

POSTER -- Explaining Qualia and Quantum Wave Collapse with Tanmatron Field Theory: A Dual-Aspect Research Program Unifying Consciousness Science and Quantum Foundations

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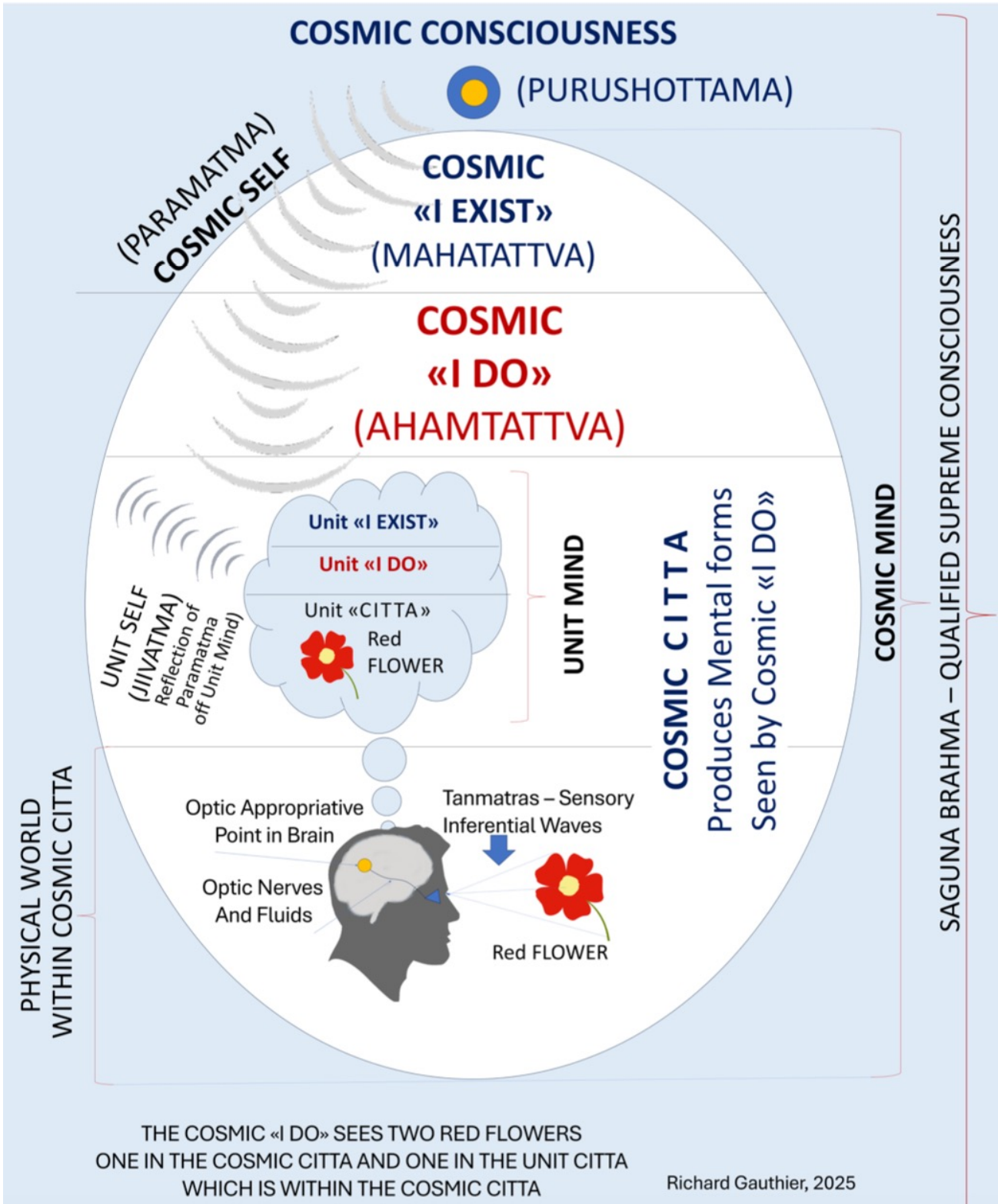
PHILOSOPHICAL FOUNDATIONS & COSMIC ARCHITECTURE

