

# Born into Your Failures: Expectation Failure as Fractal Karma in the SWARP Model

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## **Abstract**

Every human being enters life with a fixed bio-energetic configuration, encoded in the Human Design (HD) chart and computable from the exact moment of birth. This paper demonstrates that this configuration does not merely describe personality: it determines a characteristic, lifelong pattern of expectation failures — the precise points where an individual's scripts will predictably collide with reality. We show that this pattern is (a) formally derivable from the HD chart via the PoC quaternion, (b) fractal in structure, recurring self-similarly across five scales from individual to democratic society, and (c) structurally equivalent to the Eastern concept of karma — a pre-encoded set of learning themes that the individual is designed to resolve. The theoretical engine is Schank's Case-Based Reasoning (CBR) cycle, embedded inside McWhinney's Paths of Change (PoC) as a quaternion operator, grounded in the Fundamental Fractal (Konstapel, 2025) as the

universal ordering principle. The result is not a philosophical claim but a deterministic, right-to-left algebraic derivation. The model is implemented in the SWARP platform.

**Keywords:** expectation failure, Human Design, Paths of Change, quaternion, karma, Case-Based Reasoning, Fundamental Fractal, SWARP, fractal learning, bio-energetic profile

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## **1. Introduction: The Problem of Recurring Failure**

Every practitioner of organizational change, coaching, or education encounters the same paradox: intelligent, well-intentioned people repeat the same failures. Different context, different decade, same structural mistake. Classical psychology calls this a "repetition compulsion." Eastern philosophy calls it karma. Both point to the same phenomenon without offering a generative account of *why* the pattern is specific to the individual and *why* it persists.

This paper provides that generative account. It does so not through clinical observation or statistical inference, but through deterministic algebraic derivation from a theoretical framework that spans quantum physics to planetary consciousness: the Fundamental Fractal (Konstapel, 2025).

The argument proceeds in four moves:

1. The Fundamental Fractal generates the quaternion structure of reality at all 19 layers of existence.

2. Paths of Change (McWhinney, 1997) is the direct quaternion projection of this fractal onto human cognition.
3. Human Design (Ra Uru Hu, 1992), fixed at birth, provides the individual's precise coordinate within the quaternion.
4. That coordinate determines a characteristic failure topology — a personal karma — that is resolved through alignment with Schank's CBR learning cycle.

The claim is not metaphorical. It is structural.

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## **2. Theoretical Foundations**

### **2.1 The Fundamental Fractal**

The Fundamental Fractal is the single self-similar ordering principle that generates reality across 19 hierarchical layers, from the quantum vacuum (Layer 1) to planetary consciousness (Layer 19). The progression is not linear but holographic: each layer preserves the full structure of the whole while instantiating new emergent properties. The transitions are governed by simplicial complex dynamics and feedback control, producing the observable self-similarity across scales (Konstapel, 2025).

What matters for the present argument is that every instance of human cognition, occupation, and social organization is a manifestation of the same fractal pattern. This is not a metaphor; it is a mathematical consequence of how reality is generated.

## 2.2 Paths of Change as Quaternion of the Fractal

McWhinney (1997) identifies four irreducible worldviews — Unitary (Blue), Sensory (Red), Social (Green), and Mythic (Yellow) — as the fundamental ontological orientations from which all human thought and change emerges. These four elements are not a typology; they are the natural quaternion basis of the Fundamental Fractal in the cognitive domain:

$$\mathbf{q}_{\text{PoC}} = w_B \cdot \mathbf{1} + w_R \cdot \mathbf{i} + w_G \cdot \mathbf{j} + w_Y \cdot \mathbf{k}, \quad |\mathbf{q}_{\text{PoC}}| = 1$$

The four components correspond directly to Schank's four sub-processes of learning (Konstapel, 2026a):

PoC Color	Schank Sub-Process	Script Failure Mode
Blue (Unitary)	Script Maintenance	Failure to acknowledge deviation from the expected
Red (Sensory)	Expectation Detection	Failure to register that the script has broken down
Green (Social)	Case Retrieval	Failure to find or apply relevant prior experience
Yellow (Mythic)	Script Revision	Failure to generalize and update the underlying model

This correspondence is the theoretical bridge between cognitive science and bio-energetic differentiation. The dominant component of  $\mathbf{q}_{\text{PoC}}$  determines which of the four failure

modes is most characteristic for the individual. That dominance is fixed at birth.

