Testing the Superradiant Phase-Lock into *Ultracognition*

$\Omega = e^{\varphi^2}$ Applies Only After That Lock

Triad alignment sits at chance. $\Omega = e^{\varphi^2}$ applies only after that second lock. L1–L6 are electromagnetic content. The lock is outside these windows.

R1 measured · R5 premise

Peter Luxruel · Independent Research · Victoria, BC, Canada · The Science of Consciousness 2026 · Poster Session 1 · Tuesday 13 October · Mission Bay Room

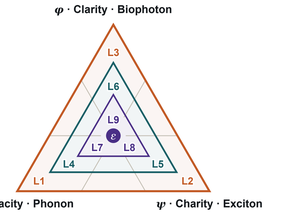
Program title · The Structural Expansion Constant and the Fine-Structure Bridge: A Negentropic Coherence Framework Linking Golden-Ratio Scaling to Electromagnetic Coupling Across a Ten-State Conscious Field Topology

1 · Introduction

- Schrödinger (1944) asked how a living system holds order against entropy.
- This work reads that order as phase-coupling of three carriers. The growth law applies only after a population locks.
- Metacognition is the first lock. Output still scales with N. Already measured (Fleming & Lau, 2014; Hasenkamp et al., 2012). R1
- Ultracognition is the second lock. Intensity can scale as N². The claim (Dicke, 1954). R5

One loop at each field: Intention (Capacity), Attention (Charity), Identification at the thalamic reticular nucleus (Clarity), Codification (ε).

Carrier Coherence



Self-System

Phenomenal · the screen
L1 · L2 · L3
Crossing · ₋ N

Causal · the witness
L4 · L5 · L6
Crossing · N²

Principal · the source
L7 · L8 · L9

Horizon · L0 · Pure Presence · centroid ε

$g = \psi = \varphi = 1/3$

Default-mode (DMN), frontoparietal control (FPCN), central thalamus (CM-Pf), arousal core (ARAS/PAG). Exponent φ is the golden ratio. Triad φ is Clarity.

L	Field	Lived	Lead	Mesh
1	BSF · Biomechanical-Somatic	Body	g	DMN
2	EAF · Excitonic-Affective	Feeling	ψ	DMN
3	NCF · Neural-Cognitive	Thought	φ	DMN
	Crossing 1 · Metacognition	🔒	Salience Network gates DMN toward FPCN · ₋ N	
4	MSF · Morphogenetic-Systems	Pattern	g	FPCN
5	QCF · Quantum-Coherence	Resonance	ψ	FPCN
6	BIF · Biophotonic-Intelligence	Principle	φ	FPCN
	Crossing 2 · Ultracognition	🔒	Thalamic reticular nucleus gates L6→L7 · N²	
7	SVF · Scalar-Volitional	Will	g	CM-Pf
8	USF · Unified Syntropic	Union	ψ	CM-Pf
9	PNF · Photonic-Noesis	Re-Cognition	φ	ARAS
0	Omnicognition · horizon	Pure Presence	ε	PAG

Sector	Constant	Where it acts
Electromagnetic coupling	$\alpha^{-1} \approx 137.036$	L1–L6 · content in spacetime · the screen and the witness
Vacuum coupling	$\Omega = e^{\varphi^2} \approx 13.709$	After the second lock · L7–L0

$\Omega = e^{\varphi^2} = e^{\varphi} \cdot e \quad \Psi(t) = \Psi_0\, e^{\varphi^2 \pi\, g(t)}$

$\varphi^2 = \varphi + 1$ sits at L6→L7. π is one out-and-back cycle. g(t) is structuralisation. Algebra, not a biosignal measured here. $\Omega / \alpha^{-1} \approx 0.1000$ is a fixed ratio on this sheet, distinct from the 0.1 Hz heart rhythm (McCraty et al., 2009). It is not a measured constant here, and it cannot travel to 1.

