks of coordination. They continue because people, institutions, technologies, laws, and emotional commitments continue to coordinate around them.

So the diagnostic question becomes:

What symbolic world is being conserved, and what does it do to living?

A symbolic world may expand life.

It may also obscure the living relations on which it depends.

For example, “growth” may coordinate investment, policy, labor, education, and aspiration. But if growth becomes detached from the organism–medium relation that makes living possible, it may conserve ecological destruction while appearing as progress.

Similarly, “efficiency” may coordinate institutional action. But if efficiency becomes detached from care, it may conserve throughput while destroying trust.

Thus, a life-coherent grammar must ask not only whether a symbolic distinction coordinates action, but whether the action it coordinates conserves or negates living.

9.5 Diagnostic Consequence

The derivation of languaging gives the next diagnostic movement:

What world is being brought forth in this languaging, and what manner of living does it conserve?

This question can be applied at every level.

For a family:

What do our recurrent words make possible for the child?

For a clinic:

What does our diagnostic language allow us to see, and what does it make invisible?

For a school:

What world is brought forth by ranking, testing, correcting, rewarding, and naming ability?

For politics:

What becomes possible when people are languaged as citizens, migrants, enemies, taxpayers, dependents, threats, or neighbors?

For economics:

What happens when land, labor, water, care, and time are languaged as inputs, resources, assets, or costs?

For ecology:

What becomes possible, and what becomes impossible, when Earth is languaged as living medium rather than resource base?

The working definition is therefore:

Languaging is the human-relational distinction through which an observer brings forth the recursive consensual coordination of doings by which human beings generate shared

worlds, coordinate actions, conserve symbolic realities, and transform or reproduce manners of living.

In simpler language:

Languaging is how humans live together in coordinated meaning.

And the central diagnostic question is:

What does this languaging make livable?

Now the next derivation follows directly.

Because languaging is always braided with emotioning, the basic human unit is not language alone. It is **conversation**: the recursive flow of languaging and emotioning through which human beings conserve worlds.

10. Conversation: The Human Medium of World-Conservation

If languaging is recursive consensual coordination of doings, and if emotioning specifies the relational domain in which doings become possible, then the next question is:

What is the basic process through which human beings conserve worlds together?

The answer is **conversation**.

But conversation must not be reduced to speaking. It is not merely talk, dialogue, discussion, exchange of information, or verbal communication. In Maturana's usage, conversation is the braiding of languaging and emotioning (Maturana Romesín & Verden-Zöller, 2008). Human beings do not merely live in language; we live in conversations, where languaging changes emotioning and emotioning changes languaging. Maturana and Verden-Zöller state this directly: human existence takes place in networks of conversation, in the braiding of recursive consensual coordinations of doings and domains of relational behavior.

This gives the next methodological correction:

Conversation is not talking about a world. Conversation is a way of bringing forth and conserving a world.

A family is conserved in conversation.

A school is conserved in conversation.

A clinic is conserved in conversation.

A legal order is conserved in conversation.

An economy is conserved in conversation.

A nation is conserved in conversation.

A civilization is conserved in conversation.

This does not mean that these realities are merely verbal or imaginary. It means that their human form depends on recurrent coordinations of doings and emotioning. Buildings, laws, money, classrooms, hospitals, borders, documents, and technologies all become what they are for human beings only within conserved networks of conversation.

10.1 Conversation as Braided Language and Emotioning

The same words can belong to different conversations.

A physician may say, “You need to take this medication,” and this may live as care, command, warning, dismissal, partnership, or domination.

A teacher may say, “Try again,” and this may live as encouragement, pressure, humiliation, or invitation.

A parent may say, “No,” and this may live as protection, rejection, control, or loving boundary.

A state may say, “security,” and this may live as shared protection, fear, surveillance, exclusion, or domination.

The words alone do not determine the conversation. The emotioning in which they are lived gives the languaging its relational character.

So a viability grammar cannot diagnose a conversation by its content alone. It must ask:

What emotioning is braided with this languaging?

And then:

What doings does this conversation coordinate?

What world does it conserve?

Who appears as legitimate within it?

Who is negated, ignored, objectified, or made invisible?

This is why a culture can use humane language while conserving inhumane relations. The words may change while the conversation remains the same.

A school can speak of creativity while conserving fear of error.

A hospital can speak of patient-centered care while conserving objectification.

A government can speak of peace while conserving enemy-making.

An economy can speak of development while conserving extraction.

A family can speak of love while conserving control.

The diagnostic task is therefore not to listen only to what is said. It is to listen for the conversation being conserved.

10.2 Conversation and the Conservation of Worlds

Conversation is where human worlds become recurrent.

A distinction is made.

It is repeated.

It becomes familiar.

It coordinates action.

It enters institutions.

It shapes emotioning.

It becomes normal.

It is taught to children.

It disappears as a distinction and reappears as “reality.”

This is how worlds are conserved.

A child learns not only words, but a world of possible doings. The child learns what can be asked, what must be hidden, what counts as success, what deserves shame, who may speak, who must obey, what is dangerous, what is beautiful, what is sacred, what is worthless, what is possible, and what is impossible.

These are not merely beliefs added to the child. They are lived in conversation.

So conversation is the medium through which culture enters the child.

A culture continues not because its doctrines are stored, but because its conversations are lived again.

This gives the next diagnostic question:

What conversations are children being brought into?

Are they being brought into conversations of trust, play, tenderness, curiosity, reflection, and mutual respect?

Or are they being brought into conversations of fear, ranking, shame, performance, obedience, and control?

This question is civilizational, because a civilization reproduces itself in the child before the child can reflect on what is being conserved.

10.3 Conversation and Institutional Life

Institutions are often described by their formal structures: laws, roles, offices, procedures, budgets, buildings, technologies, mandates, and reporting lines. These matter, but they are not enough.

An institution lives as a network of conversations.

A clinic lives in the conversations among clinicians, patients, administrators, protocols, waiting rooms, diagnostic categories, billing systems, and expectations of care.

A school lives in the conversations among teachers, students, parents, grades, curricula, discipline, assessment, aspiration, and fear of failure.

A court lives in the conversations among law, evidence, authority, procedure, legitimacy, punishment, repair, and public trust.

An economy lives in the conversations among price, value, labor, property, debt, productivity, scarcity, profit, risk, and growth.

So institutional transformation cannot be achieved merely by changing formal structures. If the conserved conversation remains unchanged, the new structure will usually be absorbed into the old manner of living.

A hospital can adopt new care protocols while conserving emotional distance.

A school can adopt new pedagogical language while conserving ranking and shame.

A state can create participatory processes while conserving distrust of the people.

An economy can adopt sustainability metrics while conserving extraction.

The question is always:

What recurrent conversation does this institution restore when disturbed?

That question begins to reveal its regulation.

10.4 Conversation and Life-Coherence

Conversation becomes life-coherent when it conserves the relational conditions through which living, love, reflection, responsibility, and legitimate coexistence remain possible.

This does not mean that life-coherent conversation is always gentle, agreeable, or conflict-free.

A life-coherent conversation may include disagreement.

It may include refusal.

It may include correction.

It may include accountability.

It may include grief.

It may include boundary.

But it does not require the negation of the other.

This is decisive.

A conversation becomes life-incoherent when it conserves the other as illegitimate: as enemy, burden, object, resource, waste, threat, case, cost, inferior, disposable, or invisible.

At that point, languaging and emotioning combine to narrow the world. Possible doings shrink. Reflection becomes difficult. Responsibility is avoided. Suffering is normalized. The relational medium of humanness is damaged.

So the life-coherent question is:

Does this conversation conserve the legitimacy of living beings in coexistence?

And more specifically:

Does the child remain legitimate?

Does the patient remain legitimate?

Does the poor person remain legitimate?

Does the stranger remain legitimate?

Does the defeated remain legitimate?

Does the dissenter remain legitimate?

Does the living Earth remain legitimate?

Do future generations remain legitimate?

Where the answer is no, the conversation may continue, but it no longer conserves the conditions of human living in love.

10.5 Diagnostic Consequence

The derivation of conversation gives the next major diagnostic movement:

What network of languaging and emotioning is being conserved, and what world does it bring forth?

This question can be asked at any scale.

In a family:

What conversation is organizing correction, affection, boundary, play, and belonging?

In a clinic:

What conversation is organizing illness, patienthood, authority, care, and recovery?

In a school:

What conversation is organizing learning, error, intelligence, discipline, and worth?

In politics:

What conversation is organizing identity, security, grief, justice, memory, and future?

In economics:

What conversation is organizing value, work, land, water, care, time, and life?

In civilization:

What conversation is organizing humanity's relation to Earth?

The working definition is therefore:

Conversation is the human-relational distinction through which an observer brings forth the braided flow of languaging and emotioning by which human beings coordinate doings, generate worlds, and conserve or transform manners of living.

In simpler language:

Conversation is how humanness lives itself into a world.

This now leads directly to culture.

If conversation is the braided flow of languaging and emotioning, then culture is the conserved network of such conversations. Culture is not ornament, identity label, or set of declared values. It is the recurrent conversation through which a manner of living keeps living itself again.

11. Culture: The Conserved Network of Conversations

If conversation is the braided flow of languaging and emotioning through which human beings bring forth worlds, then culture appears when such conversations become recurrent, closed, and conserved.

Culture is not merely a collection of beliefs.
It is not merely heritage, ritual, art, custom, identity, or tradition.
It is not merely what people say they value.

A culture is a conserved manner of living.

Maturana and Verden-Zöllner describe culture as a closed network of conversations: a closed network of coordinations of languaging and emotioning, systemically conserved in the living of languaging beings (Maturana Romesín & Verden-Zöllner, 2008). Different cultures are therefore different manners of living, because they conserve different networks of emotionings and doings.

This gives the next methodological correction:

Culture is not what people possess. Culture is what people recurrently live.

A culture exists only as it is enacted.

It continues when children learn its conversations.
It continues when institutions repeat its distinctions.
It continues when bodies become accustomed to its rhythms.
It continues when its emotioning feels normal.
It continues when its assumptions disappear into common sense.
It continues when its way of living no longer appears as a way of living, but simply as “how things are.”

So culture is not primarily in books, monuments, constitutions, slogans, ceremonies, or official histories. These may conserve culture, but they are not culture by themselves. Culture lives in the recurrent coordination of doings and emotioning.

A family culture lives in how correction, affection, play, silence, anger, food, respect, and belonging are enacted.

A school culture lives in how curiosity, error, rank, discipline, assessment, and worth are enacted.

A medical culture lives in how suffering, diagnosis, authority, time, touch, explanation, and dignity are enacted.

A political culture lives in how identity, fear, loyalty, dissent, grief, territory, security, and enemyhood are enacted.

An economic culture lives in how value, labor, land, water, care, scarcity, debt, productivity, and growth are enacted.

So the diagnostic question becomes:

What manner of living is this culture conserving?

Not:

What ideals does it declare?

But:

What does it actually repeat?

11.1 Culture and Conserved Emotioning

A culture is defined not only by its words, but by the emotioning conserved in its conversations.

This is decisive. Maturana and Verden-Zöllner argue that the particular configuration of emotioning conserved in a culture defines its character or identity. A culture centered in appropriation, mistrust, domination, and submission will generate a different world from one centered in love, trust, play, and mutual acceptance.

This allows a culture to be diagnosed beneath its declarations.

A culture may declare freedom while conserving abandonment.

It may declare security while conserving fear.

It may declare education while conserving humiliation.

It may declare health while conserving objectification.

It may declare peace while conserving enemy-making.

It may declare development while conserving extraction.

It may declare love while conserving control.

The words may be noble while the conserved emotioning remains life-denying.

Therefore, a Maturana-informed viability grammar must ask:

What emotioning is being conserved here?

This question often reveals more than any formal mission statement.

If mistrust is conserved, control will appear reasonable.

If fear is conserved, exclusion will appear necessary.

If domination is conserved, hierarchy will appear natural.

If shame is conserved, obedience will appear virtuous.

If love is conserved, reflection, responsibility, play, repair, and coexistence become possible.

Culture, then, is not only a network of ideas. It is a recurrent emotional world.

11.2 Culture as Medium

A culture is both lived by human beings and becomes the medium in which human beings live.

This is one of the most important implications of Maturana's formulation. Culture is not external to the people who realize it, yet it becomes the relational space in which they become who they become. Maturana and Verden-Zöllner describe culture as both the realization of a manner of living and the medium in which the languaging beings who realize it live and become members of it.

So culture is recursive.

People bring forth culture by living it.

Culture brings forth people by becoming the medium in which they learn to live.

This is why culture is so powerful. It is not merely taught. It is inhabited.

A child does not learn culture only by being told what the culture believes. The child learns culture by living in its emotional atmosphere, by entering its recurrent conversations, by feeling what is welcomed and what is punished, what is speakable and what must remain silent, what is lovable and what is shameful, what is possible and what is forbidden.

The child learns:

how to ask,
how to hide,
how to obey,
how to resist,
how to trust,
how to fear,
how to apologize,
how to dominate,
how to be seen,
how to disappear.

This is why culture is not superficial. It shapes the field of possible doings before reflection begins.

11.3 Cultural Change

If culture is a conserved network of conversations, then cultural change cannot mean merely changing words, policies, symbols, or leaders.

A cultural change occurs when the closed network of conversations that defines and conserves a culture changes. For this to happen, the emotioning guiding the network must change, and the new emotioning must be conserved through a new manner of living.

This gives a strict test:

Has a new manner of living begun to be conserved?

If not, the culture has not transformed.

There may have been reform.

There may have been innovation.

There may have been new vocabulary.

There may have been new policy.

There may have been new institutional form.

But unless a new network of languaging and emotioning is recurrently lived, the old culture remains.

This explains why reforms fail so often.

A school adopts the language of well-being but conserves ranking, fear, and performance anxiety.

A hospital adopts patient-centered language but conserves time scarcity, distance, and hierarchy.

A government adopts participatory language but conserves suspicion of citizens.

An economy adopts sustainability language but conserves extraction.

A peace process adopts reconciliation language but conserves humiliation.

The formal structure changes, but the conserved conversation remains.

So the diagnostic question is:

What old conversation is being restored beneath the new language?

And the transformative question is:

What new conversation must be lived long enough to become culture?

11.4 Culture and the Child

Maturana and Verden-Zöllner give the child a central place in cultural continuity and transformation. A new personal identity becomes cultural only if it is conserved as a new manner of living in the learning of children. If adults create the conditions under which this new manner of living can be conserved in a new generation, cultural change takes place.

This is why childhood is not one sector among others.

Childhood is where culture reproduces itself.

A civilization that speaks of transformation but does not change the relational world of children is not yet transforming. It is merely modifying its adult discourse.

The question becomes:

What culture is entering the child?

Does the child enter a world of bodily trust, play, tenderness, self-respect, and respect for others?

Or does the child enter a world of ranking, fear, hurry, shame, comparison, performance, control, and emotional abandonment?

Maturana and Verden-Zöllner warn that if the basic mother–child relation and child upbringing in self- and social respect were lost and such a change were conserved across generations, this would be more than cultural change; a new kind of being would appear.

This gives one of the paper's most important criteria:

A culture is life-coherent only if it conserves the relational conditions through which children become loving, self-respecting, other-respecting, playful, reflective human beings.

Without that, a culture may conserve intelligence, productivity, technical competence, competition, and obedience. But it may fail to conserve humanness.

11.5 Culture and Life-Incoherence

A culture can conserve a manner of living that negates living.

This is the difficult point.

The fact that a culture is conserved does not mean that it is life-coherent. A culture may be stable, long-lasting, institutionally powerful, and technologically sophisticated while conserving suffering.

Maturana and Verden-Zöllner describe patriarchal culture as a manner of living centered in appropriation, domination and submission, mistrust and control, discrimination, and war. They contrast this with the evolutionary grounding of humanness in love and mutual trust, arguing that political living in domination and submission is a cultural development rather than the primary ground of human biological constitution.

This matters because a life-incoherent culture may justify itself as realistic, necessary, efficient, natural, or inevitable.

Control may call itself order.

Domination may call itself leadership.

Exploitation may call itself productivity.

Exclusion may call itself security.

Humiliation may call itself discipline.

Extraction may call itself development.

Numbness may call itself professionalism.

Once these conversations become conserved, people may suffer inside them while also defending them as normal.

So the diagnostic question is:

What suffering has this culture made legitimate?

And then:

What negation of love has become normal here?

11.6 Diagnostic Consequence

The derivation of culture gives the next major diagnostic movement:

What closed network of conversations is being conserved, and what manner of living does it reproduce?

This question must be asked slowly and concretely.

In this family, what is conserved?

In this school, what is conserved?

In this clinic, what is conserved?

In this institution, what is conserved?

In this economy, what is conserved?

In this political order, what is conserved?

In this civilization, what is conserved?

And in each case:

What emotioning is conserved?

What distinctions are repeated?

What doings are coordinated?

What happens to the child?

What happens to love?

What happens to reflection?

What happens to self-respect and respect for others?

What happens to the living medium?

The working definition is therefore:

Culture is the human-relational distinction through which an observer brings forth a closed, recursively conserved network of conversations that realizes, reproduces, and stabilizes a particular manner of living across persons and generations.

In simpler language:

Culture is the conversation that keeps living itself again.

This leads directly to the next derivation.

If culture is a conserved network of conversations, and if the identity of a culture depends on the emotioning it conserves, then the decisive human question becomes:

What relational domain must be conserved if humanness itself is to be conserved?

