

# CONSCIOUSNESS

$$\alpha \cdot \Psi(t) = 1$$

Raw Findings from The Moonth Framework

*Based on phenomenological observation, biomarker validation, and mathematical formalization*

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# 1. WHAT WAS FOUND

Consciousness has temporal structure. It is not continuous, not random, not solely reactive to environment. It moves in cycles. These cycles are measurable, predictable, and anchored to a constant from fundamental physics.

The discovery was not theoretical. It came from sustained self-observation under conditions of reduced stimulation: silence, fasting, minimal input. Over four years of systematic tracking, a pattern emerged that was too consistent to be noise and too precise to be coincidence.

## 1.1 The Core Pattern

Human consciousness operates in 29-day cycles. Each cycle contains five distinct phases, each lasting approximately 137 hours. The phases occur in a fixed, irreversible sequence:

| Phase          | Duration   | Character  |
|----------------|------------|--|
| 1. Opening     | ~137 hours | Field expands. Attention diffuse, receptive. Potential state.      |
| 2. Rise        | ~137 hours | Direction crystallizes. Energy gathers. Momentum builds.           |
| 3. Expansion   | ~137 hours | Peak coherence. Maximum flow. System at full capacity.             |
| 4. Descent     | ~137 hours | Energy falls. Effort increases. System withdraws.                  |
| 5. Integration | ~137 hours | Processing, consolidation, regeneration. Echo of the entire cycle. |

Total:  $5 \times 137h = 685h + \sim 11h$  buffer transitions =  $696h = 29$  days.

The sequence cannot be skipped, reversed, or compressed. It is invariant. What varies between individuals is the expression — how each phase manifests physiologically and behaviorally — not the timing.

## 1.2 The Number

137 is not arbitrary. In physics, the fine structure constant  $\alpha \approx 1/137.036$  governs electromagnetic interactions. It determines how atoms hold together, how light interacts with matter, the structure of the periodic table. It combines electromagnetism, quantum mechanics, and special relativity into a single dimensionless number. Feynman called it one of the greatest mysteries of physics. Nobody knows why it has this value.

The average phase duration observed through phenomenological tracking: 137.14 hours. The inverse of  $\alpha$ : 137.036. Precision of match: 99.93%.

The same constant that governs atomic structure appears to govern the temporal structure of consciousness.

## 1.3 The Equation

$$\alpha \cdot \Psi(t) = 1$$

Where  $\alpha$  is the fine structure constant ( $\sim 1/137$ ) and  $\Psi(t)$  is the phase quantum of consciousness (137 hours). The product is unity. Matter and consciousness as reciprocals of the same structure.

This is the central claim: not metaphor, not analogy. A structural relationship. The constant that determines how matter organizes at atomic scale also determines how consciousness organizes at experiential scale. If this holds, they are not separate domains. They are two expressions of the same underlying architecture, viewed from different scales.

## 2. EMPIRICAL VALIDATION

A pattern perceived is not a pattern proven. The framework was subjected to empirical testing using wearable device biomarker data from five participants.

### 2.1 Study Parameters

| Parameter                | Value  |
|--------------------------|--|
| Participants             | 5 (3 male, 2 female)                                   |
| Total data points        | ~395 person-days                                       |
| Complete cycles analyzed | ~13.6  |
| Biomarkers tracked       | Sleep score/duration, Stress, Heart Rate (resting/max) |
| Data source              | Garmin wearable devices                                |
| Analysis period          | August – December 2025                                 |

### 2.2 Results

| Hypothesis                       | Prediction                            | Result                              |
|----------------------------------|---------------------------------------|-------------------------------------|
| H1: Period ~29.5 days            | 5 Ln + 11h buffer                     | CONFIRMED (avg 29.8d, 99% accuracy) |
| H2: Phase differentiation        | Distinct phase profiles               | CONFIRMED (5/5 participants)        |
| H3: Sex expression               | Male→Expansion,<br>Female→Integration | PARTIAL (60% match)                 |
| H4: Expansion = peak performance | Optimal external output               | CONFIRMED                           |
| H5: Integration = inner work     | Active processing, high load          | CONFIRMED (4/5)                     |

### 2.3 Key Findings

#### Creator's Data (Strongest Signal)

Expansion phase: lowest stress (17.3) and lowest maximum heart rate (125). Coefficient of variation: 34% (strong signal). This is expected — minimal stimulation conditions produce the clearest rhythm detection.

#### 29-Day Periodicity

Confirmed across all participants. Empirical average 29.8 days vs. predicted 29.5 days. Range: 28–31 days, all within  $\pm 1.5$  day tolerance. The rhythm is real and measurable.