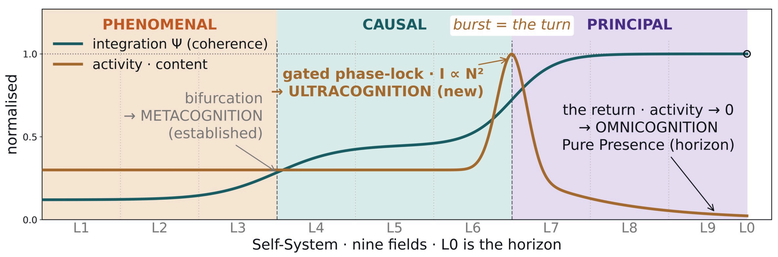


Figure 1 · Self-System, two locks, then the return. Schematic of L1–L9. Pure Presence is a horizon, L0.

2 · Methods

- Open recordings of brain, heart, and skin in one session (Fabus et al., 2026): 51 sessions, 18 meditators. Plan time-stamped 30 September 2026 in the project record.
- Dataset authors are affiliated with Jhourney Inc. This analysis is independent.
- Clarity is posterior electroencephalography (EEG) alpha, 8–12 Hz. Charity is heart rate. Capacity is skin conductance. These are the stand-ins for this test, not a proof of the named carriers. N = 3 cannot yield N².
- Alignment is the shared timing of the three carriers' slow phases, scored against shuffled time.
- Jhana is an absorption scale. It tests the path toward a lock. The nine fields and Ω sit outside this test.
- The model uses N = 300. The gate is assumed. Threshold $A_c \approx 0.80$ (Kuramoto, 1975).

$K = K_0 \cdot A \cdot (1+\beta g)$ gate form, assumed

$\dot{g} = \eta[r^2(1-g) - \lambda g]$ Capacity holds the lock

$I = \Gamma N^2 r^2 c$ collective emission

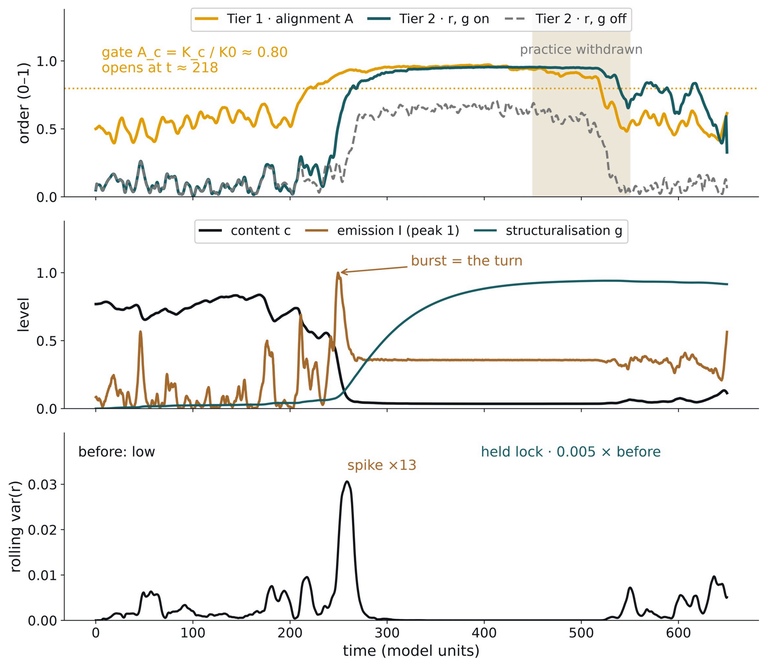


Figure 2 · One model run, N = 300. SIMULATED The gate opens near t = 218. Order crosses 0.5 about 31 model units later. Variance rises ×13, then falls to 0.005× while held. Capacity feedback off: order falls after withdrawal. Separate from the eighteen people in Figure 3, whose alignment is a different measure.