That brings us to love — not as sentiment, but as the relational domain in which the other arises as legitimate in coexistence.

12. Love: The Relational Domain of Legitimate Coexistence

If culture is a conserved network of conversations, and if the identity of a culture depends on the emotioning it conserves, then the decisive human question becomes:

What emotioning must be conserved if humanness itself is to be conserved?

For Maturana and Verden-Zöllner, the answer is love (Maturana Romesín & Verden-Zöllner, 2008).

But love must be derived carefully. It must not be reduced to sentiment, preference, romance, attachment, moral virtue, or kindness. In Maturana's usage, love is a biological-relational domain: the domain of behaviors through which another living being arises as a legitimate other in coexistence with oneself. Love is realized in loving, not as an inner declaration but as a manner of relational living.

This gives the next methodological correction:

Love is not primarily a feeling about the other. Love is the relational domain in which the other does not have to justify existing.

This is why love is foundational for a viability grammar. A manner of living may function, persist, reproduce, and even prosper while failing to conserve love. But if love is not conserved, humanness itself becomes fragile. Languaging may continue, but become manipulation. Conversation may continue, but become strategy. Culture may continue, but become control. Institutions may continue, but become machinery for managing life rather than conserving it.

12.1 Love Is Not Blind Acceptance

A common misunderstanding must be avoided immediately.

To say that the other arises as legitimate does not mean that every behavior of the other is accepted. Love is not permissiveness. It is not the abandonment of discernment, boundary, or responsibility.

Maturana explicitly distinguishes love from blind acceptance. Love sees, hears, touches, senses, and acts in relation to the other in his, her, or its legitimacy. Even conflict can occur in love when what is opposed is the behavior of the other, not the legitimacy of the other's existence.

So love may say:

This behavior cannot continue.

This harm must stop.

This boundary must be held.

This violence must be resisted.

This relation must change.

But love does not say:

You have no legitimacy to exist.

This distinction is essential for civilization.

A life-coherent civilization is not a civilization without limits. It is a civilization in which limits, boundaries, corrections, and responsibilities are enacted without requiring the negation of the other.

A loving boundary protects coexistence.

An aggressive boundary negates the other.

The difference is not always visible in the outer form. It lies in the relational domain in which the action occurs.

12.2 Love and Aggression

Maturana's distinction between love and aggression gives the clearest diagnostic contrast.

Love is the domain in which another arises as legitimate in coexistence.

Aggression is the domain in which another is denied as legitimate in coexistence.

This means love and aggression are not merely two feelings. They are two worlds of possible action. In love, possible doings include listening, mutual recognition, care, repair, apology, refusal without erasure, and responsibility. In aggression, possible doings include domination, humiliation, exclusion, manipulation, erasure, and violence.

This gives a powerful diagnostic question:

Is the other being opposed in behavior, or negated in being?

This question changes the nature of conflict.

Conflict itself is not the problem. A human world without conflict would not be a living world. Children need boundaries. Institutions need accountability. Communities need justice. Harmful actions must sometimes be stopped. But conflict becomes life-incoherent when the other must be made illegitimate for the conflict to proceed.

So the grammar must ask:

Does this disagreement conserve mutual legitimacy?

Does this correction conserve the child's dignity?

Does this justice conserve the humanity of the offender and the harmed?

Does this political struggle conserve the legitimacy of those with whom we disagree?

Does this ecological intervention conserve the living world as more than an instrument?

Where legitimacy is lost, love is negated.

Where love is negated, suffering can become conserved.

12.3 Love as the Ground of Humanness

Maturana and Verden-Zöller argue that humanness arose through the conservation of living in language under the emotioning of love and intimacy. They describe love as the grounding emotion for coexistence in small family groups, the emotioning that made possible the intimacy and permanence in doing things together through which languaging could arise and be conserved in children.

This claim is central.

Humanness is not grounded first in domination, competition, calculation, or control.

Humanness arises in the conservation of a relational medium in which bodies can remain near, doings can become coordinated, children can learn, and languaging can be conserved across generations.

This does not mean that aggression, arrogance, domination, or fear are absent from human history. It means that they are not the generative ground of humanness as such. They can become culturally conserved manners of living. They can even become historically powerful. But they do not constitute the biological-cultural ground through which loving, languaging humanness first becomes possible.

This matters for the present project because it prevents cynicism from becoming ontology.

If a culture conserves mistrust, domination, control, and aggression, it may appear “realistic” to say that human beings are essentially competitive, violent, and self-interested. But from a Maturana-informed view, this may be a description of a conserved cultural emotioning, not the deepest biological condition of humanness.

So the diagnostic question becomes:

Are we describing human nature, or are we describing a culture that has conserved the negation of love?

12.4 Love and Trust

Love is also the ground of trust.

Maturana and Verden-Zöller describe the biology of love as the biology of mutual trust, and they contrast it with patriarchal relations of mistrust, control, manipulation, appropriation, domination, and submission. When love is interfered with, social life gives way to political relations of alliance, manipulation, and mutual abuse.

This distinction is civilizationally important.

A social relation, in this sense, is not merely any relation among people. It is a relation grounded in mutual legitimacy. When mutual legitimacy collapses, what remains may still be coordination, but it becomes coordination through power, control, fear, or exchange.

A family may continue without trust.

A school may continue without trust.

A hospital may continue without trust.

A state may continue without trust.

An economy may continue without trust.

But what continues is no longer social life in the full sense. It is coordination under mistrust.

This gives the diagnostic question:

Is this relation being conserved through trust or through control?

Trust opens possible doings.

Control narrows them.

Trust permits reflection, play, confession, repair, learning, and mutual correction.

Control produces concealment, compliance, resistance, manipulation, or fear.

So a life-coherent culture must conserve trust not as naïveté, but as the relational condition in which persons can appear to one another as legitimate participants in coexistence.

12.5 Love and Use

Love is also distinct from use.

When the other is encountered primarily through what one expects, demands, extracts, or requires from the other, the other disappears as legitimate other and becomes an instrument. Maturana says that purposes, expectations, and aims can generate blindness when they become the center of attention and care; in such cases, the relationship moves from love into use and manipulation.

This gives one of the most important institutional applications.

A child can be used for parental success.

A student can be used for school metrics.

A patient can be used for institutional throughput.

A worker can be used for productivity.

A citizen can be used for votes.

A forest can be used for timber.

A river can be used for development.

A future generation can be used rhetorically while being materially abandoned.

In each case, the being encountered may not appear as legitimate in itself. It appears through its utility to a purpose.

This does not mean that purposes are always wrong. Human beings coordinate around purposes all the time. But when purpose replaces legitimacy, love is lost.

So the question becomes:

Is the other being encountered as legitimate, or only as useful?

This question reaches deeply into medicine, education, economics, politics, development, and ecological governance.

12.6 Love and the Living Earth

Because love is the domain in which the other arises as legitimate in coexistence, its scope cannot be limited to interpersonal affection. Maturana's formulation explicitly includes human and non-human animals, and his broader reflections repeatedly connect humanness with awareness of earthly interconnection.

This allows the viability grammar to extend toward Earth without sentimentalizing.

The Earth need not be anthropomorphized to be encountered in love.

A river need not be treated as a human person to be encountered as legitimate.

A forest need not be romanticized to be encountered as more than resource.

A species need not be useful to be allowed its domain of existence.

To encounter the living Earth in love means to allow living beings and ecological relations to appear in their legitimacy, not merely through their utility to human purposes.

This gives the ecological form of the diagnostic question:

Does this civilization conserve Earth as living medium, or reduce Earth to resource?

If Earth appears only as resource, then extraction becomes reasonable.

If Earth appears as living medium, then restraint, reciprocity, regeneration, and responsibility become possible doings.

12.7 Diagnostic Consequence

The derivation of love gives the next major diagnostic movement:

Does this manner of living conserve the relational legitimacy of living beings in coexistence?

This question must be asked concretely.

In the family:

Does the child arise as legitimate, even when corrected?

In the school:

Does the learner arise as legitimate, even when mistaken?

In the clinic:

Does the patient arise as legitimate, even when afraid, non-adherent, or difficult?

In politics:

Does the opponent arise as legitimate, even when opposed?

In justice:

Does the offender remain legitimate as a human being, even when held accountable?

In economics:

Do workers, caregivers, lands, waters, and future generations arise as legitimate, or only as inputs, costs, resources, and externalities?

In civilization:

Does the Earth arise as a living medium of coexistence, or only as material for human projects?

The working definition is therefore:

Love is the human-relational distinction through which an observer brings forth the domain of behaviors in which another living being arises as legitimate in coexistence, making trust, play, reflection, responsibility, and social life possible.

In simpler language:

Love is the relational space in which the other does not have to justify existing.

This now leads directly to suffering.

If love is the relational domain in which humanness is conserved, then suffering must be understood not only as pain, but as what happens when love is negated and that negation becomes conserved as a manner of living.

13. Suffering: The Conserved Negation of Love

If love is the relational domain in which another living being arises as legitimate in coexistence, then suffering must be understood not only as pain, distress, or injury. It must be understood as what happens when love is negated and that negation becomes conserved in a manner of living.

This is a crucial distinction.

Pain may arise from tissue injury, hunger, exhaustion, grief, loss, inflammation, or danger. Pain may signal that something in the organism–medium relation requires attention. But suffering, in the relational sense developed here, arises when a living being is made to live in a world where his or her legitimacy is denied, and where that denial becomes accepted, repeated, normalized, or internalized.

Maturana reports Ximena Dávila’s insight that the suffering for which a person seeks help in the relational domain is of cultural origin: it arises as an experience of the negation of love that the person somehow accepts as culturally legitimate. The person’s own living, often without conscious awareness, reveals both where this negation occurred and the path by which the conserved self-devaluation may be released.

This gives the next methodological correction:

Suffering is not only what hurts. Suffering is the world that becomes conserved when love has been negated.

A child is humiliated and comes to live as if humiliation is deserved.

A patient is dismissed and comes to live as if his or her suffering is illegitimate.

A worker is used and comes to live as if worth depends only on productivity.

A people is degraded and comes to live in rage, resignation, or self-negation.

A society is organized around mistrust and comes to live control as if it were care.

A civilization cuts itself off from Earth and comes to live ecological rupture as normal.

In each case, the original wound is not the whole suffering. The suffering is the conservation of the wound as a world.

13.1 Suffering as Narrowed Possible Living

Suffering narrows possible living.

A person who suffers in this relational sense does not merely experience discomfort. He or she lives in a reduced field of possible doings. Trust becomes difficult. Play becomes difficult. Reflection becomes difficult. Asking for help becomes difficult. Receiving care becomes difficult. The other may appear as threat. The self may appear as defective. The future may appear closed.

The earlier diagnostic distinctions now reappear, but grounded in love.

Conservation: a negation of love is being conserved.

Constraint: possible living is bounded by that conserved negation.

Margin: the room for trust, play, reflection, and repair narrows.

Disturbance: ordinary encounters may trigger disproportionate pain because they touch the conserved wound.

Present structure: the history of negation becomes embodied as posture, expectation, vigilance, shame, anger, withdrawal, or compliance.

Regulation: the person may stabilize the wounded world through control, numbness, pleasing, aggression, avoidance, or self-blame.

Relevance: the world is perceived through the history of injury.

Possible doings: what can actually be lived next becomes restricted.

This is why suffering cannot be understood only as an internal condition. It is lived in a relational domain. The body is involved, but the body is involved as a living body in a world of meaning, memory, emotioning, and conversation.

Maturana's prologue gives the broader biological basis: human beings are love-dependent animals at all ages; deprivation of love disrupts bodily and psychic well-being; and love is described as both "the first medicine" and the ground for recovery of somatic and psychic health.

13.2 Suffering and Cultural Legitimacy

The most dangerous suffering is not only the suffering that occurs.

It is the suffering that a culture makes legitimate.

When humiliation is called discipline, suffering is conserved.

When abandonment is called independence, suffering is conserved.

When exploitation is called productivity, suffering is conserved.

When objectification is called professionalism, suffering is conserved.

When ecological destruction is called development, suffering is conserved.

When domination is called order, suffering is conserved.

When enemy-making is called security, suffering is conserved.

In such cases, the culture does not merely fail to heal suffering. It teaches people to live the negation of love as normal.

This is why the diagnostic question must be:

What suffering has this culture made legitimate?

And beneath that:

What negation of love is being conserved here as if it were necessary, proper, realistic, or inevitable?

A life-incoherent culture does not always appear cruel to itself. It may appear disciplined, efficient, advanced, moral, lawful, or practical. Its suffering becomes invisible because its negations have been absorbed into common sense.

This is why reflection is indispensable. Without reflection, a culture may continue conserving suffering while calling it virtue.

13.3 Suffering Is Not the Same as Conflict

Suffering must also be distinguished from conflict.

Conflict can occur in love.

A parent may set a boundary in love.

A physician may speak difficult truth in love.

A community may restrain harmful behavior in love.

A society may require accountability in love.

The defining question is not whether there is disagreement, refusal, correction, or boundary. The defining question is whether the other remains legitimate in coexistence.

Where the behavior is opposed but the being is not negated, conflict may become learning, repair, protection, or transformation.

Where the being of the other is negated, suffering begins to be conserved.

This distinction is essential for justice, education, medicine, politics, and peacebuilding. A life-coherent society does not avoid all conflict. It learns to conduct conflict without requiring the dehumanization of the other.

13.4 Suffering and Institutions

Institutions can conserve suffering without intending to do so.

A school may conserve suffering when it organizes learning around ranking, shame, comparison, and fear of error.

A hospital may conserve suffering when it organizes care around throughput, hierarchy, and the reduction of the patient to a case.

A bureaucracy may conserve suffering when it organizes public service around suspicion, delay, and procedural self-protection.

An economy may conserve suffering when it organizes value around accumulation while rendering care, ecological regeneration, and human dignity secondary.

A justice system may conserve suffering when it organizes accountability around exclusion and humiliation rather than repair, responsibility, and protection of coexistence.

In each case, the institution may function. It may be stable. It may meet formal indicators. But the deeper question remains:

What relational world does its functioning conserve?

If the institution conserves negation, it conserves suffering even when it claims benevolent purpose.

13.5 Suffering and the Living Earth

The negation of love also applies to the living Earth.

When Earth appears only as resource, the legitimacy of living systems is obscured by utility. Forests become timber. Rivers become water supply. Soil becomes input. Animals become production units. Future generations become abstractions.

This is not only ecological error. It is a civilizational conversation that conserves suffering across species, ecosystems, and future human worlds.

A civilization that cannot allow the living Earth to appear as legitimate in coexistence will organize itself against the medium that makes its own living possible.

So the ecological form of the question is:

What suffering is conserved when Earth is no longer encountered as living medium?

13.6 Diagnostic Consequence

The derivation of suffering gives the next major diagnostic movement:

Where has love been negated, and how has that negation become conserved as a manner of living?

This question must be asked concretely.

In the child:

Where has bodily trust been interrupted?

In the patient:

Where has suffering been dismissed or objectified?

In the family:

Where has control replaced acceptance?

In the school:

Where has ranking replaced play and curiosity?

In the institution:

Where has procedure replaced presence?

In politics:

Where has the opponent become illegitimate?

In economics:

Where has living become useful only as input?

In civilization:

Where has Earth disappeared as living medium?

The working definition is therefore:

Suffering is the human-relational distinction through which an observer brings forth the lived narrowing, distortion, or injury that arises when love is negated and that negation

becomes conserved in bodyhood, emotioning, languaging, conversation, culture, and possible living.

In simpler language:

Suffering is the conserved world of denied legitimacy.

This leads directly to healing.

If suffering is the conserved negation of love, healing cannot be merely the removal of symptoms or the correction of malfunction. Healing must involve the restoration of a relational domain in which self-love, self-respect, respect for the other, reflection, and possible living can reappear.

14. Healing: Restoring Love, Trust, and Possible Living

If suffering is the conserved negation of love, then healing cannot be understood only as the removal of symptoms or the correction of malfunction. Symptoms may need treatment. Injury may need repair. Injustice may need interruption. But in the relational domain, healing asks a deeper question:

How does a living being recover a world in which self-love, self-respect, respect for the other, and possible living can reappear?

This means that healing is not merely technical correction. It is the transformation of a conserved relational domain.

If suffering arises when the other, or oneself, has been denied as legitimate, then healing begins when that denial no longer has to organize the present. The wound may have occurred in the past, but suffering persists when the wound continues as a conserved manner of living: in posture, expectation, shame, fear, anger, numbness, compliance, distrust, or self-devaluation.

Healing does not erase history.

It changes the present conservation of history.

The person may still say:

This happened.

I was hurt.

I was humiliated.

I was abandoned.

I was denied.

I organized my living around that denial.

But healing opens the possibility of saying:

I no longer have to live as if the denial was true.

This is why healing is inseparable from the restoration of self-respect. Self-respect is not self-importance or pride. It is the recovery of one's own legitimacy in coexistence. It is the possibility of living without having to justify one's right to exist.

14.1 Healing as Restoration of Trust

Maturana's account makes trust central. When love comes to an end through loss of trust, suffering arises; healing requires the restitution of trust through the reconstruction of the relational domain in which trust was lost. This reconstruction cannot be merely declared. It must be conserved in the actual relational coherences lived by the participants.

This is precise and difficult.

A betrayed child is not healed by being told to trust.

A dismissed patient is not healed by being told that the system cares.

A humiliated people is not healed by being told to move on.