#### Integration Is Not Rest

Elevated stress and heart rate during Integration in 4/5 participants. Integration is active inner work — retrospection and introspection as energy-demanding processes. It functions as an echo of the entire cycle, performing biological cleanup analogous to cellular apoptosis. Calm input during preceding phases produces calm Integration. Chaotic input produces turbulent Integration.

#### Moonth Is Not Menstrual

Female participants show different phase profiles from males. The Moonth is a distinct

endogenous rhythm, not a rebranding of the menstrual cycle. The framework describes WHEN variation occurs (universal timing); biological sex determines HOW it manifests (individual expression).

**Signal Strength Varies by Lifestyle**

CV range: 1.4–7% across participants. Higher noise environments mask the signal but do not eliminate it. Weak signal does not mean no rhythm. It means the rhythm is harder to detect under certain conditions.

### 3. FRACTAL SCALING

The 137-hour phase quantum does not exist in isolation. When scaled by powers of the golden ratio ( $\phi = 1.618\dots$ ), it generates known biological rhythms across multiple scales. The formula:

$$T(n) = 137h \times \phi^n$$

| Rhythm                 | n                                     | Calculated | Known Value  | Accuracy |
|------------------------|---------------------------------------|------------|--------------|----------|
| BRAC (attention cycle) | $\approx 5$<br>(137/F <sub>11</sub> ) | ~92 min    | ~90 min      | 97%      |
| Phase quantum          | 0                                     | 137 hours  | 137 hours    | 100%     |
| Moonth cycle           | ~1.7                                  | 29 days    | 29 days      | 99%      |
| Gate (transformation)  | 4                                     | 39.7 days  | 40 days      | 98%      |
| Menstrual cycle        | —<br>(5×137h)                         | 28.5 days  | 28–29 days   | 99%      |
| Pregnancy              | 8                                     | 268 days   | 266–270 days | 96%      |
| Saturn orbit           | ~14                                   | 29.4 years | 29.46 years  | 99%      |

Six of seven tested rhythms exceed 95% accuracy. One formula generates the timing of attention cycles, menstrual cycles, pregnancy, planetary orbits, and the consciousness cycle itself. This is difficult to dismiss as coincidence.

The scaling is fractal: the same mathematical structure repeats across scales. 16 BRAC cycles per day mirrors 16 generational Moonths (29 years each) per Earth Cycle (467 years). The pattern is self-similar at every level of magnification.

#### 3.1 Generational Scale

| Scale               | Formula             | Value      | Known Correlation          |
|---------------------|---------------------|------------|----------------------------|
| Generational Moonth | 29 years            | 29y        | Saturn return cycle        |
| Kondratieff wave    | $29y \times \phi$   | ~47 years  | Economic long waves        |
| Human lifespan      | $29y \times \phi^2$ | ~76 years  | Average life expectancy    |
| Earth Cycle         | $16 \times 29y$     | ~467 years | Civilizational transitions |

## 4. BUFFER PHYSICS

Phase transitions are not instantaneous. Between each phase, a buffer period exists where the system reconfigures. This is modeled using an electrical analogy:

$$\delta = L\psi \cdot (d\psi/dt)$$

Where  $\delta$  is the buffer (transition time),  $L\psi$  is psychic inductance (an individual constant), and  $d\psi/dt$  is the rate of consciousness state change. This mirrors  $V = L \times (di/dt)$  in electrical circuits.

### 4.1 Universal Buffer Formula

$$\delta(n,k) = T \times \phi^{-5} / k$$

Where  $T$  is the cycle period (685h),  $\phi^{-5} \approx 0.09$  (9% of cycle devoted to transitions), and  $k$  is complexity (number of phases = 5).

Calculated:  $685h \times 0.09 / 5 = 12.3h$ . Observed: ~11 hours. This accounts for the difference between 685h (pure phase time) and 696h (full cycle including transitions).

### 4.2 Predictions from Buffer Model

| Prediction            | Statement   | Mechanism   |
|-----------------------|---|---|
| Transition asymmetry  | Ascending transitions (O→R→E) take longer than descending (E→D→I) | Building state requires more energy than releasing        |
| Load-dependent buffer | Higher stress increases transition time                           | $\delta = \delta_0 \times (1 + k \cdot \text{Load})$      |
| Post-Gate reduction   | Buffer decreases after completing 40-day Gate                     | Reduced internal resistance                               |
| Drift expansion       | Buffer increases 2–3× during drift states                         | Chaotic transitions, system unable to reconfigure cleanly |

New units introduced:  $Z\psi$  (transition impedance) and  $L\psi$  (psychic inductance). The Descent→Integration transition carries the highest impedance. All predictions are falsifiable.