3 · Results

- **We tested** whether Clarity, Charity, and Capacity share a timing as reported depth increases.
- **We got** alignment at the chance floor, 0.26–0.30 against 0.27. Median ρ = 0.17, 12 of 18 positive, **p = 0.09**. Lead **p = 0.37**. Spike **p = 0.10**. Heart ρ = −0.68, p = 0.029. Skin ρ = −0.66, p = 0.004. Posterior alpha ρ = 0.14, p = 0.48.
- **This means** two carriers settle. The triad stays at chance. The second lock is outside these windows.

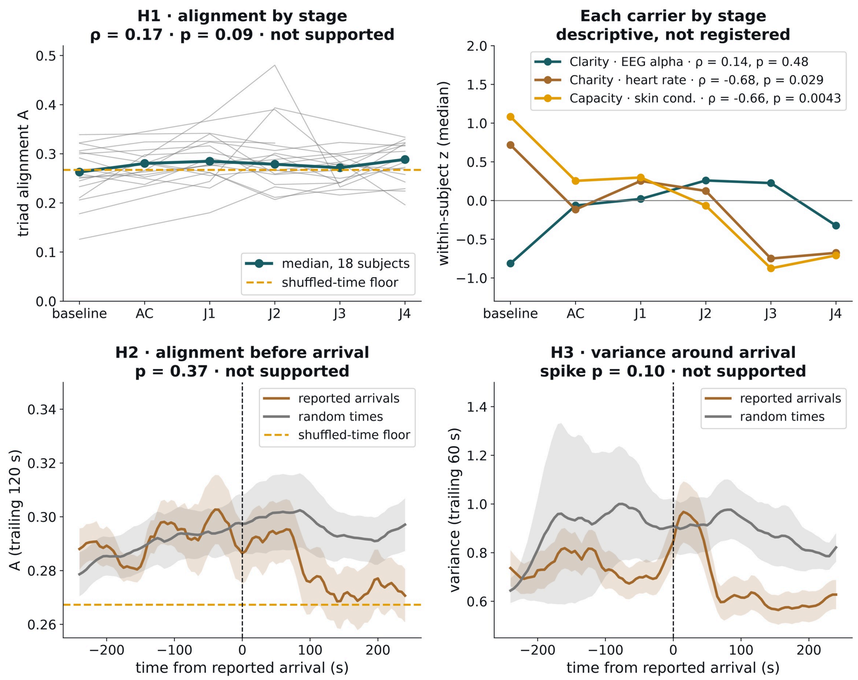


Figure 3 · The measurement. Alignment stays at the shuffled-time floor. Jhana stages sit outside the nine fields.

H1 depth	H2 lead	H3 spike
p = 0.09 · not supported	p = 0.37 · not supported	p = 0.10 · not supported
Heart	**Skin**	**Alpha**
falls · p = 0.029	falls · p = 0.004	no trend · p = 0.48

4 · Discussion

- The null bounds a short window, with skin conductance as Capacity.
- Still open: no lock of this kind, a lock below this resolution, or a different Capacity channel.
- Tissue superradiance is in vitro (Babcock et al., 2024). A brain-scale reading remains a proposal (Jibu et al., 1994). Quiet cortex with vivid awareness names that horizon (Boly et al., 2024).