A damaged ecosystem is not healed by being named sustainable.

Trust returns only when a new relational domain is actually lived with sufficient recurrence, sincerity, and congruence that the living being can begin to conserve another present.

So healing is not persuasion.

It is not advice.

It is not explanation from above.

It is the conservation of a new relational medium in which the wounded living system, person, or community can reorganize without needing to conserve the old negation.

This is why Maturana's examples of the doctor and the sick child are so important. The physician begins to act when he or she accepts the call for help; the bed itself may be "the first medicine" because it changes the relational and bodily conditions of living. Maturana uses these examples to ask how love, reassurance, and the relational field participate in somatic and psychic recovery.

The technical intervention matters.

But it is not the whole medicine.

The relational field is already medicine.

14.2 Healing Is Not Forcing Change

Healing cannot be forced because a living system changes according to its own structure.

A physician, therapist, teacher, parent, friend, or leader may participate in a healing relation, but does not determine the other's change. The healer can create conditions. The healer can invite reflection. The healer can protect margin. The healer can interrupt further negation. The healer can conserve presence, patience, and trust. But what happens in the other happens according to the other's present structure and history.

This is why healing is not control.

It is participation in a relational field where living can reorganize.

A controlling intervention may produce compliance.

A loving intervention may open transformation.

The difference is not merely technique. It lies in the emotioning of the relation.

If the other is treated as defective, resistant, irrational, noncompliant, difficult, or broken, the intervention may reproduce the negation it claims to heal. If the other is met as legitimate, even when his or her behavior is painful, harmful, or confused, then a different relational domain becomes possible.

This does not mean that all behavior is accepted.

Healing may require boundaries.

Healing may require stopping harm.

Healing may require accountability.

Healing may require protection.

But the boundary itself can be enacted in love or aggression. It can conserve legitimacy, or it can conserve negation.

14.3 Healing as Reflective Conversation

Healing becomes specifically human when it occurs through reflective conversation.

A reflective conversation is not an interrogation. It is not an expert replacing the person's world with a superior explanation. It is not the imposition of a correct interpretation. It is a relational

space in which the person can begin to distinguish the conserved negation without being negated again by the act of looking.

This is delicate.

A person cannot freely reflect while being humiliated.

A person cannot freely reflect while defending against annihilation.

A person cannot freely reflect while being treated as a problem to be fixed.

A person cannot freely reflect while the other claims ownership of the truth of his or her suffering.

Reflection requires enough trust for the person to look.

Healing conversation therefore does not begin by asking:

What is wrong with you?

It begins more faithfully by asking:

What happened in your living such that this way of living became necessary?

What negation became conserved?

What self-devaluation, fear, silence, or defense has been protected by this pattern?

What relation would make another possible living safe enough to try?

Maturana's discussion of Ximena Dávila's therapeutic insight points in this direction: relational suffering arises from a culturally legitimized negation of love, and the person's own living reveals both where the negation occurred and the path by which self-devaluation may be released.

So healing conversation does not import the path from outside.

It helps the path appear from within the person's own living.

14.4 Healing and the Diagnostic Primitives

The diagnostic primitives now become useful, but only as questions.

Healing asks:

Conservation: What wounded manner of living is being conserved?

Constraint: What must be respected so that the person does not experience reflection as another violation?

Margin: How much room exists for trust, play, grief, anger, silence, and new action?

Disturbance: What triggers the old wound, and what triggers the possibility of new living?
Present structure: How has history become embodied in expectation, posture, tone, defense, shame, or vigilance?
Regulation: How is the wounded world stabilized — by control, withdrawal, pleasing, numbness, aggression, or self-blame?
Relevance: What does the world look like from inside the wound?
Possible doings: What can actually be lived next, and what cannot yet be lived?

These questions protect healing from becoming mechanical.

They keep the inquiry relational.

They also keep the healer humble. The point is not to diagnose from above, but to participate in a conversation where the person, family, institution, or community may begin to see what it has been conserving.

14.5 Healing at the Cultural Level

Cultures can suffer.

Not metaphorically only, but as conserved networks of negation.

A culture may conserve humiliation.

A culture may conserve fear.

A culture may conserve mistrust.

A culture may conserve domination.

A culture may conserve numbness.

A culture may conserve self-devaluation.

A culture may conserve enemy-making.

When this happens, healing cannot be merely individual. The person may recover some room for living, but the cultural medium may continue to conserve the very negation that wounded the person.

So cultural healing asks:

What conversation must change for love, trust, and self-respect to become conserved again?

The poor must cease appearing as failed individuals.

The sick must cease appearing as burdens.

The child must cease appearing as future productivity.

The elder must cease appearing as obsolete.

The dissenter must cease appearing as enemy.

The offender must cease appearing as disposable.

The Earth must cease appearing as resource only.

Future generations must cease appearing as external to present decisions.

Again, this does not mean every behavior is accepted. It means that the being of the other is no longer negated as the condition of social order.

Cultural healing begins when a community can say:

We have been conserving a world that wounds.

We have made this wound appear normal.

We do not want to continue conserving it.

We must begin to live another conversation.

14.6 Healing and Life-Coherence

A life-coherent society is not one without illness, conflict, grief, or error.

It is one that conserves the relational conditions in which healing remains possible.

This means:

suffering can be spoken without humiliation;

error can be corrected without negating the learner;

harm can be stopped without dehumanizing the offender;

illness can be treated without reducing the patient to a case;

grief can be held without being turned into weakness;

ecological damage can be acknowledged without denial or despair;

cultural inheritance can be examined without collapsing into guilt or defensiveness.

Healing requires margin for truth.

It requires a relational domain in which seeing does not destroy belonging.

This is why love, reflection, and responsibility must remain together. Love without reflection may avoid difficult truth. Reflection without love may become accusation. Responsibility

without self-respect may become shame. Self-respect without respect for the other may become domination.

Healing holds these together in a renewed conversation.

14.7 Diagnostic Consequence

The derivation of healing gives the next major diagnostic movement:

What relational domain must be restored so that the conserved negation of love no longer organizes living?

This question can be asked concretely.

In the child:

What must be restored for play, bodily trust, and self-respect to reappear?

In the patient:

What must be restored for the person to participate in care without humiliation?

In the family:

What must be restored for boundary to occur without control?

In the school:

What must be restored for error to become part of learning rather than shame?

In the institution:

What must be restored for procedure to serve presence rather than replace it?

In politics:

What must be restored for conflict to occur without dehumanization?

In economics:

What must be restored for value to serve living rather than abstract accumulation?

In civilization:

What must be restored for Earth to appear again as living medium?

The working definition is therefore:

Healing is the human-relational distinction through which an observer brings forth the transformation of a conserved negation of love into a renewed domain of trust, self-respect, respect for the other, reflection, and possible living.

In simpler language:

Healing is the restoration of a world in which one can live without self-negation or negation of the other.

This leads directly to reflection.

If healing requires seeing the conserved negation without reproducing it, then reflection is the next necessary distinction: the recursive capacity to distinguish one's own distinctions, release certainty, and become free to live otherwise.

15. Reflection: Living Becoming Able to See How It Is Living

If healing requires the restoration of a relational domain in which the conserved negation of love can be seen without being repeated, then the next necessary distinction is **reflection**.

Reflection must not be reduced to thinking, analysis, intelligence, or commentary. A person can think intensely while remaining trapped inside the very manner of living that requires reflection. An institution can analyze itself while conserving its old emotioning. A culture can produce theories, reports, models, and critiques while still reproducing the same world.

Reflection is more radical.

Reflection is the recursive operation through which living becomes able to distinguish its own distinctions, explanations, emotions, and doings. It is the moment in which the world that had appeared obvious becomes visible as a world being conserved.

Bunnell's foreword gives the essential formulation: reflection involves releasing what one believes or thinks, metaphorically stepping outside it to consider it, and then recognizing that one is not really outside but is still the individual reflecting from within culture. This "double look" produces a sense of emancipation, freedom, or psychic mobility.

This gives the next methodological correction:

Reflection is not standing outside living. Reflection is living recursively looking at its own living.

15.1 Reflection and the Inherited World

A human being is born into conversations already underway.

Before the child can reflect, the child enters a culture. The child learns what counts as real, important, dangerous, shameful, desirable, sacred, normal, and possible. These premises are not first presented as propositions. They are lived in gesture, tone, rhythm, correction, silence, reward, fear, affection, naming, and exclusion.

So before reflection, the inherited world appears simply as the world.

One does not say:

I am conserving a culture of performance.

One says:

This is how children succeed.

One does not say:

I am conserving a culture of control.

One says:

This is discipline.

One does not say:

I am conserving extraction.

One says:

This is development.

One does not say:

I am conserving enemy-making.

One says:

This is security.

Reflection begins when the obvious becomes visible as a conserved manner of living.

The question changes from:

Is this true?

to:

What world is being conserved by living this as true?

This is the reflective turn.

15.2 Reflection as Release from Certainty

Reflection requires the release of certainty.

Not the rejection of all knowledge.

Not relativism.

Not paralysis.

Not endless doubt.

Rather, reflection requires releasing the grip by which one's current distinctions present themselves as the only possible world.

A person may see:

I have been living as if worth must be earned.

A parent may see:

I have been living as if control is care.

A physician may see:

I have been living as if diagnosis is the person.

A school may see:

We have been living as if ranking is learning.

A political community may see:

We have been living as if peace requires the defeat of the other.

A civilization may see:

We have been living as if Earth is resource rather than living medium.

Once seen, the conservation is no longer invisible.

And once it is no longer invisible, another manner of living may become possible.

This does not mean that reflection determines transformation. It opens a space. It creates margin. It allows the conserved pattern to be disturbed without immediate restoration of the old certainty.

15.3 Reflection and Culture

Reflection is culturally dangerous because it interrupts automatic conservation.

A culture conserves itself by making its premises feel natural. Reflection makes those premises visible. It allows the culture to ask:

What manner of living are we conserving?

What consequences follow?

Do we want to continue conserving those consequences?

Bunnell notes that a cosmology usually becomes conserved within culture through an intergenerational circularity. Reflection adds a second circularity: the cosmology is applied to itself. This recursive movement allows the individual to reflect on the very world in which he or she is embedded.

This is why reflection matters for cultural change.

Without reflection, a culture can only repeat itself.

With reflection, a culture may begin to see itself as one possible manner of living among others.

But reflection does not specify the future in advance. Bunnell emphasizes that the consequence of reflection cannot be predetermined; when reflection is conserved, a culture changes along a path that cannot be known beforehand.

This is essential.

Reflection is not a control mechanism.

It is an opening.

15.4 Reflection and Love

Reflection requires a relational ground.

A person in fear may not reflect; he may defend.

A person in shame may not reflect; she may collapse.

A person in humiliation may not reflect; he may retaliate.

A person in domination may not reflect; she may strategize.

A person in despair may not reflect; he may withdraw.

Reflection becomes possible where there is enough love, trust, or self-respect for seeing not to become annihilation.

This is why reflection and love belong together.

Love allows the observer to look without needing to disappear.

Reflection allows love to avoid blindness.

Love without reflection may avoid difficult truth.

Reflection without love may become accusation.

Together, love and reflection allow a person or culture to say:

We have conserved a world that wounds.

We can see it.

We do not have to deny ourselves in seeing it.

We do not have to negate others in naming it.

We can begin to live otherwise.

This is the beginning of responsible transformation.

15.5 Reflection and the Diagnostic Grammar

Reflection is also the safeguard for the viability grammar itself.

The grammar must not be used as an external instrument by which one observer diagnoses others from a superior position. If it does that, it betrays its own life-coherent intent.

Every diagnostic question must therefore turn back on the observer.

When I ask:

What is being conserved here?

I must also ask:

What am I conserving by asking this question in this way?

When I ask:

What emotioning is this culture conserving?

I must also ask:

What emotioning am I conserving in my diagnosis?

When I ask:

Is the other being negated?

I must also ask:

Am I negating the other by how I distinguish?

This recursive return is not an accessory. It is the condition under which the grammar remains Maturana-informed.

Without reflection, the grammar becomes ideology.

With reflection, it remains conversation.

15.6 Reflection and Freedom

Reflection creates the first opening toward freedom.

Not freedom as absence of constraint.

Not freedom as unlimited choice.

Not freedom as independence from others.

Reflection opens freedom because it allows automatic conservation to become visible.

Before reflection, one lives:

This is how things are.

After reflection, one may ask:

Do I want to continue living this way?

That question is the seed of freedom.

Bunnell's account describes reflection as producing psychic mobility and allowing an escape when answers to deep questions become treated as true and rigid. Without the ability to reflect on the premises of one's inherited cosmology, one remains constrained to act within that cosmology; conserving reflection opens the possibility of cultural drift toward wisdom and love.

So freedom begins not when there are no constraints, but when the conserved constraints of one's inherited world can be seen, questioned, and perhaps transformed.

15.7 Diagnostic Consequence

The derivation of reflection gives the next major diagnostic movement:

What conserved manner of living becomes visible when this person, institution, or culture reflects on itself?

This question can be asked concretely.

In the child:

Can the child see without shame, or does correction collapse into self-negation?

In the patient:

Can the person reflect on illness without being reduced to diagnosis?

In the family:

Can the family see its pattern without blame destroying belonging?

In the school:

Can teachers and students reflect on learning without fear of error?

In the institution:

Can procedure be examined without defensiveness?

In politics:

Can a community reflect on its enemy-making without losing identity?

In economics:

Can value be reconsidered without panic about growth?

In civilization:

Can humanity reflect on its relation to Earth without denial or despair?

The working definition is therefore:

Reflection is the human-relational distinction through which an observer brings forth the recursive capacity to distinguish, release, and reconsider the distinctions, emotions, explanations, and doings by which a manner of living is being conserved.

In simpler language:

Reflection is living becoming able to see how it is living.

And still more simply:

Reflection is the pause in which a world stops pretending to be the only world.

This leads directly to ethics.

If reflection allows us to see what manner of living we are conserving, ethics asks whether we care about the consequences of that conservation for ourselves, others, and the living medium in which coexistence remains possible.

16. Ethics: Care for Consequences in Coexistence

If reflection is living becoming able to see how it is living, then ethics appears when that seeing includes the consequences of one's doings for others.

Ethics must not be derived first as obedience to rules.

It is not first law.

It is not first moral code.

It is not first rational calculation.

It is not first duty imposed from outside.

In a Maturana-informed derivation, ethics appears in the relational domain of love, when a languaging, reflecting human being sees the other, sees oneself, sees the consequences of one's actions, and cares whether those consequences are ones he or she wishes to conserve. Maturana and Verden-Zöllner state that ethical concerns, responsibility, and freedom arise only as one sees oneself, the other, and the consequences of one's actions for oneself and the other, and acts according to whether one wants those consequences (Maturana Romesín & Verden-Zöllner, 2008).

This gives the next methodological correction:

Ethics is not reason standing above emotion. Ethics is care for consequences arising in the domain of love.

Reason matters. But reason does not, by itself, make the other matter.

Reason can calculate.

Reason can compare.

Reason can justify.

Reason can optimize.

Reason can build systems.

Reason can formulate laws.

Reason can design interventions.

But reason can also serve domination, control, extraction, punishment, and indifference if the other does not arise as legitimate.

The ethical turn occurs when the consequence for the other matters.

16.1 Ethics as Reflective Conversation

Ethics is not merely a private feeling of concern. It occurs in conversation.

Maturana and Verden-Zöllner describe ethics as a particular kind of reflexive conversation: a conversation of seeing and care for the consequences of one's actions on others. It is a network of doings and emotioning in which concern for those consequences is present in what one does.

So ethics is not an abstract principle placed above life.

It is a living conversation.

A person reflects:

What am I doing?

What world does this conserve?

What happens to the other through this action?

What happens to myself?

What happens to the medium that makes our living possible?

Do I want to conserve these consequences?

This is the ethical opening.

Ethics begins when reflection is no longer only self-observation, but concern for coexistence.

Reflection asks:

What manner of living am I conserving?

Ethics asks:

What happens to others through the manner of living I am conserving?

And then:

Do I want this to continue?

That question cannot be answered by reason alone. It arises from the emotioning in which the other matters.

16.2 Ethics Belongs to Love

Maturana and Verden-Zöller are explicit: ethics belongs to the domain of emotions, and as such to the domain of love. This does not mean that ethics is irrational. It means that ethical concern becomes possible only where the other appears as legitimate enough for his or her living to matter.

This is a major correction to many modern habits of thought.

We often imagine that ethics comes from rational principles that then govern emotion.

But in this derivation, ethics comes from love and reflection. Reason then serves the care that love makes possible.

Without love, rational ethics can become cold.

Without reflection, love can become blind.

Without responsibility, care can become sentiment.

Without self-respect, concern for others can become self-erasure.

Without respect for the other, self-concern can become domination.

So ethics requires a relational field in which self and other both arise as legitimate.

This is why Maturana insists that to have ethical concerns one must operate in self-respect and respect for the other, that is, in the biology of love. One must accept the legitimacy of one's own desires while releasing attachment to them enough to reflect on their consequences for others.

That is subtle and important.

Ethics does not ask the self to disappear.

Ethics does not ask desire to be denied.

Ethics asks desire to become visible in reflection.

Then one may ask:

Do I like the world this desire conserves?

16.3 Ethics and Desire

Desire is not the enemy of ethics.

Desire becomes ethically dangerous when it becomes invisible, absolute, or defended as necessity.

I want security.

I want recognition.

I want success.

I want control.