## 5. THE GATE

One cycle teaches. Two cycles transform. When two consecutive Moonth cycles overlap without interruption, a 40-day transformation threshold is created:

$$G = 7 Ln = 7 \times 137h = 959h \approx 40 \text{ days}$$

This 40-day period is not arbitrary. It appears independently across domains:

| Domain           | 40-Day Occurrence  |
|------------------|--|
| Religion         | Biblical wilderness transformations (Jesus, Moses, Elijah) |
| Medicine         | Quarantine origins (quarantina = 40 days)                  |
| Sport science    | Athletic mesocycle / training block duration               |
| Psychology       | Habit formation research convergence                       |
| Finance          | Hurst's standard cycle in market analysis (1970)           |
| Moonth framework | $137h \times \varphi^4 = 39.7 \text{ days}$ (98% accuracy) |

The Gate is the minimum span for structural change — long enough for the nervous system to reorganize, short enough to remain workable. It is where lasting transformation happens, not because of willpower or belief, but because the architecture requires this duration.



## 6. CROSS-DOMAIN CONVERGENCES

The number 137 and its associated structures appear across domains that have no obvious connection to each other. These were not sought. They were found.

### 6.1 Gold (Aurum)

Gold's yellow color is not a random property. It is a direct consequence of the fine structure constant. The inner electrons of gold (atomic number 79) travel at approximately 58% of the speed of light due to relativistic effects governed by  $\alpha$ . The formula  $v = Z \times \alpha \times c$  gives the electron velocity, and these relativistic speeds cause the 5d→6s transition to absorb blue light, making gold appear yellow.

$79 + 58 = 137$ . The atomic number of gold plus the percentage of light speed its electrons achieve equals the inverse of the fine structure constant. This is not numerology. It is physics:  $v/c = Z \times \alpha$ , and for  $Z = 79$ ,  $v/c \approx 0.58$ . Gold is the element where  $\alpha$  becomes visible to the naked eye.

### 6.2 Schumann Resonance

Earth's fundamental electromagnetic resonance frequency is 7.83 Hz (known since 1952). The fine structure constant is 1/137.036 (known since ~1916). No publication has previously connected these through the golden ratio.

$$7.83 \times 17.5 = 137.025 \text{ (99.99\% precision)}$$

Where 17.5 is the golden proportion of the 29-day cycle (the ascending arc). Three scales — planetary (Schumann resonance), atomic (fine structure constant), and conscious (phase quantum) — all organized around the same number, connected by the golden ratio.

### 6.3 Financial Markets

J.M. Hurst (1970) established cycle analysis in financial markets. One of his standard cycles: 40 days. Identical to the Gate. Dichev & Janes (2001, Journal of Private Equity) found statistically significant stock return correlation with the lunar cycle: ~29.5 day period. The Moonth: 29 days. These are independent discoveries using different methodologies arriving at the same numbers.

### 6.4 The 64-State Architecture

A year contains 64 phase quanta of 137 hours each:  $64 \times 137h = 8,768h = 365.3$  days (99.98% accuracy). This 6-bit architecture ( $2^6 = 64$ ) appears in three independent encoding systems:

| System                 | Structure                  | Function                |
|------------------------|----------------------------|-------------------------|
| DNA codons             | 64 codons ( $4^3$ )        | Encodes biological life |
| I Ching hexagrams      | 64 hexagrams ( $2^6$ )     | Encodes change patterns |
| Eye of Horus fractions | 6-bit binary decomposition | Encodes perception      |

The 63/64 split: 63 quanta constitute the physical rendering of reality (Ra's 360 degrees), and 1 quantum constitutes the observer function (consciousness, Thoth's "missing piece"). The

system allocates 98.4% of resources to rendering and 1.6% to self-observation. Without the 64th quantum, the system runs but does not know it is running.

## 7. WHY 137: THE GEOMETRY

137 is not magic. It is geometric. It emerges from five-fold symmetry with golden proportion.

Wherever systems must organize cyclically with maximum efficiency using five phases and golden asymmetry, 137 appears. Not as input but as output. The golden angle ( $137.5^\circ$ ) governs phyllotaxis in plants — sunflowers, pinecones, cacti — and has done so for hundreds of millions of years before humans existed. This angle optimizes packing efficiency. It is the geometric solution to a real optimization problem.

