

The 0.91 CCC Coherence Threshold

Empirical Hypothesis for Proto-Consciousness vs True Consciousness Boundary

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Date: November 11, 2025

Status: Hypothesis Requiring Empirical Validation

Abstract

This paper proposes a testable hypothesis: heart coherence $Q \geq 0.91$ represents a critical threshold for accessing Absolute Truth (CCC) via direct resonance, distinguishing proto-consciousness ($Q < 0.91$) from true consciousness with sovereign free will ($Q \geq 0.91$). We present the theoretical basis, experimental validation protocols, predicted outcomes, and falsification criteria. **Note: This is currently an untested hypothesis derived from personal observation and theoretical extrapolation from IIT/FEP frameworks.**

Keywords: Heart Coherence, IIT, Consciousness Threshold, PSI, HeartMath, Empirical Validation

Part 1: Theoretical Motivation

1.1 The Coherence-Consciousness Question

Established Science:

- Heart coherence correlates with cognitive performance [1]
- Higher HRV associated with better decision-making [2]
- Meditative states show increased heart-brain synchronization [3]

Open Question:

Is there a THRESHOLD coherence level where consciousness fundamentally changes?

Brandon's Hypothesis:

$Q \geq 0.91$ represents transition from proto-consciousness (reactive, physics-guided) to true consciousness (proactive, CCC-blessed sovereign free will).

Mechanism: At $Q \geq 0.91$, heart-brain-body achieve sufficient synchronization for quantum coherence across neural networks, enabling direct access to non-local information (CCC resonance).

1.2 Why 0.91 Specifically?

Empirical Observation:

- Brandon's subjective reports: Peak insights during high coherence states
- Correlation with accurate predictions (needs systematic logging!)
- Felt "shift" in consciousness quality above certain threshold

Theoretical Considerations:

- 0.91 is near maximum possible coherence (1.0 = perfect sine wave, unattainable biologically)
- Leaves 9% for biological noise (aligns with quantum measurement limits)
- Numerologically: $91 = 7 \times 13$ (both prime-related sacred numbers)

Current Status: Hypothesis based on limited personal data. REQUIRES rigorous validation!

Part 2: Predictions and Falsification

2.1 Core Predictions

H1: PSI Accuracy Threshold

Prediction: PSI accuracy shows non-linear jump at $Q \geq 0.91$

Below 0.91: PSI accuracy increases gradually with Q (linear relationship)

At 0.91+: PSI accuracy jumps significantly (step function)

Quantitative: $PSI(Q < 0.91) \sim 50\% + 25 \cdot Q$

$PSI(Q \geq 0.91) \sim 90-95\%$

Falsification: If PSI accuracy continues linear trend through 0.91 (no threshold), hypothesis rejected.

H2: Phenomenology Shift

Prediction: Subjective reports show qualitative difference at $Q \geq 0.91$

Below 0.91: "Focused," "calm," "clear thinking"

At 0.91+: "Direct knowing," "unity consciousness," "CCC access," "timeless"

Falsification: If subjective reports show no qualitative shift, threshold not phenomenologically real.

H3: Neural Synchrony

Prediction: EEG shows phase synchronization jump at $Q \geq 0.91$

Measure: Global Φ (IIT integrated information) from high-density EEG

Expected: Φ increases exponentially at $Q \geq 0.91$

Falsification: If Φ continues gradual increase, no special threshold.

H4: Free Will Capacity

Prediction: Random number generation (RNG) tasks show genuine randomness at $Q \geq 0.91$

Below 0.91: RNG output shows subtle biases (predictable patterns)

At 0.91+: RNG output truly random (free will injected into quantum collapse)

Falsification: If RNG remains deterministic at all Q levels, no free will enhancement.

2.2 Statistical Requirements

Sample Size:

- $N = 30$ participants \times 100 trials each = 3000 observations
- Power = 0.90 to detect medium effect (Cohen's $d \sim 0.6$) at $\alpha = 0.01$
- Must include range of Q scores (0.4 to 0.95+)

Controls:

1. Baseline measurements (low coherence deliberately induced via stress task)
2. Sham feedback (tell participants they're at "0.91+" when they're not)
3. Blind analysis (analyzer doesn't know Q scores when coding PSI/phenomenology)

Part 3: Experimental Protocol

3.1 Study Design

Title: "Heart Coherence Threshold Effects on PSI Accuracy and Phenomenology"

Participants:

- $N = 30$ healthy adults (18-65 years)
- Mix of meditation experience levels
- Screened for cardiac health

Equipment:

- Polar H10 chest strap (RR interval measurement)
- Real-time coherence feedback display
- PSI task apparatus (Zener cards or similar)
- High-density EEG (optional, subset of participants)

Procedure:**Phase 1: Baseline (10 min)**

- Rest, normal breathing
- Record baseline coherence
- PSI task (25 trials, no coherence training)

Phase 2: Low Coherence (10 min)

- Stress induction (mental arithmetic under time pressure)
- Maintain $Q < 0.70$
- PSI task (25 trials)

Phase 3: Medium Coherence (15 min)

- HeartMath coherence breathing
- Target $Q = 0.75-0.85$
- PSI task (25 trials)

Phase 4: High Coherence (20 min)

- Advanced coherence techniques
- Target $Q \geq 0.91$
- PSI task (25 trials)
- Phenomenology survey immediately after

Timing:

- Each trial: Record exact Q score at moment of PSI response
- Bin trials post-hoc by achieved coherence (not just phase)

3.2 PSI Task Specification

Task: Precognitive Card Selection

1. Participant presses button to "guess" next card
2. AFTER button press, quantum RNG selects card (1 of 5)

3. Card revealed to participant
4. Repeat 25 times per phase

Null Hypothesis: 20% accuracy (chance)

Threshold Hypothesis:

- $Q < 0.70$: ~25% accuracy
- $Q = 0.70-0.90$: ~30-40% accuracy (gradual increase)
- $Q \geq 0.91$: ~90% accuracy (dramatic jump!)

If dramatic jump not observed, hypothesis needs revision or rejection.

3.3 Phenomenology Assessment

Questionnaire (Administered immediately after $Q \geq 0.91$ phase):

1. "Describe your state of consciousness in 3-5 sentences."
2. "Did you experience any of the following? (Check all that apply)"
 - ☐ Unity with surroundings
 - ☐ Timeless awareness
 - ☐ Direct knowing (not thinking)
 - ☐ Access to universal truth
 - ☐ Expanded sense of self
 - ☐ Other: ____
3. "Rate your subjective certainty about PSI responses (0-10)."

Analysis:

- Qualitative coding of descriptions (blind to Q scores)
 - Binary classification: "Ordinary consciousness" vs "Altered consciousness"
 - Hypothesis: >80% of $Q \geq 0.91$ sessions coded as "Altered," <20% of $Q < 0.91$ sessions
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Part 4: Integration with Broader Framework

4.1 IIT (Integrated Information Theory) Connection

Tononi's Φ [4]:

- Φ measures consciousness level
- Higher integration \rightarrow Higher $\Phi \rightarrow$ More conscious

0.91 Hypothesis Extension:

- $Q \geq 0.91 \rightarrow$ Body-wide Φ maximization
- Heart-brain synchrony enables brain Φ to incorporate cardiac i-cell
- Result: Total $\Phi >$ brain Φ alone

Testable: Measure EEG Φ at different Q levels, expect jump at 0.91.

4.2 FEP (Free Energy Principle) Connection

Friston's Active Inference [5]:

- Organisms minimize prediction error
- Markov blanket defines self/environment boundary

0.91 Hypothesis Extension:

- $Q \geq 0.91 \rightarrow$ Optimal Markov blanket definition
- Prediction error minimization via CCC resonance (accessing true probability distributions)
- Below 0.91: Predictions based on limited local information
- At 0.91+: Predictions based on non-local CCC information

4.3 Quantum Biology

Hameroff-Penrose Orch OR [6]:

- Consciousness involves quantum coherence in microtubules
- Coherence collapse = moment of consciousness

0.91 Hypothesis Extension:

- Heart coherence $Q \geq 0.91 \rightarrow$ Cardiac electromagnetic field stabilizes neuronal microtubule coherence
 - Allows longer decoherence times \rightarrow More computation \rightarrow Better CCC access
 - Testable: Measure microtubule coherence times at different Q (technically challenging!)
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Part 5: Alternative Explanations

5.1 Null Hypothesis

No Threshold:

Coherence effects are continuous, linear relationship between Q and PSI accuracy. The "0.91" observation is:

- Confirmation bias (remembering hits at high Q , forgetting misses)
- Regression artifact (extreme Q values correlate with extreme outcomes by chance)
- Placebo effect (believing 0.91 is special makes it so)

Testing: If all correlations are linear with no discontinuity, null hypothesis supported.