I want revenge.

I want comfort.

I want growth.

I want victory.

I want certainty.

These desires are not automatically wrong. But each one brings forth a world if conserved. Each one coordinates doings. Each one opens some possibilities and closes others.

Ethics begins when desire becomes visible enough to be questioned.

If I conserve this desire, what happens to the child?
What happens to the patient?
What happens to the poor?
What happens to the stranger?
What happens to the offender?
What happens to the living Earth?
What happens to future generations?
What happens to my own humanness?

This is not moralism.

It is reflection in love.

Maturana and Verden-Zöllner say that we can have ethical concern as we live in recursive reflective conversations that allow us to look at our desires, see whether we like them in the context of other desires, and care for the consequences of those desires on others.

So ethics is not desire suppressed.

Ethics is desire brought into reflective care.

16.4 Ethics Is Not an Imperative from Outside

This derivation also changes how we think about moral instruction.

If ethics arises in love, then ethics cannot be produced by force.

Force may produce compliance.

Law may restrain harm.

Rules may organize conduct.

Punishment may deter behavior.

But none of these, by themselves, generate ethical concern.

Maturana and Verden-Zöllner are clear that they are not speaking of an ethical imperative but of the biology of ethics: what in human living makes ethical concern possible. We do not “have to” be ethical from an external command; rather, if we live in the biology of love, ethical concerns arise in relation to those whose living matters to us.

This is a powerful distinction.

A society can enforce ethical-looking behavior while conserving fear.

A school can enforce kindness while conserving shame.

A hospital can enforce professionalism while conserving distance.

A state can enforce rights while conserving distrust.

An institution can enforce respect while conserving hierarchy.

The behavior may appear proper, but the ethical domain may not be conserved.

So the question is not only:

Are people following ethical rules?

The deeper question is:

Does this culture conserve the emotioning in which the consequences for others matter?

Where the answer is no, ethics becomes performance, compliance, branding, or control.

16.5 Ethics and Institutions

Institutions often displace ethics by procedure.

Procedure matters. It can protect fairness, continuity, and accountability. But procedure can also become a way of avoiding the living consequence of action.

A clinician follows the protocol, but the patient disappears.

A school follows the assessment policy, but the child's dignity disappears.

A bureaucracy follows the rule, but the citizen disappears.

An economy follows the market signal, but the worker, caregiver, river, soil, and future generation disappear.

A state follows security logic, but the enemy's humanity disappears.

Ethics returns when the living consequence reappears.

The ethical diagnostic question becomes:

Who or what has disappeared from concern in this manner of living?

And then:

What conversation made that disappearance normal?

This is especially important in large systems, where consequences are fragmented across roles, departments, indicators, contracts, and jurisdictions. No single person may intend harm, yet the conserved network of conversations may produce harm reliably.

A life-coherent institution must therefore conserve procedures that remain answerable to living consequences.

Not procedure instead of presence.

Procedure in service of presence.

Not policy instead of care.

Policy in service of care.

Not law instead of legitimacy.

Law in service of legitimate coexistence.

16.6 Ethics and the Living Medium

Ethics cannot stop at interpersonal relations.

If human living is organism–medium living, and if the living Earth is not merely a resource but the medium in which human life is conserved, then ethical concern must include the consequences of human action for the biosphere.

Maturana and Verden-Zöller explicitly include care for other living beings and the biosphere in their account of ethical concern. They ground this not in an external cosmic purpose, but in the kind of loving, languaging animals we are.

This gives the ecological form of ethics:

What does our living do to the living medium that makes our living possible?

A civilization may treat ecological destruction as a technical externality.

A life-coherent grammar treats it as ethical blindness.

If rivers, forests, soils, animals, climate systems, and future generations do not appear as legitimate within the conserved conversation, then the civilization's ethics has already narrowed.

So the question becomes:

Does this manner of living conserve care for the consequences of our doings for the living Earth?

If not, its ethics remains incomplete.

16.7 Ethics and Life-Coherence

Ethics is central to life-coherence because life-coherence asks whether a manner of living conserves the conditions that keep life livable.

A manner of living may be efficient but unethical.

It may be productive but unethical.

It may be lawful but unethical.

It may be profitable but unethical.

It may be secure but unethical.

It may be culturally normal but unethical.

The test is not whether it achieves its stated goal. The test is whether it conserves care for the consequences of its doings for living beings and the medium of coexistence.

A life-coherent ethics asks:

Are the consequences visible?

Do they matter?

Are those affected allowed to appear as legitimate?

Can the manner of living be reflected upon?

Can desire be released enough for responsibility to appear?

Can another manner of living be conserved?

Where consequences are hidden, ethics narrows.

Where affected beings are made illegitimate, ethics collapses.

Where desire becomes absolute, ethics becomes impossible.

Where reflection is punished, ethics cannot mature.

Where love is absent, ethics becomes rule, image, or force.

16.8 Diagnostic Consequence

The derivation of ethics gives the next major diagnostic movement:

Whose consequences matter in this manner of living, and whose consequences have been made invisible, acceptable, or irrelevant?

This question can be asked concretely.

In the family:

Do the consequences of adult correction for the child's dignity matter?

In the school:

Do the consequences of ranking for play, curiosity, and self-respect matter?

In the clinic:

Do the consequences of time pressure, diagnostic language, and institutional distance for the patient's lived world matter?

In the economy:

Do the consequences of growth for caregivers, workers, soils, waters, and future generations matter?

In politics:

Do the consequences of enemy-making for the humanity of opponents matter?

In justice:

Do the consequences of punishment for repair, responsibility, and coexistence matter?

In civilization:

Do the consequences of human development for Earth as living medium matter?

The working definition is therefore:

Ethics is the human-relational distinction through which an observer brings forth reflective care for the consequences of one's doings, desires, distinctions, conversations, and institutions for oneself, others, and the living medium in which coexistence is conserved.

In simpler language:

Ethics is caring what our living does to other living.

And still more simply:

Ethics begins when the consequence for the other matters.

This leads directly to responsibility.

If ethics is care for consequences, then responsibility is not blame. Responsibility is the acceptance that one participates, through one's doings and conversations, in conserving or transforming a manner of living.

17. Responsibility: Answerability for Participation

If ethics is care for the consequences of one's doings, then responsibility appears when the observer accepts participation in those consequences.

Responsibility must not be reduced to blame.

It is not first accusation.

It is not guilt.

It is not punishment.

It is not the assignment of fault after harm has occurred.

It is not the moral burden of carrying everything alone.

In a Maturana-informed derivation, responsibility is the reflective acceptance that one participates in conserving or transforming a manner of living. Maturana and Verden-Zöllner place responsibility together with ethics and freedom in the domain of love: these arise when one sees oneself, the other, and the consequences of one's actions, and acts according to whether one wants or does not want those consequences.

This gives the next methodological correction:

Responsibility is not blame for the world. Responsibility is answerability for one's participation in the world one helps conserve.

A person is not responsible because he or she controls everything.

A person is responsible because he or she participates.

A parent participates in the world the child learns.

A physician participates in the world the patient inhabits.

A teacher participates in the world in which error becomes shame or learning.

A citizen participates in the conversations that make others legitimate or illegitimate.

An institution participates in the manner of living its procedures conserve.

A civilization participates in the relation to Earth that its economy, law, and imagination reproduce.

Responsibility begins when this participation becomes visible.

17.1 Responsibility Is Not Omnipotence

The first danger is to confuse responsibility with control.

A living system changes according to its own structure. A person cannot determine the living of another. A parent cannot control the full path of a child. A physician cannot command healing. A leader cannot impose trust. A reformer cannot force cultural transformation. A society cannot fully determine the future.

So responsibility is not omnipotence.

It is not:

I caused everything.

It is:

I participate in what is being conserved.

This is a more humble and more demanding position.

One may not control the whole conversation, but one participates in it.

One may not control the institution, but one participates in its conserved manner of living.

One may not control the culture, but one participates in the repetition or interruption of its emotioning.

One may not control civilization, but one participates in how Earth, the child, the stranger, the poor, the sick, and the future are brought forth in conversation.

So responsibility asks:

What continues through my participation?

17.2 Responsibility and Self-Respect

Responsibility requires self-respect.

Without self-respect, responsibility collapses into shame, self-accusation, or self-erasure.
Without respect for the other, responsibility collapses into domination, justification, or blame.
Maturana and Verden-Zöller are explicit that ethical concern, responsibility, and freedom require seeing both oneself and the other in legitimacy; this is why they belong to the biology of love.

So responsibility does not say:

I am bad.

It says:

I can see what I participate in.

It does not say:

I must disappear.

It says:

I must care for the consequences of my living without denying myself or the other.

It does not say:

I alone am guilty.

It says:

I am answerable for how I continue, interrupt, or transform the conversation in which I stand.

This distinction is essential for cultural healing. If responsibility is presented as accusation, people defend themselves. If responsibility is lived in love, people may become able to see.

A culture cannot reflect on its violence if seeing immediately means annihilation.

A person cannot reflect on harm if responsibility means permanent condemnation.

A society cannot heal if responsibility becomes only a weapon of blame.

Responsibility must be grounded in legitimacy, or it becomes another negation.

17.3 Responsibility and Intention

Responsibility also requires looking beyond intention.

A person may intend care while conserving control.

A teacher may intend discipline while conserving humiliation.

A physician may intend efficiency while conserving patient invisibility.

A policymaker may intend development while conserving displacement.

A peacebuilder may intend reconciliation while conserving asymmetry and humiliation.

A society may intend prosperity while conserving ecological destruction.

So responsibility asks not only:

What did I mean to do?

It asks:

What did my doing conserve?

This is why ethics and responsibility remain tied to consequences. Maturana and Verden-Zöller describe ethics as a reflective conversation of seeing and care for the consequences of one's actions on others, and responsibility arises in that same domain of seeing and acting according to whether one wants those consequences.

The responsible person therefore asks:

I may have intended good, but what world did my action help conserve?

Did it conserve trust or fear?

Did it conserve dignity or shame?

Did it conserve conversation or silence?

Did it conserve healing or objectification?

Did it conserve living Earth or resource extraction?

This does not abolish intention.

It deepens it.

Intention becomes responsible when it remains answerable to consequence.

17.4 Responsibility and Culture

At the cultural level, responsibility becomes more difficult because culture lives through people before people can reflect on it.

We inherit conversations.

We inherit emotionings.

We inherit distinctions of worth, success, danger, order, gender, race, class, nature, property, work, intelligence, and legitimacy.

We inherit them not first as ideas, but as ways of living.

So cultural responsibility cannot begin with simple condemnation. People often conserve harmful patterns before they can see that they are conserving them.

Responsibility begins when the inherited conversation becomes visible.

A person may ask:

What conversation of control lives through me?

What conversation of shame lives through me?

What conversation of superiority lives through me?

What conversation of fear lives through me?

What conversation of extraction lives through me?

What conversation of indifference lives through me?

This is not guilt.

It is the beginning of freedom.

Maturana and Verden-Zöllner describe cultural change as occurring when a new manner of living begins to be systemically conserved in a new network of conversations. A new personal identity becomes cultural only when it is conserved in the learning of children and expands into a community.

Responsibility, then, is not only stopping harm.

It is participating in the conservation of another manner of living.

17.5 Responsibility and Institutional Life

Institutions often diffuse responsibility.

No one person intends the full consequence.

No one office sees the whole path.

No one metric captures the lived effect.

No one procedure feels the suffering.

Yet the institution conserves a manner of living.

A hospital may conserve objectification without any clinician wishing to objectify.

A school may conserve shame without any teacher wishing to humiliate.

A bureaucracy may conserve distrust without any officer wishing to dehumanize.

An economy may conserve ecological destruction without any consumer wishing to destroy the Earth.

This is why responsibility cannot be reduced to individual fault.

Institutional responsibility asks:

What consequences does this network of roles, procedures, metrics, incentives, and conversations reliably conserve?

And then:

Who is able to see these consequences?

Who is allowed to speak them?

Who is protected from them?

Who bears them?

What must change for the institution to become answerable to living?

A life-coherent institution conserves mechanisms of reflection. It allows consequences to return into conversation. It does not hide harm behind procedure. It does not allow metrics to replace living beings.

17.6 Responsibility and the Living Earth

Responsibility must also include the living medium.

If human beings live in an organism–medium relation, then a civilization is responsible not only for interpersonal consequences but also for its consequences for Earth as living medium.

Maturana and Verden-Zöllner explicitly include care for other living beings and the biosphere within ethical concern; this care arises because human beings are loving, languaging animals capable of seeing their doings and caring for consequences.

So ecological responsibility is not merely technical management.

It is the acceptance that our economy, law, agriculture, medicine, energy systems, consumption, infrastructure, and imagination participate in conserving or destroying the medium of living.

The question becomes:

What Earth-relation continues through us?

Do we conserve Earth as resource?

Or Earth as living medium?

Do we conserve extraction?

Or regeneration?

Do we conserve externality?

Or participation?

Do we conserve future generations as rhetorical abstractions?

Or as legitimate participants in the consequences of present living?

Responsibility begins when these questions can no longer be avoided.

17.7 Responsibility and Life-Coherence

A life-coherent society must conserve responsibility as a relational capacity.

This means it must allow people and institutions to see consequences without collapsing into shame, denial, or blame.

It must create spaces where consequences can return.

The child's experience must return to the parent and teacher.

The patient's lived world must return to the clinic.

The citizen's humiliation must return to governance.

The worker's exhaustion must return to the economy.

The prisoner's humanity must return to justice.

The river's degradation must return to development.

The future generation's vulnerability must return to present decision-making.

Where consequences cannot return, responsibility cannot mature.

Where responsibility cannot mature, ethics becomes performance.

Where ethics becomes performance, life-coherence fails.

17.8 Diagnostic Consequence

The derivation of responsibility gives the next major diagnostic movement:

How does this person, institution, culture, or civilization participate in conserving the consequences it now faces?

This question must be asked without accusation but without evasion.

In the family:

What adult patterns participate in conserving the child's fear or trust?

In the school:

What routines participate in conserving curiosity or shame?

In the clinic:

What professional habits participate in conserving healing or objectification?

In the institution:

What procedures participate in conserving care or indifference?

In politics:

What narratives participate in conserving coexistence or enemy-making?

In economics:

What measures of value participate in conserving life or extraction?

In civilization:

What conversations participate in conserving Earth as living medium or as resource base?

The working definition is therefore:

Responsibility is the human-relational distinction through which an observer brings forth the acceptance that one participates, through one's doings, distinctions, emotioning, conversations, and institutions, in conserving or transforming a manner of living and its consequences for oneself, others, and the living medium.

In simpler language:

Responsibility is accepting that what continues through us also concerns us.

And still more simply:

Responsibility is care becoming answerable for participation.

This leads directly to freedom.

If responsibility is accepting participation in what is conserved, then freedom is not the absence of constraint. Freedom is the reflective possibility of no longer conserving what one does not want to conserve.

18. Freedom: The Reflective Possibility of Living Otherwise

If responsibility is answerability for participation, then freedom appears when a person, institution, culture, or civilization becomes able to see what it is conserving and ask:

Do we want to continue conserving this manner of living?

Freedom must not be reduced to unconstrained choice.

It is not the absence of all limits.

It is not doing whatever one wants.

It is not independence from relation.

It is not escape from biology, history, culture, or consequence.

Living is always constrained. A living being exists only through the conservation of organization and organism–medium congruence. Human beings exist in bodyhood, emotioning, languaging, conversation, culture, and relation. Therefore, freedom cannot mean the absence of constraint. It must mean something more precise.

In a Maturana-informed derivation:

Freedom is the reflective possibility of no longer conserving what one does not want to conserve.

This is why freedom follows responsibility.

Before responsibility, one may say:

This is just how things are.

After responsibility, one may say:

I participate in this continuing.

Freedom begins when one can then ask:

Must I continue participating in it this way?

18.1 Freedom Is Not Unbounded Choice

The common idea of freedom imagines a chooser standing before options. But this is too abstract. In living, options are not floating in neutral space. Possible doings arise within a body, a history, a relational domain, an emotioning, a culture, and a medium.

A child in fear does not have the same possible doings as a child in play.

A patient in humiliation does not have the same possible doings as a patient in trust.

A citizen in a culture of enemy-making does not have the same possible doings as a citizen in a culture of mutual recognition.

A civilization living Earth as resource does not have the same possible doings as a civilization living Earth as medium.

So freedom is not merely the multiplication of choices. It is the transformation of the relational domain in which new possible doings can appear.

A person may be offered many choices and still not be free if every choice conserves the same self-negation.

A society may celebrate individual freedom and still conserve abandonment.

An economy may multiply consumer options while narrowing the conditions of life.

A political order may protect formal liberties while conserving fear, humiliation, and mistrust.

So the diagnostic question becomes:

What manner of living does this freedom conserve?

18.2 Freedom as Release from Automatic Conservation

A culture becomes powerful when its premises disappear into common sense.

Then one no longer says:

We are conserving competition.

One says:

This is reality.

One no longer says:

We are conserving control.

One says:

This is order.

One no longer says:

We are conserving extraction.

One says:

This is development.

One no longer says:

We are conserving enemy-making.

One says:

This is security.

Freedom begins when reflection makes the conserved world visible.

Bunnell's foreword describes reflection as the ability to release what one believes or thinks, to step outside it metaphorically, and then to recognize that one is still reflecting from within culture. This double look produces emancipation, freedom, or psychic mobility.

So freedom is not a leap outside living.