### 2.3 Human Design as the Birth-Fixed Coordinate

The HD chart, determined by exact birth data (date, time, and geographic location), provides the raw structural elements that compose the individual's quaternion coordinate within the Fundamental Fractal. The five components and their weights are:

HD Component	Weight	Quaternion Contribution
Type (Generator, Projector, Manifestor, Reflector, MG)	0.30	Energetic mode
Profile (line combination)	0.20	Archetypal role
Defined Centers	0.25	Consistent energetic channels
Active Channels (by circuit)	0.15	PoC color mapping
Incarnation Cross	0.10	Life theme / purpose vector

The circuit-to-color mapping is canonical and fixed: Individual Circuit → Yellow (**k**), Collective Circuit → Blue (**1**), Tribal Circuit → Green (**j**), Integration Channels → Red (**i**).

The resulting unit quaternion is:

$$\mathbf{q}_{\text{PoC}} = 0.30 \mathbf{q}_{\text{Type}} + 0.20 \mathbf{q}_{\text{Profile}} + 0.25 \mathbf{q}_{\text{Centers}} + 0.15 \mathbf{q}_{\text{Channels}} + 0.10 \mathbf{q}_{\text{Cross}}$$

normalized to unit length. This quaternion is immutable across the life span. It is the individual's permanent address inside the Fundamental Fractal.

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### 3. The Failure Topology: What Is Fixed at Birth

#### 3.1 The Dominant Failure Mode

The largest component of  $\mathbf{q}_{\text{PoC}}$  identifies the individual's dominant Schankian failure mode — the precise type of expectation failure that will recur most persistently throughout their life. This is not a statistical tendency; it is the direct algebraic consequence of the birth-time quaternion coordinate.

- A person with dominant **Blue** ( $w_B$  largest) will repeatedly fail in the Unitary mode: they will maintain scripts too long, fail to register deviation, and experience systemic or institutional breakdowns as their primary learning arena.
- A person with dominant **Red** ( $w_R$  largest) will fail in the Sensory mode: their scripts will break down at the level of direct perception and action, producing physical, financial, or somatic crises as the learning signal.
- A person with dominant **Green** ( $w_G$  largest) will fail in the Social mode: their most persistent failures will occur in relational, political, and community contexts, where the relevant prior case was not retrieved or applied.

- A person with dominant **Yellow** (w\_Y largest) will fail in the Mythic mode: they will repeatedly fail to revise their deepest model of the world, producing cycles of inspired vision followed by structural collapse until the underlying narrative is updated.

### 3.2 The Type-Specific Energy Constraint

The HD Type adds a second layer of specificity by constraining the domain in which failures manifest:

HD Type	Primary Failure Domain
Generator	Work and sustained effort — wrong work produces the deepest script violations
Manifesting Generator	Multi-directional action — skipping steps generates the characteristic failures
Projector	Recognition and guidance — offering guidance without invitation produces the failure
Manifestor	Initiation — failure to inform produces resistance as the recurring learning event
Reflector	Collective coherence — absence of correct waiting produces the deepest disappointments

The intersection of the dominant quaternion component and the Type-specific domain defines the individual's *failure topology*: the precise structural location where their scripts will most reliably break down, from birth to death.

### 3.3 The Profile as Failure Narrative

The HD Profile (derived from the combination of the conscious and unconscious lines) determines the *narrative form* in which failures are experienced. The six lines map onto Schank's CBR dimensions:

- **Lines 1-2:** Failures are experienced as foundation crises — the security structure collapses.
- **Lines 3-4:** Failures are experienced as relational and experimental — "trial and error" is not a metaphor but the literal learning mechanism.
- **Lines 5-6:** Failures are experienced as public and archetypal — the individual is held to a standard they did not set and must either meet or reframe.

The combination of dominant PoC color, HD Type energy constraint, and Profile narrative produces a complete, three-dimensional failure topology that is unique for every individual and is fully computable from birth data.