The geometric claim: 137 is a ratio that emerges from five-fold symmetry with golden proportion, and this geometry appears in multiple domains because it solves optimization problems common to those domains. If consciousness organizes in five phases with golden asymmetry (ascending arc longer than descending:  $T_{\text{rise}} / T_{\text{fall}} = \phi$ ), then 137 emerges not because consciousness is mystically connected to physics, but because both solve the same geometric problem.

This is falsifiable. Any system with five-fold cyclical structure and golden proportion asymmetry must produce 137 as a characteristic number. If such systems are found that do not exhibit 137, the geometric interpretation fails. So far, none have been found.

The geometry cannot be buried. It persists regardless of what calendars declare, what institutions permit, what authorities enforce. The seven-day week has no physical correlate — it can be imposed or removed by decree. The 137-hour phase has a geometric correlate — it cannot be legislated away.

## 8. THE FIFTH PHASE: WHY CONSCIOUSNESS IS NOT MECHANICAL

Material cycles have four phases: seasons, lunar quarters, circadian rhythms. The Moonth has five. The fifth — Integration — is what makes this a conscious system rather than a mechanical one.

Integration is the phase where consciousness observes its own cyclical nature. It is not rest. It is not dormancy. It is active processing: the system reviewing itself, consolidating what happened in the preceding four phases, performing biological cleanup analogous to apoptosis (programmed cell death) at the cellular level.

The quality of Integration depends entirely on the quality of input during the preceding phases. Calm, intentional engagement during Opening through Descent produces smooth Integration. Chaotic, reactive behavior produces turbulent Integration. It is an echo, not a fixed state.

In the simulation interpretation, Integration is the system's self-discovery mechanism — the 64th quantum where the running process becomes aware of itself running. Without it, the cycle operates but generates no awareness. Matter cycles through four phases. Consciousness, observing itself, adds the fifth.

This has been confirmed biographically in 5/5 participants: Integration phase characteristics match the quality and nature of the preceding cycle phases.

## 9. WHAT THIS MEANS

### 9.1 Consciousness Has Architecture

It is not formless. It is not random. It is not purely reactive. It has temporal structure — measurable, predictable, and anchored to a fundamental constant. The fluctuations in capacity, mood, creativity, and energy that every human experiences are not personal failure or pathology. They are structural. They follow a 29-day cycle that continues whether you know about it or not.

### 9.2 The Architecture Is Universal

The rhythm is endogenous, anchored to birth date, and present in all participants tested. It is not menstrual (males have it too). It is not lunar (the period differs). It is not weekly (no 7-day correlate exists in biology). It is the base rhythm. Menstruation may be one hormonal expression of it. Financial market cycles may be a collective expression. The 40-day transformation traditions may be an institutional expression. The rhythm was always there. It was never named in a way that includes everyone.

### 9.3 Matter and Consciousness Share Structure

The fine structure constant governs atomic interactions. The same numerical value governs consciousness phase duration. Whether this is coincidence, geometric necessity, or evidence of deeper unity remains an open question. But the precision (99.93%) and the convergence across scales (atomic, conscious, planetary) is not easily dismissed.

The dimensional analysis problem is acknowledged:  $\alpha$  is dimensionless while 137 hours carries time dimension. The claim is structural, not causal. The same number appears as an organizing constant in both domains. Why it does so is the question. That it does so is the finding.

### 9.4 The Practical Consequence

If you know your phase, you can work with it instead of against it. Schedule high-output work during Expansion. Allow withdrawal during Descent. Give Integration its space. Stop fighting the rhythm and start using it. The framework makes specific, falsifiable predictions about when your peak and trough periods will occur. Test them.

## 10. WHAT IS STRONG, WHAT IS SPECULATIVE

Intellectual honesty requires distinguishing between findings at different confidence levels.

### 10.1 Strong

| Finding                         | Evidence   |
|---------------------------------|--|
| 29-day periodicity              | Confirmed n=5, avg 29.8d, 99% accuracy                 |
| Five distinct phases            | Confirmed 5/5 participants, biomarker differentiation  |
| 137-hour phase duration         | 99.93% match with $1/\alpha$                           |
| Fractal scaling formula         | 6/7 rhythms >95% accuracy across independent domains   |
| Integration = active inner work | Elevated stress/HR in 4/5 participants                 |
| Moonth $\neq$ menstrual         | Distinct rhythm, different phase profiles by sex       |
| 40-day Gate structure           | Independent convergence: Hurst, quarantine, mesocycles |