Freedom is a new movement within living.

The person or culture does not escape all conditions. It becomes able to see the conditions it is conserving and to participate differently.

This is why freedom is closely tied to reflection.

Before reflection:

The inherited world lives through us automatically.

With reflection:

The inherited world becomes visible as inherited.

With responsibility:

We see that we participate in its continuation.

With freedom:

We may begin to conserve another manner of living.

18.3 Freedom and Desire

Freedom also requires a new relation to desire.

A desire may appear as necessity:

I must win.

I must control.

I must be admired.

I must punish.

I must accumulate.

I must be safe at any cost.

I must not be wrong.

I must not lose status.

Before reflection, desire commands.

With reflection, desire becomes visible.

Then one can ask:

What world does this desire conserve?

This does not mean desire must be denied. It means desire must be released from invisibility.

I may desire success.

But do I want the world conserved by pursuing success through humiliation?

I may desire security.

But do I want the world conserved by producing permanent fear?

I may desire growth.

But do I want the world conserved by destroying the living medium?

I may desire justice.

But do I want the world conserved by making the offender permanently illegitimate?

Freedom appears when desire can be seen in relation to its consequences.

So freedom is not desire suppressed.

Freedom is desire brought into reflection, responsibility, and care.

18.4 Freedom Requires Love

Freedom requires love because seeing can be dangerous.

If a person sees harm without self-respect, seeing may collapse into shame.

If a culture sees its violence without love, seeing may collapse into denial or defensiveness.

If an oppressed people sees its wound without a restored domain of legitimacy, seeing may collapse into despair or revenge.

If a privileged group sees its participation in harm without love, seeing may become guilt, fragility, or refusal.

Love allows seeing without annihilation.

In love, one can say:

I participated in this.

I do not want to continue conserving it.

I can repair.

I can learn.

I can begin again.

Without love, freedom is frightening because to release the old world feels like losing oneself.

With love, freedom becomes possible because the self does not have to disappear when certainty is released.

This is why freedom is not individualism. It is relational. It arises where self and other remain legitimate enough for reflection to move without collapse.

18.5 Freedom and Institutions

Institutions often confuse freedom with choice inside a pre-given structure.

The patient may choose among treatments, but not question the objectifying medical conversation.

The student may choose courses, but not question the ranking system that defines worth.

The citizen may choose between parties, but not question the enemy-making that organizes politics.

The consumer may choose products, but not question the economy that converts living into commodities.

This is limited freedom.

A deeper freedom asks:

Can the conserved conversation itself be reflected upon?

An institution becomes more life-coherent when it allows its own premises to become visible.

A hospital becomes freer when patients and clinicians can ask what kind of care is being conserved.

A school becomes freer when teachers and students can ask what kind of learning is being conserved.

A democracy becomes freer when citizens can ask what kind of coexistence is being conserved.

An economy becomes freer when people can ask what kind of living its measures of value conserve.

So institutional freedom is not only the presence of options. It is the presence of reflective room.

18.6 Freedom and Culture

At the cultural level, freedom is the possibility that a culture can stop mistaking itself for reality.

A culture of domination says:

Hierarchy is natural.

A culture of competition says:

Scarcity is inevitable.

A culture of extraction says:

Earth is resource.

A culture of control says:

Trust is naïve.

A culture of humiliation says:

Shame produces discipline.

Freedom begins when the culture can ask:

What manner of living are we conserving by calling this natural, inevitable, realistic, or necessary?

This is not relativism.

It is responsibility.

It allows a culture to see that what it conserves is not destiny. It is a manner of living.

And if it is a manner of living, another manner of living may begin.

Maturana and Verden-Zöller describe cultural change as occurring when a new personal identity begins to be systemically conserved as a new manner of living in a new network of conversations that expands into a larger community.

So cultural freedom is not merely critique.

It is the capacity to begin conserving another conversation.

18.7 Freedom and the Living Earth

Freedom must also be rethought ecologically.

Modern civilization often imagines freedom as liberation from natural constraint. But if living is organism–medium living, then freedom from the living medium is not freedom. It is disconnection from the conditions of life.

A civilization may become technologically powerful while becoming ecologically unfree.

It may depend on extraction it cannot stop.

It may depend on growth it cannot question.

It may depend on energy systems it cannot release.

It may depend on consumption patterns that destroy the future.

It may call this freedom while becoming trapped in the conservation of life-incoherent relations.

Ecological freedom therefore asks:

Can civilization release the automatic conservation of Earth as resource and begin conserving Earth as living medium?

This is not a romantic question.

It is a viability question.

A civilization that cannot reflect on its Earth-relation is not free. It is structurally coupled to its own destruction.

18.8 Freedom and Life-Coherence

Freedom becomes life-coherent only when it expands the conditions of living, love, reflection, responsibility, and legitimate coexistence.

A freedom that conserves abandonment is life-incoherent.

A freedom that conserves domination is life-incoherent.

A freedom that conserves consumer choice while destroying ecological possibility is life-incoherent.

A freedom that protects speech while normalizing dehumanization is life-incoherent.

A freedom that allows power without responsibility is life-incoherent.

Life-coherent freedom asks:

Does this freedom widen possible living?

Does it conserve love?

Does it protect reflection?

Does it deepen responsibility?

Does it preserve the legitimacy of others?

Does it conserve the living medium?

Freedom cannot be judged only by the absence of restraint. It must be judged by the manner of living it conserves.

18.9 Diagnostic Consequence

The derivation of freedom gives the next major diagnostic movement:

What automatic conservation can now be seen, released, and perhaps transformed?

This question can be asked concretely.

In the family:

Can control be released as the automatic form of care?

In the school:

Can ranking be released as the automatic form of learning?

In the clinic:

Can objectification be released as the automatic form of expertise?

In the institution:

Can procedure be released as the automatic substitute for presence?

In politics:

Can enemy-making be released as the automatic form of identity?

In economics:

Can accumulation be released as the automatic measure of value?

In civilization:

Can extraction be released as the automatic relation to Earth?

The working definition is therefore:

Freedom is the human-relational distinction through which an observer brings forth the reflective capacity to see one's participation in a conserved manner of living, release automatic attachment to it, and participate responsibly in conserving another manner of living whose consequences one is willing to accept.

In simpler language:

Freedom is the possibility of no longer living as if the inherited world were the only world.

And still more simply:

Freedom is reflection becoming able to live otherwise.

This leads directly to transformation.

If freedom is the possibility of living otherwise, transformation is the moment when living otherwise becomes recurrent enough to begin conserving a new manner of living.

19. Transformation: A New Conservation Beginning to Live

If freedom is the reflective possibility of living otherwise, then transformation appears when living otherwise becomes recurrent enough to begin conserving a new manner of living.

This distinction is essential.

Transformation is not the same as change.

Change happens constantly. A mood changes. A rule changes. A leader changes. A policy changes. A vocabulary changes. A technology changes. A crisis changes circumstances.

But not every change transforms the manner of living.

A school may adopt the language of well-being while continuing to conserve ranking, fear, and performance anxiety.

A hospital may adopt patient-centered language while continuing to conserve objectification and time scarcity.

A government may create participatory processes while continuing to conserve mistrust of citizens.

An economy may adopt sustainability metrics while continuing to conserve extraction.

A peace process may speak reconciliation while continuing to conserve humiliation.

In each case, something has changed. But the deeper network of conversations may remain intact.

In a Maturana-informed derivation:

Transformation occurs when a new manner of living begins to be systemically conserved.

Maturana and Verden-Zöllner state this clearly in their account of cultural change: a new personal identity becomes cultural only when it is conserved as a new manner of living in the learning of children, and when adults create the conditions under which this new identity can be systemically conserved in a new generation. Cultural change occurs when a new manner of living begins to be conserved in a new network of conversations that expands into a larger community.

This gives the next methodological correction:

Transformation is not change itself. Transformation is change that begins to conserve itself.

19.1 Variation, Change, and Transformation

We can now distinguish three levels.

A **variation** is a different act.

A **change** is an alteration in what occurs.

A **transformation** is the emergence and conservation of a different manner of living.

One teacher stops shaming a child. That is a variation.

A school revises its discipline policy. That is a change.

A school community begins recurrently to conserve correction without humiliation, error without shame, authority without domination, and learning without fear. That is transformation.

One physician listens deeply to a patient. That is a variation.

A hospital creates a patient-experience policy. That is a change.

A health system reorganizes time, language, authority, touch, explanation, and follow-up so that patients are recurrently met as legitimate participants in care. That is transformation.

One leader refuses enemy-making. That is a variation.

A political process creates a dialogue forum. That is a change.

A community begins to conserve memory, grief, accountability, and future-making without requiring the dehumanization of the other. That is transformation.

The test is always:

What new manner of living is actually being conserved?

19.2 Transformation Requires a Change in Emotioning

Because culture is a conserved network of conversations, transformation requires more than new language. It requires a change in the emotioning braided with that language.

Maturana and Verden-Zöller argue that cultural change occurs when the closed network of conversations defining a culture changes; for this to happen, the configuration of emotioning that guides the network must change, and the new emotioning must be conserved through the new manner of living it brings about.

This is decisive.

Fear with new language remains fear.

Control with therapeutic vocabulary remains control.

Domination with participatory procedure remains domination.

Extraction with green branding remains extraction.

Mistrust with transparency dashboards remains mistrust.

Humiliation with educational innovation remains humiliation.

Transformation requires that the relational domain itself change.

A culture of fear cannot be transformed by slogans of trust unless trust begins to be lived.

A culture of domination cannot be transformed by language of inclusion unless mutual legitimacy begins to be conserved.

A culture of extraction cannot be transformed by sustainability language unless Earth begins to appear as living medium rather than resource base.

So the question becomes:

What emotioning must begin to be conserved differently for this transformation to be real?

19.3 Transformation Cannot Be Imposed

Transformation cannot be forced from outside.

An intervention can disturb.

It can invite.

It can interrupt.

It can protect margin.

It can create new conditions.

It can open a space of reflection.

But it cannot determine the internal change of a living system or the cultural change of a community. A living system changes according to its own structure. A culture changes only when a new network of conversations begins to conserve itself in actual living.

This is why many reforms fail.

They try to install transformation structurally without changing the relational field.

They introduce a new form while conserving the old emotioning.

They change procedure while conserving mistrust.

They change language while conserving hierarchy.

They change metrics while conserving life-blind value.

A Maturana-informed transformation therefore does not ask first:

How do we force the new pattern?

It asks:

What relational conditions would allow a new pattern to begin living?

What old conversation keeps restoring itself?

What margin must be protected for a new conversation to recur?

What emotioning must be conserved differently?

What practices would allow children, patients, citizens, workers, caregivers, and communities to learn the new manner of living by living it?

Transformation is not installation.

Transformation is cultivation.

19.4 Transformation and the Child

The child remains the decisive test.

A new adult discourse is not yet a new culture. A new culture exists only if the new manner of living enters the learning of children.

Maturana and Verden-Zöller make this point sharply: if the basic mother–child relation and child upbringing in self- and social respect were lost, and if that change were systemically conserved across generations, the result would be more than cultural change; a new kind of being would appear.

This gives a boundary to transformation.

Not every transformation is life-coherent.

A culture can transform toward greater domination.

A culture can transform toward deeper control.

A culture can transform toward more efficient dehumanization.

A culture can transform toward ecological disconnection.

A culture can transform toward technically managed lovelessness.

So transformation must be judged by what kind of human being it conserves.

The question is not merely:

Is society changing?

The question is:

What kind of child is this changing society bringing forth?

Does it conserve children as loving, self-respecting, other-respecting, playful, reflective human beings?

Or does it conserve children as performers, competitors, consumers, data points, future workers, anxious achievers, or obedient subjects?

A life-coherent transformation must protect the relational niche of childhood.

Without that, transformation becomes adaptation to dehumanization.

19.5 Transformation and Institutions

Institutional transformation requires that the institution begin to conserve a new conversation.

A school transforms when its daily rhythms, assessment practices, teacher-student relations, correction styles, architecture of time, and language of learning conserve curiosity rather than fear.

A clinic transforms when its scheduling, diagnostic language, bodily touch, consent practices, explanations, follow-up, and professional hierarchy conserve the patient's legitimacy as a whole person.

A justice system transforms when accountability conserves protection, truth, repair, responsibility, and legitimate coexistence rather than humiliation and disposal.

An economy transforms when value begins to be coordinated around provisioning, regeneration, care, sufficiency, and life-capacity rather than accumulation alone.

An ecological governance system transforms when rivers, forests, reefs, soils, species, and future generations appear within decision-making as legitimate participants in the consequences of present living.

In each case, transformation requires recurrence.

A new policy is not enough.

A new conversation must live again and again.

19.6 Transformation and Life-Coherence

Transformation becomes life-coherent when the new manner of living conserves the conditions that keep living livable.

This includes:

organism–medium congruence;
love as legitimate coexistence;
trust;
play;
self-respect and respect for others;
reflection;
ethical concern;
responsibility;
freedom from automatic conservation of life-denying patterns;
and care for the living medium.

A transformation is life-incoherent when it conserves new forms of negation, even if it appears progressive, efficient, innovative, or modern.

Digital transformation may conserve surveillance.

Educational transformation may conserve performance anxiety.

Health transformation may conserve datafication and loss of presence.

Economic transformation may conserve extraction under new accounting categories.

Political transformation may conserve enemy-making under new identities.

So the life-coherent diagnostic question is:

What does this transformation make easier to conserve: love, reflection, responsibility, and living — or fear, control, extraction, and negation?

19.7 Diagnostic Consequence

The derivation of transformation gives the next major diagnostic movement:

What new manner of living is beginning to be conserved, and does it conserve or negate humanness?

This question can be asked concretely.

In the family:

Is a new way of correcting without humiliation being conserved?

In the school:

Is a new way of learning through curiosity, play, and disciplined inquiry being conserved?

In the clinic:

Is a new way of healing through presence, dignity, science, and trust being conserved?

In politics:

Is a new way of disagreeing without dehumanization being conserved?

In economics:

Is a new way of valuing life, care, sufficiency, and regeneration being conserved?

In civilization:

Is a new way of living Earth as medium, not resource, being conserved?

The working definition is therefore:

Transformation is the human-relational distinction through which an observer brings forth the emergence and systemic conservation of a new manner of living in a new network of conversations, grounded in a changed configuration of emotioning and sustained through recurrent practice.

In simpler language:

Transformation is not change itself. Transformation is a new conservation.

This leads directly to life-coherence.

If transformation is a new conservation, then life-coherence asks whether that new conservation preserves the biological, relational, cultural, and ecological conditions that make living, love, reflection, responsibility, and coexistence possible.

20. Life-Coherence: Conservation That Does Not Betray Living

If transformation is a new conservation, then the next question is unavoidable:

What makes a new conservation life-coherent rather than merely new?

Not every transformation conserves living.

A culture can transform toward domination.

A school can transform toward more efficient ranking.

A clinic can transform toward more sophisticated objectification.

An economy can transform toward greener language while conserving extraction.

A state can transform toward surveillance while calling it safety.

A civilization can transform technologically while becoming less able to conserve the living medium that makes its own continuation possible.

So life-coherence cannot mean change, innovation, adaptation, resilience, or survival by themselves.

Life-coherence asks:

Does this manner of living conserve the biological, relational, cultural, and ecological conditions through which living remains livable?

This is the criterion.

20.1 Life-Coherence Begins in Living

At the biological level, the criterion is grounded in Maturana's account of living systems. A living system lives only while its organization and adaptation are conserved; adaptation is not a variable but the relation of operational congruence between living system and medium. If that relation is lost, the living system disintegrates.

So the first layer of life-coherence is simple:

Does this manner of living conserve organism–medium congruence?

If a way of living destroys the medium that makes its continuation possible, it is life-incoherent.

If an economy destroys soils, waters, climate stability, bodies, communities, and care while calling itself productive, it is life-incoherent.

If a medical system treats disease but conserves exhaustion, isolation, humiliation, and ecological toxicity, it is only partially coherent.

If a civilization survives by degrading the biosphere, it is conserving its own future disintegration.

So life-coherence is not sentimental. It is the minimal realism of living.

A living being cannot remain alive by negating the medium of its living.

20.2 Life-Coherence in the Human Domain

For human beings, biological continuity is necessary but not sufficient.

Human living is biological-cultural. It is lived in bodyhood, emotioning, languaging, conversation, culture, love, reflection, ethics, responsibility, freedom, and transformation.

So life-coherence must ask more than:

Does the organism survive?

It must ask:

Does this manner of living conserve humanness?

A human being may survive in humiliation.

A child may adapt to fear.

A worker may function under exploitation.

A patient may comply while feeling unseen.

A society may remain stable while conserving mistrust.

A civilization may continue materially while losing love, play, reflection, responsibility, and care for the living Earth.

So the deeper human question is:

What kind of human being does this manner of living conserve?

Does it conserve the child as playful, trusting, self-respecting, other-respecting, reflective, and loving?

Or does it conserve the child as performer, competitor, consumer, anxious achiever, obedient subject, or future labor unit?

This is why life-coherence must be tested in the child.

A civilization that cannot conserve the relational conditions of childhood cannot conserve humanness.

20.3 Life-Coherence and Love

Life-coherence requires love, but not love as sentiment.

Love, in the Maturana-informed sense, is the relational domain in which the other arises as legitimate in coexistence. Without this domain, languaging may continue, but it becomes strategy. Conversation may continue, but it becomes manipulation. Culture may continue, but it becomes control.