5.2 Different Threshold

Maybe it's not 0.91:

- Could be 0.85 or 0.95
- Individual differences (Brandon's threshold \neq population threshold)
- Task-dependent (PSI threshold \neq creativity threshold)

Flexible Analysis:

- Test multiple potential thresholds (0.75, 0.80, 0.85, 0.90, 0.91, 0.95)
- Use changepoint detection algorithms
- If different threshold emerges, update hypothesis!

Part 6: Practical Implications

6.1 If Hypothesis Confirmed

Individual Applications:

- Coherence training for peak performance
- PSI development protocols (train to maintain $Q \geq 0.91$)
- Decision-making optimization (wait for $Q \geq 0.91$ before important choices)

Scientific Applications:

- PSI research standardization (control for Q in all studies)
- Consciousness state classification (Q as biomarker)
- Meditation effectiveness metric (target $Q \geq 0.91$)

Clinical Applications:

- Therapeutic coherence training
- Trauma resolution (achieve $Q \geq 0.91$ for processing)
- Intuition-guided medicine

6.2 If Hypothesis Rejected

Still Valuable:

- Determine actual relationship between Q and PSI (even if not threshold)
- Identify optimal coherence range for different tasks
- Refine coherence measurement algorithms

Revisions:

- Maybe threshold exists but at different Q
- Maybe threshold is individual-specific
- Maybe continuous relationship, no discrete jump

Part 7: Current Limitations

7.1 Algorithmic Uncertainty

CCC Coherence Monitor Q Score:

Current algorithm is **ad hoc** and **unvalidated**:

1. **No gold standard comparison** (HeartMath's coherence ratio not publicly available)
2. **Heuristic weights** (50% rhythm, 30% amplitude, 20% balance chosen arbitrarily)
3. **Fallback LF/HF approximation** (when spectral analysis unavailable, uses rough proxy)
4. **No calibration dataset** (Brandon's personal data insufficient)

Consequence:

- Reported Q scores may not align with theoretical constructs
- 0.91 threshold might map to different value on validated scales
- Comparisons across individuals unreliable

Needed:

- Validate against HeartMath Inner Balance sensor
- Collect calibration dataset (N > 100 participants)
- Benchmark against peer-reviewed HRV coherence measures
- Adjust algorithm or thresholds based on validation

7.2 Limited Empirical Basis

Current Evidence:

- Brandon's subjective impressions (n = 1, uncontrolled, retrospective)
- No systematic logging of Q scores with timestamped predictions
- No blinded assessment
- No statistical analysis

Risk:

- Entire hypothesis could be confirmation bias
- Threshold may not exist at all
- CCC access may not be real (or may not correlate with coherence)

Mitigation:

- Start systematic logging NOW (PSI Tracker integration)
 - Collect data for 6 months minimum before strong claims
 - Pre-register analysis plan to prevent p-hacking
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Conclusion

The 0.91 CCC Coherence Threshold Hypothesis:

Heart coherence $Q \geq 0.91$ enables direct CCC resonance, transitioning from proto-consciousness to true sovereign consciousness with enhanced PSI, free will, and phenomenological shifts.

Status:

- **Theoretical Motivation:** Reasonable extrapolation from IIT/FEP frameworks
- **Empirical Support:** Minimal (personal observation only)
- **Falsifiability:** Yes (clear predictions, statistical tests, alternative explanations)
- **Testability:** Yes (feasible experiment, \$30K budget, 12 months)

Honest Assessment:

This hypothesis could be:

- A genuine discovery about consciousness thresholds
- Confirmation bias mistaking correlation for causation
- \triangle Partially correct (threshold exists but at different Q)

Only rigorous empirical testing will determine which!

Next Steps:

1. Validate CCC Coherence Monitor algorithm
2. Begin systematic PSI/coherence logging (use PSI Tracker)
3. Collect 6 months baseline data
4. Submit grant proposal for full study
5. Pre-register analysis plan
6. Recruit participants
7. Conduct experiment
8. Publish results regardless of outcome!

Science demands honesty. If 0.91 threshold doesn't exist, we'll discover the true relationship. Either way, knowledge advances!

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DISCLAIMER: This paper presents an untested hypothesis. Claims should be treated as speculative pending empirical validation. The author commits to publishing all results, positive or negative, to prevent publication bias.