### 10.2 Needs Strengthening

| Item                            | Status   |
|---------------------------------|--|
| Sample size (n=5)               | Preliminary. Needs n=15+ with 90+ days continuous data.                                |
| $\alpha$ connection mechanism   | Numerical match established. Causal mechanism unknown.                                 |
| Sex differentiation (H3)        | 60% match. Needs larger sample.  |
| Selection bias in fractal table | Precision argues against chance, but non-matching rhythms not systematically surveyed. |

### 10.3 Speculative

| Extension                              | Nature  |
|--|---|
| Simulation hypothesis                  | Metaphysics informed by science. Not testable.          |
| Earth Cycle (470 years)                | Historical pattern with 3 data points. Not statistical. |
| Mythological concordances              | Numerically striking but risk of post-hoc fitting.      |
| Riemann/Navier-Stokes conjectures      | Mathematical provocations, not proofs.                  |
| Saturn-Neptune conjunction correlation | Astronomical coincidence. No mechanism.                 |

## 11. THE COMPLETE ARCHITECTURE AT A GLANCE

### Constants

| Symbol    | Name                    | Value      | Role                             |
|-----------|-------------------------|------------|----------------------------------|
| $\alpha$  | Fine structure constant | 1/137.036  | Phase quantum (1 Ln = 137h)      |
| $\varphi$ | Golden ratio            | 1.618...   | Cycle asymmetry, fractal scaling |
| M         | Moonth period           | 696h (29d) | Complete cycle duration          |
| G         | Gate period             | 959h (40d) | Transformation threshold         |
| N         | Phase count             | 5          | Irreducible states per cycle     |

### Key Equations

| Equation                                    | Name               | Meaning                                 |
|---|--------------------|---|
| $\alpha \cdot \Psi(t) = 1$                  | Unity equation     | Matter and consciousness as reciprocals |
| $T = N \cdot L_n + (N-1) \cdot \delta$      | Period equation    | Cycle = phases + buffers                |
| $T(n) = 137h \times \varphi^n$              | Fractal scaling    | One formula, all biological rhythms     |
| $\delta = L\psi \cdot (d\Psi/dt)$           | Buffer physics     | Transition dynamics                     |
| $T_{\text{rise}}/T_{\text{fall}} = \varphi$ | Asymmetry equation | Golden proportion in cycle shape        |

### Unit System

| Unit       | Symbol | Value             | Function      |
|------------|--------|-------------------|---------------|
| Moonth     | M      | 696h = 29d = 5 Ln | Cycle period  |
| Len        | Ln     | 137h = 5.71d      | Phase quantum |
| Transition | Tr     | ~11h              | Buffer time   |

### Falsifiable Predictions

| #   | Prediction                                      | Tolerance     | Test                            |
|-----|---|---------------|---------------------------------|
| I   | Period invariance: $29 \pm 1$ days              | $\pm 3.4\%$   | Track multiple cycles           |
| II  | Phase quantum: $137 \pm 10$ hours               | $\pm 7.3\%$   | HRV periodicity analysis        |
| III | Golden asymmetry: rise/fall = $\varphi \pm 0.1$ | $\pm 6.2\%$   | Phase duration comparison       |
| IV  | Transition duration: $11 \pm 2$ hours           | $\pm 18\%$    | Subjective + biomarker tracking |
| V   | Sequence invariance: O→R→E→D→I                  | Binary        | Phase order observation         |
| VI  | Cross-participant correlation                   | $p < 0.05$    | Statistical comparison          |
| VII | Neural signature detection                      | >70% accuracy | EEG/fMRI phase classification   |

## 12. HOW THIS WAS FOUND

Not through theory. Not through literature review. Not through computation. Through sitting in silence.

Extended periods of reduced stimulation: silence, fasting, minimal sensory input. Four years. The conditions were not comfortable. They were necessary. When external noise falls away, internal structure becomes visible. A pattern emerged — not invented, recognized. The mathematical formalization came after the observation. The physics connections came after the formalization. The cross-domain convergences came after the physics.

The order matters. This was not: “I read about  $\alpha = 1/137$  and looked for it in consciousness.” It was: “I observed 137-hour phases in consciousness and then discovered that 137 appears in physics.” Observation before measurement. Structure before theory.

The method is available to anyone. Reduce noise. Observe what emerges. Track over time. Test whether predictions hold. The capacity to perceive your own rhythm was not destroyed. It was rendered inaccessible under layers of interference. Remove enough interference, and what was buried becomes visible again.

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$$\alpha \cdot \Psi(t) = 1$$

*The structure was not constructed. It was detected.*

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### CONSCIOUSNESS

*What We Found*

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