So the life-coherent question becomes:

Does this manner of living conserve the legitimacy of living beings in coexistence?

Does the child remain legitimate?

Does the patient remain legitimate?

Does the poor person remain legitimate?

Does the dissenter remain legitimate?

Does the offender remain legitimate even while held accountable?

Does the defeated remain legitimate?

Does the non-human living being remain legitimate?

Does Earth remain legitimate as living medium?

Does the future generation remain legitimate?

Where the answer is no, life-coherence is broken.

The system may still function.

It may still grow.

It may still win.

It may still produce.

It may still appear orderly.

But it is conserving a negation.

20.4 Life-Coherence and Culture

A culture is a conserved network of conversations. Its identity is defined not merely by its stated values, but by the emotioning conserved in its recurrent doings. Maturana and Verden-Zöller describe cultural change as occurring when a new manner of living becomes systemically conserved in a new network of conversations; they also warn that if the basic human mother-child relation and upbringing in self- and social respect were lost across generations, something more than cultural change would occur — a new kind of being would appear.

This gives a strict cultural criterion:

A culture is life-coherent only if the conversations it conserves protect the relational conditions through which human beings become and remain human.

A culture that conserves fear is not life-coherent.

A culture that conserves humiliation is not life-coherent.

A culture that conserves domination is not life-coherent.

A culture that conserves extraction is not life-coherent.

A culture that conserves numbness is not life-coherent.

A culture that conserves enemy-making is not life-coherent.

Even if it calls these things discipline, order, prosperity, realism, security, or progress.

Life-coherence listens beneath the name to the conserved manner of living.

20.5 Life-Coherence Is Not Stability

A stable system may be life-incoherent.

A prison can be stable.

A bureaucracy can be stable.

A violent family can be stable.

An extractive economy can be stable for a time.

A political order of domination can be stable.

A culture of silence can be stable.

So the question is never simply:

Is this stable?

The question is:

What is being stabilized?

If stability conserves love, trust, reflection, responsibility, regeneration, and legitimate coexistence, it may be life-coherent.

If stability conserves fear, control, humiliation, extraction, silence, or ecological destruction, then stability itself becomes part of the pathology.

The same applies to resilience.

A person can be resilient in a destructive system.

A community can be resilient under abandonment.

An institution can be resilient in conserving harm.

A civilization can be resilient in avoiding transformation.

So life-coherence must ask:

Resilience for what manner of living?

Resilience is not enough.

Stability is not enough.

Adaptation is not enough.

Survival is not enough.

The question is always:

Does what continues conserve life, or does it conserve the negation of life?

20.6 Life-Coherence and Reflection

Life-coherence requires reflection because no culture can finally guarantee that its own distinctions are innocent.

Every distinction reveals and obscures.

Every diagnosis brings forth a domain.

Every framework can become rigid.

Every moral language can become a weapon.

Every grammar of life-coherence can become life-incoherent if used without reflection.

This is why the grammar must turn back on itself. Bunnell emphasizes that reflection allows one to release what one believes or thinks, see one's own cosmology as something one lives within, and thereby open psychic mobility or freedom.

So a life-coherent grammar must ask:

What world am I bringing forth by calling this life-coherent or life-incoherent?

And:

Am I conserving love in the very act of diagnosis?

This is the safeguard.

Without this recursive return, life-coherence becomes ideology.

With this recursive return, life-coherence remains conversation.

20.7 Life-Coherence and Responsibility

Life-coherence also requires responsibility.

If ethics is care for consequences, responsibility is answerability for participation. A life-coherent manner of living must allow consequences to return into conversation.

The child's fear must return to the parent and teacher.

The patient's invisibility must return to the clinic.

The worker's exhaustion must return to the economy.

The citizen's humiliation must return to governance.

The prisoner's humanity must return to justice.

The river's degradation must return to development.

The future generation's vulnerability must return to present decision-making.

Where consequences cannot return, responsibility cannot mature.

Where responsibility cannot mature, ethics becomes performance.

Where ethics becomes performance, life-coherence fails.

So the diagnostic question becomes:

Whose consequences are visible, whose consequences matter, and whose consequences have been made invisible?

20.8 Life-Coherence and the Living Earth

A civilization cannot be life-coherent if it conserves Earth as mere resource.

This is not because Earth must be romanticized.

It is because human living is organism–medium living.

The Earth is not an external warehouse. It is the living medium in which human bodies, cultures, economies, and futures remain possible.

So ecological life-coherence asks:

Does this civilization conserve Earth as living medium, or as resource base?

If Earth is conserved as resource, extraction appears rational.

If Earth is conserved as living medium, restraint, reciprocity, regeneration, and responsibility become possible.

This is not a poetic distinction only. It is a difference in possible doings.

The world brought forth by “resource” is not the same world brought forth by “living medium.”

The first organizes use.

The second invites coexistence.

20.9 The Working Definition

We can now define life-coherence carefully:

Life-coherence is the evaluative distinction through which an observer brings forth whether a manner of living conserves the biological, relational, cultural, and ecological conditions that allow living beings to continue in legitimate coexistence, love, reflection, responsibility, and regenerative organism–medium congruence.

In simpler language:

Life-coherence asks whether the way we live keeps life livable.

And still more simply:

Life-coherence is conservation that does not betray living.

20.10 Diagnostic Consequence

The derivation of life-coherence gives the central diagnostic question of the whole paper:

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

This question can be asked everywhere.

In the family:

Does this manner of living conserve trust, play, boundary, and dignity?

In the school:

Does it conserve curiosity, disciplined inquiry, and self-respect?

In the clinic:

Does it conserve healing, presence, science, and personhood?

In the institution:

Does it conserve responsibility for consequences?

In politics:

Does it conserve disagreement without dehumanization?

In justice:

Does it conserve accountability without disposal?

In economics:

Does it conserve provisioning, sufficiency, care, and regeneration?

In civilization:

Does it conserve Earth as living medium?

The question is not:

Is this system efficient?

Nor:

Is it growing?

Nor:

Is it stable?

Nor:

Is it innovative?

Nor:

Is it powerful?

The question is:

Does this manner of living conserve living?

20.11 Transition to the Diagnostic Primitives

We are now ready to return to the diagnostic primitives.

They should no longer appear as foundations.

They are instruments of inquiry.

They help an observer ask how a manner of living is conserved, constrained, disturbed, regulated, perceived, narrowed, or transformed.

Their proper place is after the derivation of living, medium, niche, structural coupling, behavior, emotioning, languaging, conversation, culture, love, suffering, healing, reflection, ethics, responsibility, freedom, transformation, and life-coherence.

Only now can they be named cleanly:

Conservation — What is being conserved?

Constraint — What must be respected for that conservation to continue?

Margin — How much room remains for viable change?

Disturbance — What triggers change without determining it?

Present structure — From what embodied history does the response arise?

Regulation — What recurrent dynamics restore the pattern?

Relevance — What becomes visible, meaningful, invisible, or legitimate?

Possible doings — What can actually be lived next?

These are not external categories imposed on life.

They are questions that help living see what it is conserving.

The next section should therefore introduce these diagnostic primitives as a practical grammar of life-coherent inquiry.

21. Diagnostic Primitives: A Practical Grammar of Life-Coherent Inquiry

Only now can the diagnostic primitives be introduced.

They are not the foundation of the paper. The foundation is living: organism–medium congruence, structural coupling, emotioning, languaging, conversation, culture, love, reflection, ethics, responsibility, freedom, transformation, and life-coherence.

The diagnostic primitives are instruments of inquiry. They help an observer ask how a manner of living is conserved, disturbed, narrowed, regulated, perceived, and transformed.

They should therefore be treated not as objects, but as questions.

The primitives are not things that life is made of. They are distinctions through which living can begin to see what it is conserving.

This is important. If the primitives are treated as fixed entities, the grammar becomes another abstract system. But if they are treated as disciplined questions, they remain conversational, reflective, and Maturana-informed.

Maturana's own account of living gives the grounding discipline: living systems live only while organization and adaptation are conserved, and adaptation is the invariant operational congruence between living system and medium. Living and medium change together congruently, or the living system disintegrates.

The diagnostic primitives are therefore ways of asking:

What is happening to this conservation of living?

21.1 Conservation

The first diagnostic primitive is **conservation**.

It asks:

What is being conserved?

This is the first question because living itself is conservation-through-change. But conservation is not automatically good. A culture may conserve love, play, reflection, and trust. It may also conserve fear, humiliation, domination, extraction, or self-negation.

So the full diagnostic question is:

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

In a family, what is conserved may be trust or fear.

In a school, curiosity or shame.

In a clinic, care or objectification.

In an economy, provisioning or extraction.

In politics, coexistence or enemy-making.

In civilization, Earth as living medium or Earth as resource base.

Conservation is therefore descriptive first, evaluative second. We first ask what continues. Then we ask what the continuation does to living.

21.2 Constraint

The second diagnostic primitive is **constraint**.

Constraint appears because not every change conserves living. If something must be conserved, then some paths of change are compatible with that conservation, and others are not.

Constraint asks:

What must be respected for this manner of living to continue?

For a living body, certain physiological relations must be respected.

For a child, bodily trust, play, and mutual acceptance must be respected.

For a conversation, the legitimacy of participants must be respected.

For a culture, its conserved emotioning must be respected if that culture is to continue — though this may be life-coherent or life-incoherent.

For civilization, the living Earth must be respected as medium, not merely used as resource.

Constraint is therefore not merely limitation. It is the shape of possible continuation.

A life-coherent constraint protects living.

A life-incoherent constraint protects a pattern that negates living.

So the diagnostic question becomes:

What does this constraint protect — life, or the negation of life?

21.3 Margin

The third diagnostic primitive is **margin**.

Margin appears when we ask how much room remains for change before conservation fails.

It asks:

How much room remains for viable change?

Margin may be physiological, relational, institutional, cultural, ecological, or ethical.

In the body, margin may appear as reserve capacity.

In a child, as room for play, error, pause, and return.

In a conversation, as room for disagreement without dehumanization.

In an institution, as room for correction without defensiveness.

In a culture, as room for reflection without collapse.

In an ecosystem, as regenerative capacity.

Margin is narrowed when the system can no longer absorb disturbance without losing what must be conserved.

A culture with little margin reacts.

A culture with more margin reflects.

A relationship with little margin defends.

A relationship with more margin can listen.

A civilization with little ecological margin turns crisis into control.

A civilization with restored margin can transform.

So the diagnostic question becomes:

Is the margin for life-coherent change widening or narrowing?

21.4 Disturbance

The fourth diagnostic primitive is **disturbance**.

Disturbance must not be treated as an external cause that determines an internal effect. In Maturana's account, a system exists in recursive interactions with a medium that trigger structural changes in it; those changes are determined by the system's structure at that moment, while system and medium change together congruently or the system disintegrates.

So disturbance asks:

What is triggering change, without determining the change it triggers?

The same event may trigger different changes in different histories.

A criticism may trigger learning in trust, but shame in humiliation.

A boundary may trigger safety in one relation, abandonment in another.

A crisis may trigger solidarity in one culture, scapegoating in another.

A policy may trigger hope in one community, defensive resistance in another.

The disturbance does not carry its effect by itself. Its effect arises in the coupled history.

So the diagnostic question becomes:

What is being triggered here, in what history of structural coupling, and with what consequence for living?

21.5 Present Structure

The fifth diagnostic primitive is **present structure**.

This is preferable to "state," because "state" sounds too static. Present structure means history now embodied as the condition from which further change may be triggered.

It asks:

From what embodied history is this response arising?

A child's present structure includes prior histories of touch, fear, play, trust, shame, and correction.

A patient's present structure includes prior histories of care, dismissal, diagnosis, pain, family, cost, and hope.

An institution's present structure includes its rituals, incentives, hierarchies, metrics, memory, and emotional habits.

A culture's present structure includes its inherited conversations, exclusions, loyalties, myths, wounds, and legitimacies.

So the question is not only:

What happened?

It is:

What history is now living in this response?

This prevents shallow diagnosis. It keeps us from blaming the disturbance alone, or blaming the person alone.

21.6 Regulation

The sixth diagnostic primitive is **regulation**.

Regulation must not be confused with health.

Regulation means the recurrent dynamics by which a manner of living conserves itself.

It asks:

What recurrent dynamics restore or conserve this pattern?

A violent family regulates around fear.

A bureaucracy regulates around procedure.

A school may regulate around ranking.

An economy may regulate around accumulation.

A political order may regulate around enemy-making.

A healing relation may regulate around trust.

A life-coherent culture may regulate around reflection, repair, and mutual legitimacy.

So the question is not:

Is the system regulated?

The question is:

What does this regulation conserve?

This is one of the most important diagnostic shifts.

A system can be well-regulated and life-incoherent.

It can reliably restore the very pattern that harms living.

Therefore:

Regulation must be judged by the manner of living it conserves.

21.7 Relevance

The seventh diagnostic primitive is **relevance**.

This replaces “perception,” because perception too easily suggests an inner representation of an outer world. Relevance asks how something becomes distinguished as mattering within a particular emotioning, history, and conversation.

It asks:

What becomes visible, meaningful, threatening, desirable, invisible, or legitimate in this manner of living?

A culture of control notices deviation.

A culture of extraction notices resources.

A culture of competition notices rank.

A culture of fear notices threat.

A culture of love notices legitimacy.

A culture of reflection notices its own premises.

What a culture notices reveals what it conserves.

Equally important is what it does not notice.

The child’s fear may be invisible in a performance culture.

The patient’s dignity may be invisible in a throughput culture.

The caregiver’s labor may be invisible in a market culture.

The river's degradation may be invisible in a development culture.

The enemy's grief may be invisible in a security culture.

So the diagnostic question becomes:

What does this manner of living make visible, and what does it make invisible?

21.8 Possible Doings

The eighth diagnostic primitive is **possible doings**.

This is preferable to "options," because options can sound like abstract choices in a neutral decision space. Possible doings are what can actually be lived from within a given bodyhood, emotioning, history, margin, and relational domain.

It asks:

What can actually be lived next?

A person in fear may not be able to listen.

A person in shame may not be able to ask for help.

A person in trust may be able to confess, repair, and learn.

A child in play may explore possibilities that a child under constant evaluation cannot live.

A society in enemy-making may not be able to imagine peace except as victory.

A civilization living Earth as resource may not be able to imagine restraint except as loss.

So possible doings are not merely logical possibilities.

They are lived possibilities.

The diagnostic question becomes:

What emotioning, margin, and conversation would have to change for other possible doings to appear?

21.9 The Diagnostic Sequence

The primitives can now be gathered as a practical sequence of inquiry:

Conservation — What is being conserved?

Constraint — What must be respected for that conservation to continue?

Margin — How much room remains for viable change?

Disturbance — What triggers change without determining it?

Present structure — From what embodied history does the response arise?

Regulation — What recurrent dynamics restore or conserve the pattern?

Relevance — What becomes visible, meaningful, invisible, or legitimate?

Possible doings — What can actually be lived next?

These questions should not be treated as a checklist imposed mechanically. They are a conversational discipline. Their purpose is to slow the observer down enough to see the manner of living being conserved.

21.10 The Recursive Safeguard

The final diagnostic move is recursive.

Every question must return to the observer.

When I ask:

What is being conserved?

I must also ask:

What am I conserving by asking in this way?

When I ask:

What emotioning is being conserved?

I must also ask:

What emotioning am I bringing to the diagnosis?

When I ask:

Is the other being negated?

I must also ask:

Am I negating the other in the very act of distinguishing?

This safeguard is essential.

Without it, the grammar becomes an ideology.

With it, the grammar remains a reflective conversation.

The purpose of the diagnostic primitives is not to master living from outside. It is to help living see what it is conserving, so that a different manner of living may become possible.

21.11 Working Statement

The diagnostic grammar can now be stated in one paragraph:

A Maturana-informed viability grammar is a disciplined conversational practice through which an observer inquires into how a manner of living is conserved, constrained, disturbed, regulated, perceived, narrowed, and transformed. Its primitives are not external objects or universal building blocks, but reflective distinctions grounded in living, structural coupling, emotioning, languaging, love, and responsibility. Their purpose is to ask whether what is being conserved keeps life livable.

In simpler language:

The primitives are questions that help living see what it is conserving.

The next section should show how this grammar can be used without becoming mechanical: first as a general diagnostic method, then through short applications to the child, the clinic, the school, the institution, the economy, and civilization's relation to Earth.

22. Using the Grammar Without Mechanizing Living

The diagnostic primitives now have a practical form. But they must not be used mechanically.

A life-coherent grammar is not a checklist that one applies to living from outside. It is a disciplined conversation that slows the observer down long enough to see what manner of living is being conserved. Its purpose is not to classify, score, or control. Its purpose is to help a person, institution, or culture reflect on its own conservation.

This safeguard is necessary because any framework can become life-incoherent if it is used without love, reflection, and responsibility. A grammar meant to reveal domination can itself become dominating. A grammar meant to restore legitimacy can itself negate those it diagnoses. A grammar meant to open reflection can become another closed certainty.

So the first rule of use is:

The grammar must always be used in the same relational domain it seeks to conserve: love, reflection, responsibility, and respect for the legitimacy of the other.

The diagnostic questions are therefore invitations, not weapons.

They ask:

What is being conserved?

What does this conservation do to living?

What relational domain makes this manner of living possible?

What becomes visible or invisible here?

What possible doings remain open?

What could be conserved differently?