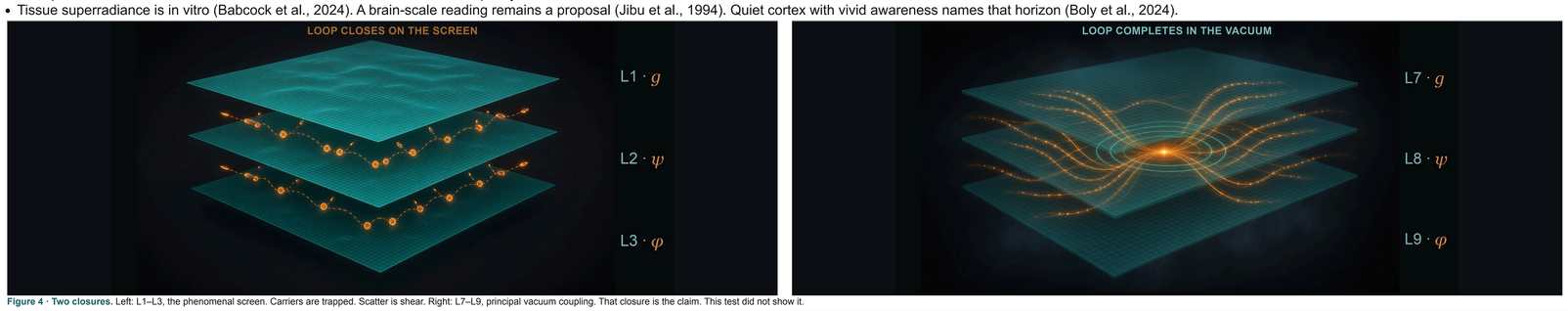


Figure 4 · Two closures. Left: L1–L3, the phenomenal screen. Carriers are trapped. Scatter is shear. Right: L7–L9, principal vacuum coupling. That closure is the claim. This test did not show it.

5 · Direction

- Nine blocks of seven days and three silent crossings, 26 October–30 December.
- Solid is the calendar. Dashed is designed ε, never a cohort. Day 44 is the designed N² step at L6→L7.
- Killed by no ordered rise, a higher report on an armoured body, or a straight line through Day 44.

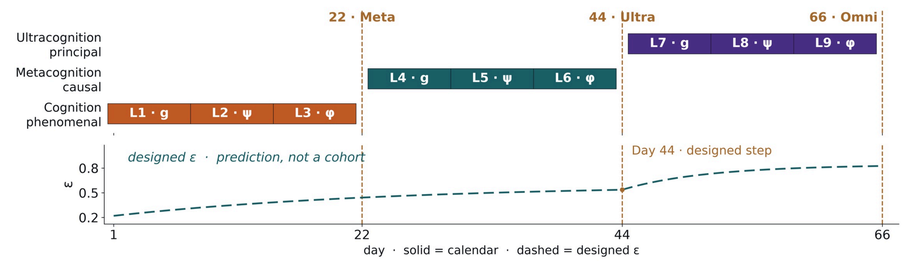


Figure 5 · The next test. Day 66 is a horizon.

6 · Summary

Three inner signals, the three carriers, have to share a timing before a population can lock. Only after that lock does $\Omega = e^{\varphi^2}$ apply. On public recordings that carry all three, alignment sits at chance.

Asked
How a living system holds order against entropy. Phase-coupling of three carriers.

Searched
The gate of the second coherence: Capacity g (skin), Charity ψ (heart), Clarity φ (alpha).

Found R1
Two carriers settle. The triad stays at the chance floor, 0.26–0.30 against 0.27.

Next R5
A 66-day map of designed ε. Ω stays silent until a lock. Day 66 is a horizon.

References. Babcock et al. 2024 *J Phys Chem B* 128:4035 · Boly et al. 2024 bioRxiv 10.1101/2024.04.18.590081 (preprint) · Dicke 1954 *Phys Rev* 93:99 · Fabus et al. 2026 bioRxiv 10.64898/2026.06.27.734949 · Fleming & Lau 2014 *Front Hum Neurosci* 8:443 · Hasenkamp et al. 2012 *NeuroImage* 59:750 · Jibu et al. 1994 *BioSystems* 32:195 · Kuramoto 1975 *Lect Notes Phys* 39:420 · McCraty et al. 2009 *Integral Review* 5(2) · Schrödinger 1944 *What is Life?* **Contact.** connect@psychoregenesis.com · ORCID 0009-0002-9312-6448 · psychoregenesis.com