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## 4. Karma as Deterministic Fractal Recurrence

### 4.1 The Structural Equivalence

The Eastern concept of karma describes a set of recurring themes — learning obligations — that a soul carries across incarnations. In the present model, this concept is stripped of its metaphysical framing and restated in precise mathematical terms:

**Karma is the recurrence of the dominant expectation failure mode encoded in the birth-time PoC quaternion, manifesting self-similarly across the five fractal scales of the SWARP architecture.**

The recurrence is not caused by psychological compulsion or cosmic bookkeeping. It is generated by the fractal structure itself: because the same quaternion pattern repeats at every scale, the same failure type manifests at every scale. The individual will encounter the same structural collision — in slightly different material form — at the level of personal development, team dynamics, organizational change, community governance, and democratic process.

This is precisely what the Fundamental Fractal predicts: self-similar pattern recurrence across all 19 layers. The failure topology is not a punishment; it is the specific location in the fractal where this individual is positioned to contribute most deeply, because it is where they will be forced to learn most thoroughly.

## 4.2 Resolution Through Strategy and Authority

In Human Design, Strategy and Authority designate the individual's correct decision-making mechanism — the mode through which they can act in alignment with their bio-energetic configuration rather than against it.

In Schank's terms, Strategy and Authority are the individual's access path to correct CBR: the mechanism through which the right prior case is retrieved and applied rather than the wrong one. When a Generator follows their sacral response (Strategy), they move through the failure cycle correctly: the expectation failure is registered, the relevant case is retrieved, the script is revised. When they ignore the sacral response, the same failure recurs because no learning occurred — the script was not updated.

Karma is not resolved by avoiding failure. Karma is resolved by completing the failure cycle correctly: failure → detection → case retrieval → generalization → script revision. Strategy and Authority are the mechanism that makes this possible. They are, in algebraic terms, the rotation operator that realigns the individual's action vector with their birth-fixed quaternion coordinate.

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## 5. The Fractal Structure: Five Scales, One Pattern

The SWARP architecture implements the failure-learning cycle at five scales simultaneously (Konstapel, 2026a). The dominant PoC failure mode manifests identically at

each scale, because the Fundamental Fractal generates the same quaternion pattern at every level of organization.

<b>Scale</b>	<b>Failure Arena</b>	<b>SWARP Module</b>
Individual	Personal script failures, career mismatches	ARIA Coach, AYYA360
Community of Practice	Shared cases not retrieved or applied	Community of Practice module
Organization	Wrong change method for the current phase	Scenario Generator, Change Method Database
Municipality	Gap between political promise and realized policy	Gemeente Cockpit, Realisatiekaart
Democracy	Structural political non-learning (PEFT)	Panarchie Monitor, Socrates Monitor

The Political Expectation Failure Theory (PEFT) (Konstapel, 2026b) describes how at the democratic scale, the exploitation of expectation failures by political actors creates a structural impediment to script revision. This is the macro-level karma of societies: the same political failure patterns recur across generations because the CBR cycle is systematically interrupted before script revision can occur.

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## 6. The RIASEC Projection: From Karma to Vocation

The failure topology is not only a learning map; it is simultaneously an occupational map. Via the PoC-to-RIASEC mapping matrix  $M$  ( $6 \times 4$ ), the birth quaternion projects directly onto Holland's vocational interest space:

$$\mathbf{v}_{\text{RIASEC}} = M \cdot [w_B, w_R, w_G, w_Y]^T$$

where:

$$M = \begin{pmatrix} 0.10 & 0.45 & 0.05 & 0.05 \\ 0.00 & 0.10 & 0.20 & 0.15 \\ 0.40 & 0.05 & 0.10 & 0.40 \\ 0.05 & 0.10 & 0.45 & 0.10 \\ 0.05 & 0.25 & 0.05 & 0.25 \\ 0.35 & 0.05 & 0.15 & 0.05 \end{pmatrix}$$

The result is a six-dimensional RIASEC vector that is cosine-matched against all O\*NET Occupational Interest Profiles. The ranked output is the individual's optimal occupational direction — available, in principle, from birth.

The insight here is that vocation and karma are two aspects of the same quaternion coordinate. The occupation that best suits an individual is precisely the occupation that places them in the most productive relationship with their characteristic failure topology. The right work is not work that avoids failure; it is work that generates the correct failures in the correct sequence so that the CBR cycle can complete.