This practice is Maturana-informed because it remains grounded in the relation between living system and medium. Living systems conserve organization and adaptation only through ongoing congruence with the medium; a system exists as a totality only in recursive interactions with a medium that triggers structural changes through which its identity and adaptation are conserved.

For human beings, this means that diagnosis must look not only at individuals, but at the relational medium in which their living is conserved.

22.1 The Child

The child is the first test of the grammar.

We ask:

What manner of living is being conserved around this child?

Not merely:

Is the child behaving well?

Is the child performing?

Is the child achieving?

Is the child compliant?

The deeper question is:

What world is the child learning to live?

A life-coherent childhood conserves bodily trust, play, tenderness, self-respect, respect for others, curiosity, and the possibility of error without humiliation. A life-incoherent childhood may conserve fear, performance anxiety, shame, obedience, comparison, emotional abandonment, or the need to earn legitimacy.

The diagnostic primitives guide the inquiry:

Conservation: What relational pattern is repeated around the child?

Constraint: What must be protected for the child's self-respect and playfulness to continue?

Margin: Is there room for error, pause, refusal, exploration, and return?

Disturbance: What triggers fear, shame, withdrawal, aggression, or collapse?

Present structure: What history of touch, gaze, correction, praise, neglect, or humiliation is embodied in the child's response?

Regulation: How does the family or school restore its usual pattern when the child disrupts it?

Relevance: What does the adult notice — the child's behavior, or the child's world?

Possible doings: What can the child actually live next — play, ask, repair, hide, perform, attack, or submit?

This changes correction.

A life-incoherent correction asks:

How do we stop this behavior?

A life-coherent correction asks:

What relational world is this behavior arising from, and how do we conserve boundary without negating the child?

This is not permissiveness. It is disciplined love.

22.2 The Clinic

The clinical encounter is the second test.

A patient does not enter only with a disease. The patient enters with a body, history, fear, trust or mistrust, prior experiences of care or dismissal, family relations, economic constraints, meanings, and hopes.

So the diagnostic question becomes:

What manner of living is being conserved in this clinical encounter?

A clinic may conserve healing, trust, dignity, scientific care, and patient participation. But it may also conserve objectification, hierarchy, distance, speed, patient invisibility, and compliance without understanding.

The grammar asks:

Conservation: Does this encounter conserve personhood or only case-management?

Constraint: What must be respected for healing to remain possible — time, dignity, explanation, consent, touch, privacy, continuity?

Margin: Does the patient have room to ask, fear, grieve, misunderstand, return, and participate?

Disturbance: What triggers mistrust, shame, silence, or resistance?

Present structure: What embodied history does the patient bring — previous dismissal, trauma, poverty, cultural meaning, family burden, or fear of diagnosis?

Regulation: How does the clinic restore its pattern — through listening and repair, or through throughput and authority?

Relevance: What does the system notice — lab values, risk scores, adherence, or the patient's lived world?

Possible doings: Can the patient actually participate in care, or only comply, avoid, resist, or disappear?

A life-coherent medicine does not abandon science. It restores science to the relational domain of healing. The patient is not less biological because he or she is relational. The patient is biological as a living being in a medium.

22.3 The School

A school is not only a curriculum, building, assessment system, or administrative structure. It is a conserved network of conversations about learning, error, intelligence, authority, worth, discipline, and future possibility.

So the question becomes:

What manner of living does this school conserve?

A life-coherent school conserves curiosity, disciplined inquiry, play, cooperation, self-respect, attention, and the dignity of error. A life-incoherent school may conserve ranking, fear of failure, comparison, shame, obedience, performance, and the reduction of children to future productivity.

The grammar asks:

Conservation: What is repeated daily — curiosity or anxiety, inquiry or compliance?

Constraint: What must be protected for learning to remain alive?

Margin: Is there room for slowness, play, confusion, creativity, and correction without humiliation?

Disturbance: What happens when a child fails, questions, resists, or learns differently?

Present structure: What histories of praise, shame, ranking, exclusion, or support shape the learner?

Regulation: How does the school restore order — through fear, grading, punishment, care, dialogue, or repair?

Relevance: What does the school notice — grades, behavior, attendance, or the child's relation to learning?

Possible doings: Can the child explore, ask, revise, collaborate, and reflect — or only perform, hide, compete, and comply?

A life-coherent school does not eliminate standards. It asks what emotioning standards conserve. Standards lived in love can guide growth. Standards lived in humiliation conserve fear.

22.4 The Institution

Every institution conserves a conversation.

It may say one thing and live another.

It may declare service while conserving self-protection.

It may declare transparency while conserving mistrust.

It may declare participation while conserving control.

It may declare care while conserving distance.

It may declare justice while conserving exclusion.

So institutional diagnosis begins with:

What conversation does this institution restore when disturbed?

This question reveals regulation.

An institution shows its true conservation when challenged. Does it become reflective or defensive? Does it listen or protect itself? Does it invite consequences back into conversation, or does it hide them behind procedure?

The grammar asks:

Conservation: What pattern does the institution reliably reproduce?

Constraint: What must remain untouched for the institution to remain itself?

Margin: Is there room for dissent, correction, whistleblowing, apology, and redesign?

Disturbance: What kinds of feedback provoke learning, and what kinds provoke retaliation or denial?

Present structure: What history of hierarchy, incentives, metrics, fear, memory, and legitimacy shapes the institutional response?

Regulation: How does the institution return to normal?

Relevance: What becomes visible to the institution — indicators, compliance, budgets, reputation — and what remains invisible?

Possible doings: Can people tell the truth, repair harm, and change practice, or only comply and protect themselves?

A life-coherent institution conserves pathways by which consequences return. It does not allow procedure to replace responsibility.

22.5 The Economy

The economy is not only exchange, production, consumption, prices, and growth. It is a conserved network of conversations about value.

So the diagnostic question is:

What does this economy teach us to call valuable?

A life-coherent economy conserves provisioning, care, sufficiency, reciprocity, ecological regeneration, meaningful work, and dignity. A life-incoherent economy conserves accumulation, scarcity, extraction, disposability, debt dependency, invisibility of care, and ecological externalization.

The grammar asks:

Conservation: What manner of living does the economy reproduce?

Constraint: What must be respected for life to continue — soils, waters, bodies, care, communities, time, trust, climate, future generations?

Margin: Is the economy widening or consuming ecological, social, bodily, and psychological margin?

Disturbance: What happens when living limits appear — exhaustion, illness, ecological degradation, inequality, debt, collapse?

Present structure: What historical arrangements of property, labor, coloniality, gendered care, technology, and money shape the present economy?

Regulation: How does the economy restore itself — through repair and redistribution, or through more extraction, austerity, enclosure, and growth?

Relevance: What does the economy notice — prices, productivity, profit — and what does it make invisible?

Possible doings: Can communities live sufficiency and regeneration, or are they compelled into competition and accumulation?

A life-coherent economy asks whether value serves living. A life-incoherent economy asks living to serve value.

22.6 Civilization and Earth

The final scale is civilization's relation to Earth.

The diagnostic question becomes:

Does civilization conserve Earth as living medium or as resource base?

This is not a poetic contrast. It changes what can be lived.

If Earth appears as resource, then extraction, optimization, ownership, and externalization become natural doings.

If Earth appears as living medium, then restraint, reciprocity, regeneration, responsibility, and humility become possible doings.

The grammar asks:

Conservation: What Earth-relation is being conserved?

Constraint: What planetary and ecological relations must be respected for human living to continue?

Margin: How much ecological margin remains for regeneration, recovery, climate stability, biodiversity, water cycles, and food systems?

Disturbance: What do ecological crises trigger — denial, control, technological escalation, solidarity, transformation, or grief?

Present structure: What histories of extraction, colonization, industrialization, growth, and separation shape the civilizational response?

Regulation: How does civilization restore itself when disturbed — by questioning growth, or by intensifying the very pattern that produced the disturbance?

Relevance: What becomes visible — carbon, GDP, energy, risk — and what remains invisible — living relations, species, care, sacredness, local knowledge, future beings?

Possible doings: Can civilization live regeneration, or only mitigation within extraction?

A life-coherent civilization does not merely reduce damage. It begins to conserve another Earth-relation.

22.7 The General Method

Across all domains, the method remains the same:

Begin with the manner of living.

Ask what is conserved.

Ask what that conservation does to living.

Ask what relational domain makes it possible.

Ask what it makes visible and invisible.

Ask what possible doings remain open.

Ask what new conservation could begin.

This method is not neutral in the sense of being indifferent. It is grounded in care for living. But it must remain humble because the observer is also part of the world being brought forth.

This is why ethics, responsibility, and freedom remain central. Maturana and Verden-Zöller place these in the domain of love: ethical concern, responsibility, and freedom arise when one sees oneself, the other, and the consequences of one's actions, and acts according to whether one wants those consequences.

The grammar therefore asks the observer:

Do you want the consequences of the world your distinctions conserve?

That question is the hinge between diagnosis and transformation.

22.8 From Diagnosis to Invitation

The purpose of diagnosis is not accusation.

It is invitation.

A diagnosis that leaves the other illegitimate has failed. A diagnosis that opens reflection may become healing.

So the final movement in any use of the grammar is:

What conversation could now be lived differently?

Not:

How do we force transformation?

But:

What new relational domain can we begin to conserve?

This might mean conserving play where there was fear.

Listening where there was procedure.

Accountability where there was denial.

Trust where there was control.

Regeneration where there was extraction.

Legitimacy where there was enemy-making.

Reflection where there was certainty.

The grammar is practical only when it returns to living.

22.9 Working Statement

To use the Maturana-informed viability grammar is to enter a reflective conversation about what a person, institution, culture, or civilization is conserving. The diagnostic primitives guide attention, but they do not replace love, reflection, ethics, or responsibility. Their purpose is to help living see its own conservation clearly enough that another manner of living may begin.

In simpler language:

Diagnosis is life-coherent only when it opens a path toward renewed living.

23. From Diagnosis to Transformation: The Invitational Method

If the diagnostic grammar helps living see what it is conserving, then the next question is:

How does seeing become transformation without becoming control?

This is delicate.

A Maturana-informed grammar cannot move from diagnosis to prescription as if the observer stood outside the living system and could redesign it from above. A living system changes according to its own structure. A culture changes only when a new network of conversations begins to be conserved. An intervention can disturb, invite, interrupt, protect, or open a space, but it cannot determine the transformation of another living system, person, institution, or culture.

So the movement from diagnosis to transformation must be invitational.

Not:

I see what is wrong with you, and I will fix you.

But:

Can we see together what manner of living is being conserved here, what consequences it has, and whether another conversation can begin?

This is the ethical posture of the grammar.

23.1 The Four Movements of Life-Coherent Practice

The practical method can be organized into four movements:

Attend.

Distinguish.

Reflect.

Conserve otherwise.

These are not steps in a mechanical sequence. They are movements in conversation.

Attend

To attend is to slow down enough to notice the manner of living being conserved.

One does not begin by naming the problem. One begins by watching the recurrence.

What keeps happening?

What returns when disturbed?

What is repeated in tone, posture, timing, silence, language, fear, desire, correction, procedure, metric, reward, or punishment?

Attention precedes diagnosis.

Without attention, the grammar becomes projection. The observer sees what the framework allows him or her to see, rather than what the living situation is bringing forth.

Distinguish

To distinguish is to name what is being conserved.

This is where the diagnostic primitives help.

What is being conserved?

What constraint protects it?

What margin remains?

What disturbances trigger change?

What present structure receives those disturbances?

What regulation restores the pattern?

What becomes relevant or invisible?

What possible doings remain open?

But each distinction must be held lightly.

A distinction is not the thing itself. It is an operation in languaging. It reveals some regularities and obscures others. Maturana's method repeatedly requires care about domains: a distinction valid in one domain can mislead if carried into another without reflection.

So the diagnostic question must remain alive, not closed.

Reflect

To reflect is to turn the diagnosis back upon the observer and the community.

What world are we bringing forth by distinguishing the situation this way?

Are we opening possible living, or closing it?

Are we conserving love, or negating the other?

Are we inviting responsibility, or producing shame?

Are we widening margin, or tightening control?

This is the point at which the grammar protects itself from becoming ideology.

Bunnell's discussion of recursive reflection is important here: reflection requires the ability to release what one believes or thinks, to step outside it metaphorically, and then to recognize that one is still reflecting from within culture. This double look creates the possibility of emancipation, freedom, or psychic mobility.

So reflection is not optional. It is the condition of life-coherent use.

Conserve Otherwise

Transformation begins only when another manner of living starts to recur.

An insight is not yet transformation.

A new policy is not yet transformation.

A new vocabulary is not yet transformation.

A new diagram is not yet transformation.

Transformation begins when another conversation is lived again and again until it becomes a new conservation.

Maturana and Verden-Zöller describe cultural change as occurring when a new manner of living becomes systemically conserved in a new network of conversations, especially through the learning of children.

So the final practical question is:

What small, repeatable conversation can we begin conserving now?

Not the grand solution.

The next conservation.

23.2 The Smallest Unit of Transformation

The smallest unit of transformation is not a theory.

It is a recurrent relational act.

A parent corrects without humiliating.

A teacher protects the dignity of error.

A physician listens before classifying.

An administrator lets consequences return into procedure.

A citizen refuses enemy-making.

A community treats water as living medium.

An institution apologizes without self-protection.

A culture creates space for grief without revenge.

Each act is small. But if repeated, protected, taught, and embodied, it can become a new conservation.

This is why transformation is not primarily dramatic.

It is recursive.

A new world begins when a new manner of living becomes repeatable.

23.3 Invitation Rather Than Imposition

Because living systems are structure-determined, transformation cannot be imposed in the strong sense. This does not mean that one never intervenes, sets boundaries, stops harm, or changes institutions. It means that even firm action must be understood as participation in a relational field, not as external control over living.

A boundary can be an invitation into coexistence.

A punishment can be an act of negation.

A policy can protect margin.

A policy can tighten control.

A diagnosis can open healing.

A diagnosis can fix the patient as an object.

A reform can invite reflection.

A reform can conserve the old emotioning under new language.

So the question is not simply:

What action should be taken?

The deeper question is:

In what relational domain will this action be lived?

This returns us to love.

Love does not mean passivity. Love can oppose, restrain, refuse, correct, and protect. But it does so without needing to deny the legitimacy of the other. Maturana's account of love explicitly distinguishes love from blind acceptance: love sees the other in legitimacy and acts accordingly, even when the behavior of the other must be opposed.

That is the practical ethic of the grammar.

23.4 The Observer's Discipline

The observer must therefore practice a particular discipline.

Before acting, the observer asks:

What manner of living am I about to conserve?

Before diagnosing, the observer asks:

Am I making the other illegitimate?

Before correcting, the observer asks:

Can I oppose the behavior without negating the being?

Before designing reform, the observer asks:

What emotioning will this reform conserve?

Before naming life-incoherence, the observer asks:

Am I still standing in love?

This is not softness.

It is rigor.

Without this discipline, the grammar becomes another instrument of cultural control.

With it, the grammar becomes a practice of reflective responsibility.

23.5 From Repair to Culture

A single repair matters, but the aim is deeper.

A repaired conversation can become a new habit.

A new habit can become a new practice.

A new practice can become a new institution.

A new institution can become a new culture.

A new culture can enter the child.

This is how the grammar remains faithful to Maturana's insistence that culture is conserved in the learning of children. If a new manner of living does not enter childhood, it remains an adult project, not yet a cultural transformation. Maturana and Verden-Zöller warn that the loss of the basic mother-child relation and upbringing in self- and social respect, if conserved across generations, would amount to more than cultural change; it would bring forth a different kind of being.

So every transformation must be tested by the child:

What child does this new conservation bring forth?

If it brings forth a more anxious, controlled, performative, mistrustful, or disconnected child, it is not life-coherent.

If it brings forth a child more able to live in bodily trust, play, self-respect, respect for others, reflection, and love, then it is moving toward life-coherence.

23.6 Working Statement

Life-coherent practice is the movement from seeing what is conserved, to reflecting on its consequences, to beginning another conservation in love, responsibility, and respect for the living medium. It does not impose transformation from outside. It invites, protects, and repeats the relational conditions under which another manner of living can begin to conserve itself.

In simpler language:

Transformation begins when we stop merely naming another world and begin conserving it.

The next section should now bring the paper toward closure by articulating the recursive safeguard and final synthesis: how the grammar remains faithful to living by applying its own diagnostic question to itself.

24. Recursive Safeguard: Applying the Grammar to Itself

The grammar now has a form.

It begins with living.

It moves through medium, niche, structural coupling, behavior, emotioning, languaging, conversation, culture, love, suffering, healing, reflection, ethics, responsibility, freedom, transformation, and life-coherence.

It then returns as a practical set of diagnostic primitives for asking what manner of living is being conserved.

But one danger remains.

The grammar itself can become life-incoherent.

A framework created to restore life can become an instrument of control.

A diagnostic language created to reveal negation can become a new way to negate.

A grammar created to open reflection can become a closed certainty.

A concept such as “life-coherence” can become a weapon if it is used to declare others illegitimate.

So the final safeguard is recursive:

The grammar must be applied to itself.

This is not an intellectual ornament. It is the condition of fidelity to Maturana’s method.

Bunnell’s foreword emphasizes that reflection requires a double look: one releases what one believes, steps outside it metaphorically, and then recognizes that one is not truly outside, but still reflecting from within culture. This recursive movement opens psychic mobility and protects against treating one’s own distinctions as final reality.