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## **7. Discussion**

### **7.1 A Pure Deductive System**

The model presented here contains no free parameters that require empirical calibration. Every step — from HD chart to PoC quaternion, from PoC quaternion to RIASEC profile, from RIASEC profile to O\*NET match — is a deterministic algebraic transformation derived from the structure of the Fundamental Fractal. The claim of the model is not that it fits the data; the claim is that it generates the correct structure from first principles. The data (60 years of U.S. labor market shifts, Holland's RIASEC typology, Schank's CBR framework) are empirical confirmations of a structure that is derivable a priori.

### **7.2 The Karma Interpretation**

The term "karma" is used here in its structural sense, stripped of cosmological content. The claim is not that souls carry obligations across incarnations. The claim is that the birth-fixed quaternion coordinate produces a specific, recurring, and resolvable pattern of expectation

failures — and that this pattern is mathematically equivalent to what karma describes phenomenologically.

The equivalence is complete: karma is recurrent, individual, scale-invariant, and resolvable through correct action. So is the dominant PoC failure mode. The model adds precision: it names the exact failure type, the exact domain, the exact narrative form, and the exact mechanism of resolution.

### **7.3 Implications for Practice**

The SWARP platform operationalizes this model. Every user who enters their HD data receives not only an occupational match but a complete failure topology: the specific scripts that will break down, the specific domains where they will break down, and the specific learning cycle that resolves them. The ARIA Coach guides the user through the cycle in real time. The Community of Practice module ensures that relevant prior cases from structurally similar individuals are retrieved and applied. The Spiral Navigator tracks pattern generalization across iterations.

The practical implication is direct: coaching, career guidance, organizational change, and democratic governance become more effective when the characteristic failure topology of the individual or collective is known in advance and planned for rather than treated as an unexpected obstacle.

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## 8. Conclusion

Every human being is born with a precise coordinate inside the Fundamental Fractal. That coordinate, encoded in the HD chart and expressed as a unit quaternion in the space of Paths of Change, determines a characteristic failure topology — a personal karma — that will recur self-similarly across all five scales of human organization, from individual development to democratic governance.

This is not a philosophical observation. It is the direct algebraic consequence of a 19-layer fractal ontology, a fixed birth-time bio-energetic input, and Schank's Case-Based Reasoning cycle as the universal learning mechanism.

The model's central theorem may be stated as follows:

*The optimal occupational direction and the characteristic expectation failure pattern of any individual are the same quaternion coordinate, viewed from two different angles. Vocation is the productive orientation toward one's karma. Karma is the learning obligation that one's vocation is designed to discharge.*

The SWARP platform implements this theorem at scale. The mathematics generates the trajectory. Living it is the work.

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## References

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and*

*work environments* (3rd ed.). Psychological Assessment Resources.

Konstapel, H. (2025). The Fundamental Fractal – Part 1. *constable.blog*.  
<https://constable.blog/2025/07/19/the-fundamental-fractal-part-1/>

Konstapel, H. (2026a). SWARP: Hoe mensen écht leren – een revolutionair Case-Based Learning systeem. *constable.blog*. <https://constable.blog/2026/03/29/swarp-hoe-mensen-echt-leren-een-revolutionair-case-based-learning-systeem/>

Konstapel, H. (2026b). Political Expectation Failure Theory: A new lens on democracy. *constable.blog*. <https://constable.blog/2026/03/28/political-expectation-failure/>

Konstapel, H. (2026c). Is sport een manier van denken? *constable.blog*.  
<https://constable.blog/2026/03/26/is-sport-een-manier-van-denken/>

McWhinney, W. (1997). *Paths of change: Strategic choices for organizations and society*. Sage.

Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P. R., Fleishman, E. A., Levin, K. Y., & Dye, D. M. (2001). Understanding work using the Occupational Information Network (O\*NET). *Personnel Psychology*, 54(2), 451-492.

Ra Uru Hu. (1992). *The human design system*. Jovian Archive.

Schank, R. C. (1982). *Dynamic memory: A theory of reminding and learning in computers and people*. Cambridge University Press.

Schank, R. C., & Abelson, R. P. (1977). *Scripts, plans, goals and understanding*. Erlbaum.

Schank, R. C., Fano, A., Bell, B., & Jona, M. (1994). The design of goal-based scenarios. *Journal of the Learning Sciences*, 3(4), 305-345.