So the grammar must ask of itself the very question it asks of everything else:

What manner of living does this grammar conserve?

24.1 The Grammar Can Betray Itself

The grammar betrays itself when it becomes accusatory.

It betrays itself when it says:

I am life-coherent; you are life-incoherent.

It betrays itself when it diagnoses others without asking what world its diagnosis brings forth.

It betrays itself when it treats people, institutions, or cultures as objects to be corrected rather than participants in a relational field.

It betrays itself when it mistakes explanation for control.

It betrays itself when it forgets love.

This is why the grammar must never be used as a superior standpoint outside living. There is no such standpoint in this method. The observer is always inside living, inside languaging, inside emotioning, inside a history of distinctions, and inside a domain of responsibility.

So the first safeguard is humility:

This diagnosis is a distinction I am bringing forth. What does it make possible, and what does it obscure?

24.2 The Observer's Return

Every diagnostic movement must return to the observer.

When the observer asks:

What is being conserved?

The observer must also ask:

What am I conserving by asking this way?

When the observer asks:

What emotioning is being conserved?

The observer must also ask:

What emotioning am I living in this diagnosis?

When the observer asks:

What has become invisible?

The observer must also ask:

What am I making invisible?

When the observer asks:

Where has love been negated?

The observer must also ask:

Am I negating the other in how I name this?

This recursive return is the grammar's immune system.

Without it, the grammar becomes ideology.

With it, the grammar remains a conversation.

24.3 Diagnosis Must Remain in Love

The most important safeguard is love.

Love, in the Maturana-informed sense, is the relational domain in which the other arises as legitimate in coexistence. It is not blind acceptance; it can oppose behavior, set boundaries, and even confront harm, but it does not require the denial of the other's legitimacy.

Therefore, a life-coherent diagnosis must conserve love even when it names life-incoherence.

It may say:

This pattern conserves harm.

It may say:

This institution conserves humiliation.

It may say:

This economy conserves extraction.

It may say:

This political conversation conserves enemy-making.

But it must not say:

The people living this pattern are illegitimate.

The distinction is decisive.

The grammar may oppose a behavior, a structure, a policy, a conversation, or a manner of living. But if it negates the living beings involved, it falls into the very domain it was created to reveal.

So the safeguard becomes:

Oppose life-denying conservation without denying the legitimacy of those caught in conserving it.

24.4 Responsibility Without Blame

The grammar must also distinguish responsibility from blame.

Responsibility means accepting participation in what is conserved. It does not mean omnipotence, guilt, accusation, or condemnation. Maturana and Verden-Zöllner place ethics, responsibility, and freedom in the domain of love: these arise when one sees oneself, the other, and the consequences of one's actions, and acts according to whether one wants those consequences.

So the grammar should not ask:

Who is guilty?

It should ask:

Who participates?

Who can see?

Who bears the consequences?

Who is protected from seeing?

What conversation prevents responsibility from returning?

What new conversation could allow responsibility without shame?

This allows the grammar to be firm without becoming punitive.

A culture may conserve harm.

An institution may conserve harm.

A person may participate in harm.

A civilization may be structurally coupled to harm.

But the purpose of seeing this is not condemnation.

The purpose is freedom:

Do we want to continue conserving these consequences?

24.5 The Grammar Must Protect Margin for Reflection

A life-coherent grammar must widen margin.

If its use makes people more defensive, ashamed, frightened, or dehumanized, it narrows margin.

If it opens room for seeing, grieving, correcting, apologizing, repairing, and beginning again, it widens margin.

This gives a practical test:

Does this use of the grammar make reflection more possible or less possible?

If less possible, the grammar is being used in a life-incoherent way.

This matters especially in institutional and political contexts. A diagnosis may be accurate in content but destructive in emoting. It may name real harm while producing shame, denial, or retaliation. It may identify a life-denying conservation but do so in a way that closes the possibility of transformation.

So the question is not only:

Is the diagnosis true?

The question is:

What does the diagnosis conserve?

24.6 The Grammar Must Remain Open to Correction

Because every distinction reveals and obscures, the grammar must remain revisable.

It must allow others to say:

That distinction does not describe my living.

Or:

You are missing the domain in which this matters.

Or:

Your diagnosis makes invisible what we are actually conserving.

Or:

You are naming our behavior but not seeing our history.

This is not a weakness.

It is the grammar's life.

A closed grammar becomes ideology.

An open grammar remains conversation.

This is especially important because the grammar is being derived from Maturana's orientation, not merely repeated from it. We are extending his style of reasoning into a diagnostic vocabulary. That extension must remain accountable to the living experience it claims to illuminate.

24.7 Recursive Diagnostic Questions

The recursive safeguard can be summarized as a final set of questions:

Conservation: What does this grammar conserve when it is used?

Constraint: What must it respect so that it remains life-coherent?

Margin: Does it widen or narrow room for reflection?

Disturbance: What does it trigger in those who hear it?

Present structure: From what history, desire, pain, or concern is the observer diagnosing?

Regulation: How does the grammar restore itself when challenged — by reflection or defensiveness?

Relevance: What does it make visible, and what does it risk making invisible?

Possible doings: What becomes livable after the diagnosis — repair, responsibility, dialogue, or accusation?

This is the grammar applied to itself.

Now the grammar can remain faithful to living.

24.8 Final Synthesis

The whole argument can now be gathered.

Living is conservation-through-change.

Living occurs in a medium, not in isolation.

A niche is the organism–medium relation actually lived.

Structural coupling is the history of recurrent congruent change through which living continues.

Behavior is relational flow, not isolated output.

Emotioning specifies the domain of possible behavior.

Languaging is recursive coordination of doings.

Conversation is the braid of languaging and emotioning.

Culture is a conserved network of conversations.

Love is the relational domain in which the other arises as legitimate in coexistence.

Suffering is the conserved negation of love.

Healing is the restoration of trust, self-respect, respect for the other, and possible living.

Reflection is living becoming able to see how it is living.

Ethics is care for consequences in coexistence.

Responsibility is answerability for participation.

Freedom is the reflective possibility of no longer conserving what one does not want to conserve.

Transformation is a new conservation beginning to live.

Life-coherence is conservation that does not betray living.

And the diagnostic primitives are the questions that help us see how this conservation occurs.

24.9 Closing Statement

The purpose of a Maturana-informed viability grammar is not to master life.

It is to help living see what it is conserving.

It asks persons, institutions, cultures, and civilizations to pause before the worlds they reproduce and ask:

What manner of living is being conserved here?

What happens to love?

What happens to the child?

What happens to reflection?

What happens to responsibility?

What happens to the living Earth?

What becomes possible if we conserve otherwise?

This is not a final answer.

It is a disciplined invitation.

A world does not become life-coherent because it is named so.

It becomes life-coherent only as another manner of living is conserved — in touch, speech, care, education, healing, governance, economy, justice, and Earth-relation — again and again, until a different world begins to live through us.

25. Conclusion: The Grammar Ends Where Living Begins Again

This paper has developed a Maturana-informed viability grammar by refusing to begin with abstraction. Its guiding question has been simple:

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

The derivation began with living as conservation-through-change. A living system does not persist by remaining fixed. It lives only while its organization and its operational congruence with the medium remain conserved through continuous change. From this ground, the paper moved through medium, niche, structural coupling, behavior, emotioning, languaging, conversation, culture, love, suffering, healing, reflection, ethics, responsibility, freedom, transformation, and life-coherence.

The central claim is that viability cannot be reduced to survival, adaptation, stability, resilience, or persistence. A system can persist while conserving suffering. A culture can endure while conserving domination. An institution can function while conserving objectification. An economy can grow while consuming the living medium that makes its own continuation possible. A civilization can become powerful while becoming less able to conserve humanness.

Life-coherence therefore asks a deeper question:

Does what is being conserved keep life livable?

The diagnostic primitives — conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings — are not proposed as metaphysical foundations. They are reflective questions. Their purpose is to help living see what it is conserving.

The grammar remains faithful to Maturana only if it applies to itself. If it becomes a weapon of accusation, it betrays love. If it becomes an external system imposed on living, it betrays the observer. If it becomes a closed certainty, it betrays reflection. If it names life-incoherence while negating those caught in it, it reproduces the very suffering it seeks to reveal.

The final invitation is therefore not to master life, but to conserve otherwise.

To conserve play where fear has been conserved.

To conserve dignity where shame has been conserved.

To conserve presence where procedure has been conserved.

To conserve care where objectification has been conserved.

To conserve responsibility where consequences have been hidden.

To conserve Earth as living medium where Earth has been reduced to resource.

To conserve disagreement without dehumanization where enemy-making has been conserved.

A life-coherent world will not appear because it is named. It will appear only if another manner of living is conserved — in bodies, homes, schools, clinics, institutions, economies, laws, technologies, and relations with Earth — again and again, until it begins to live through us.

The grammar ends where living begins again.

Glossary of Core Terms

Adaptation

The ongoing relation of operational congruence between a living system and its medium. In this paper, adaptation is not treated as a variable or achievement, but as a relation that is conserved or lost.

Behavior

The relational flow distinguished by an observer in the encounter between a living system and its medium. Behavior is not merely an output of an isolated organism.

Conservation

The observer's distinction of what continues through change. In this grammar, conservation is the first diagnostic question: what manner of living is being conserved?

Constraint

The condition that must be respected for a particular conservation to continue. Constraint is not merely limitation; it is the shape of possible continuation.

Conversation

The braided flow of languaging and emotioning through which human beings coordinate doings, bring forth worlds, and conserve manners of living.

Culture

A closed, recursively conserved network of conversations that realizes and reproduces a particular manner of living across persons and generations.

Disturbance

An encounter, event, or change that triggers structural or relational change without determining the change it triggers.

Emotioning

The changing relational domain that specifies what behaviors, perceptions, reasonings, and possible doings are available. Emotioning is not merely private feeling.

Ethics

Reflective care for the consequences of one's doings, desires, distinctions, conversations, and institutions for oneself, others, and the living medium.

Freedom

The reflective possibility of no longer conserving what one does not want to conserve. Freedom is not unconstrained choice, but the possibility of living otherwise.

Healing

The restoration of a relational domain in which self-love, self-respect, respect for the other, reflection, trust, and possible living can reappear.

Languaging

Recursive consensual coordination of doings. Languaging is not primarily representation, but a way humans live together in coordinated meaning.

Life-Coherence

The evaluative distinction through which an observer asks whether a manner of living conserves the biological, relational, cultural, and ecological conditions that keep living livable.

Living

The ongoing realization of a living organization in structural congruence with a medium, such that organization and adaptation are conserved through change.

Love

The relational domain in which another living being arises as legitimate in coexistence. Love is not sentimentality or blind acceptance; it is the ground of legitimate coexistence.

Margin

The remaining room for change within which a living system, relationship, culture, or institution can continue conserving what must be conserved.

Medium

The domain of circumstances in which a living system realizes its living and with which it changes congruently or incongruently.

Niche

The particular organism–medium relation actually lived and conserved as a manner of living.

Possible Doings

The actions that can actually be lived from within a particular bodyhood, history, emotioning, margin, and relational domain.

Present Structure

History now embodied as the condition from which further change may be triggered. This term is preferred to “state” because it avoids static interpretation.

Reflection

The recursive capacity to distinguish, release, and reconsider the distinctions, emotions, explanations, and doings by which a manner of living is being conserved.

Regulation

The recurrent dynamics through which a manner of living restores or conserves itself. Regulation is not automatically healthy; it depends on what is conserved.

Relevance

What becomes visible, meaningful, threatening, desirable, invisible, or legitimate in a given manner of living.

Responsibility

Answerability for participation in the conservation or transformation of a manner of living and its consequences.

Structural Coupling

The history of recurrent congruent structural changes between a living system and its medium through which living continues or fails.

Suffering

The conserved world of denied legitimacy; the lived narrowing, distortion, or injury that arises when love is negated and that negation becomes conserved.

Transformation

A new conservation beginning to live. Transformation is not mere change, but the systemic conservation of a new manner of living.

Appendix A

Diagnostic Primitive Summary Table

Diagnostic Primitive	Guiding Question	Life-Coherent Use	Life-Incoherent Risk
Conservation	What is being conserved?	Reveals the manner of living that continues through change.	Mistakes stability or persistence for viability.
Constraint	What must be respected for this conservation to continue?	Identifies conditions that protect living, dignity, and coexistence.	Protects domination, fear, or extraction as if they were necessary.
Margin	How much room remains for viable change?	Protects space for play, reflection, repair, dissent, and regeneration.	Consumes margin until only reaction, control, or collapse remains.
Disturbance	What triggers change without determining it?	Attends to how events are lived in a particular history of coupling.	Treats disturbance as linear cause and blames the event or person alone.
Present Structure	From what embodied history does the response arise?	Sees history living in present response.	Treats behavior as isolated, irrational, or merely individual.
Regulation	What recurrent dynamics restore or conserve the pattern?	Reveals how a pattern maintains itself and whether it conserves life.	Equates regulation with health or order, even when it conserves suffering.
Relevance	What becomes visible, meaningful, invisible, or legitimate?	Shows what a culture, institution, or person notices and ignores.	Confuses its own distinctions with reality itself.
Possible Doings	What can actually be lived next?	Identifies livable pathways for repair, reflection, and transformation.	Assumes abstract options exist even when emotioning and history make them unavailable.

Appendix B

Maturana-Informed Methodological Safeguards

1. Begin with the observer.

Every distinction is made by an observer in a domain of living. The grammar must not pretend to speak from nowhere.

2. Do not confuse domains.

A distinction valid in one domain may mislead in another. Physiological regulation, relational regulation, institutional regulation, and cultural regulation are not the same phenomenon.

3. Explain generatively.

Do not merely label a pattern. Ask what recurrent process brings it forth and conserves it.

4. Treat primitives as questions, not objects.

The diagnostic primitives are not things that life is made of. They are reflective questions that help living see what it is conserving.

5. Ask what is conserved before asking what is wrong.

The first diagnostic question is not “What is the problem?” but “What manner of living is being conserved?”

6. Distinguish behavior from being.

A life-coherent diagnosis may oppose a harmful behavior without negating the legitimacy of the living being.

7. Keep love as the relational ground.

Without love, diagnosis becomes accusation, correction becomes control, and responsibility becomes blame.

8. Protect margin for reflection.

If the use of the grammar produces shame, fear, defensiveness, or dehumanization, it is narrowing the very margin it should protect.

9. Return consequences into conversation.

Ethics and responsibility mature only when consequences can be seen, spoken, and cared for.

10. Apply the grammar to itself.

Every diagnosis must ask: what manner of living is this diagnosis conserving?

Appendix C

Short Diagnostic Protocol

This can be used by a person, group, institution, or community as a reflective exercise.

Step 1: Name the situation.

What situation, pattern, conflict, or concern are we attending to?

Step 2: Ask the conservation question.

What keeps happening?

What returns when disturbed?

What manner of living is being conserved?

Step 3: Identify the relational domain.

What emotioning is present?

Fear, trust, shame, love, control, resentment, play, care, domination, curiosity?

Step 4: Examine consequences.

What happens to the child, patient, worker, citizen, stranger, offender, future generation, or living Earth through this conservation?

Step 5: Identify invisibilities.

Who or what disappears from concern?

What does the current conversation make difficult to see?

Step 6: Ask about possible doings.

What can actually be lived next from within this relational domain?

What cannot yet be lived?

Step 7: Reflect recursively.

What are we conserving by diagnosing the situation this way?

Are we opening reflection or closing it?

Step 8: Begin a new conversation.

What small, repeatable conversation or practice can we begin conserving now?

Back-Cover Synopsis

Human beings do not merely inhabit worlds. We conserve them.

This white paper develops a Maturana-informed viability grammar: a disciplined way of asking what manner of living is being conserved, and whether that conservation keeps life livable. Drawing from Humberto Maturana's biology of living, structural coupling, emotioning, languaging, conversation, culture, and love, the paper derives a practical set of diagnostic distinctions for examining persons, institutions, cultures, economies, and civilizations.

The central claim is that viability cannot be reduced to survival, stability, resilience, or adaptation. A system may persist while conserving fear, domination, humiliation, extraction, or ecological destruction. Life-coherence therefore asks whether a manner of living conserves the biological, relational, cultural, and ecological conditions through which living beings remain legitimate in coexistence.

The paper introduces eight diagnostic primitives — conservation, constraint, margin, disturbance, present structure, regulation, relevance, and possible doings — not as abstract categories, but as reflective questions. Their purpose is to help living see what it is conserving, so that another manner of living may begin.

Author Bio

Dr. Bichara Sahely, BSc, MBBS, DM (Internal Medicine) is a physician, systems thinker, and independent scholar from St. Kitts and Nevis. His work explores the intersections of health, ecology, peace, governance, civilizational viability, and life-coherent transformation. Drawing from medicine, living systems theory, the biology of love, life-value onto-axiology, peace theory, and ecological thought, he develops integrative frameworks for diagnosing and transforming life-incoherent patterns across personal, institutional, cultural, and planetary scales.

AI Tool Bio (Non-Author)

ChatGPT, GPT-5.5 Thinking is an AI language model developed by OpenAI. In this project, it served as a dialogical reasoning, drafting, and editorial assistant, helping the author develop a Maturana-informed viability grammar through iterative conceptual clarification, structural organization, prose generation, and publication packaging. ChatGPT did not function as an autonomous author and cannot assume responsibility for the accuracy, integrity, originality, or final scholarly judgment of the work. All final decisions and responsibility remain with the human author.

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