- The Bottleneck of Modern Consciousness Science**
 - The Historical Fracture:** Western science systematically stripped physical matter of subjective qualities to build a mechanical physics (Democritus, Galileo, Descartes, Locke). This created an artificial ontological split: objective quantities versus isolated subjective qualities.
 - The Newton–Leibniz Impasse (1715):** Newton realized physical corpuscle impacts on the optic nerve could not explain color sensations in the sensorium, resorting to divine intervention. Leibniz proposed parallel Pre-established Harmony. Both failed because they treated mind and matter as alien, incompatible substances.
 - Failure of Bottom-Up Reductionism:** Mainstream physicalism cannot bridge Chalmers' "Hard Problem"—no quantitative arrangement of non-conscious physical particles logically yields inner felt qualitative experience (qualia).
 - Failure of Constitutive Panpsychism:** Attributing primitive consciousness to subatomic particles succumbs to the Combination Problem—it fails to explain how billions of micro-experiences cleanly merge into a single, macroscopic human ego.
- Reviving and Expanding the Tanmatra Concept**
 - Ancient Lineage:** *Tanmatras*, originating in ancient Samkhya philosophy, were systematically expanded by Prabhat Ranjan Sarkar (*Ananda Sutram*, 1962).
 - The Tanmatra (Generic Essence):** A purely mental sensory inference or qualitative essence (sound, touch, form/color, taste, smell) associated with physical vibrational waves.
 - Introducing the Tanmatron:** The fundamental dual-aspect quantum entity, proposed by Gauthier, consisting of a physical vibration (e.g., a photon) coupled to its associated mental *tanmatra*, such as “redness”.
 - Top-Down Field Principle:** Brains do not manufacture conscious qualities out of matter or physical activities. Brains act as tuned biological antennas receiving, channeling, and projecting tanmatrons from tanmatron fields.
- Sarkar's Cosmic Cycle (Brahma Chakra) -- two parts:**
 - 1. Saincara (Top-Down Cosmic Evolution):** Infinite Supreme Consciousness (*Shiva*) condenses under the qualifying influence of its infinite Creative Power (*Shakti*) into three layers of Cosmic Mind:
 - Cosmic Mahat:** Pure 'I exist' existential awareness.
 - Cosmic Aham:** Active 'I do' agency and volition.
 - Cosmic Citta:** Objective Cosmic Mind that further condenses into the five fundamental physical factors (*bhutas*: Ethereal, Aerial, Luminous, Liquid, Solid).
 - 2. Pratisaincara (Bottom-Up Individual Evolution):** Physical matter evolves under internal pressure to form living bodies, individual minds (individual *citta* → individual *aham* → individual *mahat*) that reflect Cosmic Consciousness, producing the *Atman* or individual self.

ANATOMY OF PERCEPTION, MIND HIERARCHY & BIOLOGICAL GATEWAYS

- Structure of the Individual Human Mind**
 - Individual Citta (Mental Plate):** The receptive screen upon which mental *tanmatras* project, producing vibratory forms.
 - Individual Aham (Feeling of “I do”):** The ego or active mental layer that perceives the vibratory forms of the *Citta* as subjective qualities and objects, and executes volitional intent.
 - Individual Mahat (Feeling of “I exist”):** The deep layer of 'I exist' self-awareness.
 - Atman & Purushottama:** Individual consciousness (*Atman*) illuminated by Supreme Consciousness (*Purushottama*), making qualia consciously experienced.

2. The Anatomy of Perception



Graphic: physical object (red flower) → *tanmatras* → eye/sensory nerves → cortical A-point gateway → *tanmatras* vibrate *citta* (mental plate) → red flower seen by *aham* (ego) in presence of *mahat* (“I exist” feeling), *Atman* (unit self), and *Paramatman* (Cosmic Self).

- Process Mechanics:**
- Emanation:** Physical objects (e.g., a red rose) emanate dual-aspect tanmatrons (photons bound to their mental color/form *tanmatras*).
 - Propagation:** Tanmatrons enter sensory organs. Their *tanmatras* travel with sympathetic waves along nerve pathways.
 - Cortical A-Point Gateway:** Sympathetic waves carrying *tanmatras* reach terminal coordinates (the Appropriative Point). Quantitative physical energy uncouples and remains conserved in nerves while mental *tanmatras* enter and vibrate the mental plate.
 - Qualia Projection:** The mental *tanmatras* project onto the individual *citta*, creating a red flower image observed by the *aham* under the conscious illumination of the *Atman*.
- 3. Memory Systems & Biological Gateways**
- Appropriative Points (A-Points):** Deterministic spatial boundary region located at anatomical “geographical dead ends” in primary sensory cortices possibly (Layer IV of V1, Heschl's Gyrus BA 41). *Tanmatras* pass here from the sensory nerves to the mind.
 - Cerebral Memory (Physical):** Biological neural areas that record physical frequencies associated with *tanmatras*, as on a phonograph record or hologram.
 - Extracerebral Memory (Samskaras):** Karmic reactive momenta to previous actions are stored directly within the non-physical *Citta*, surviving physical brain dissolution.

RESOLUTION OF CONSCIOUSNESS AND QUANTUM ENIGMAS

Resolution of 13 Foundational Consciousness Enigmas by *Tanmatras*

- Mind-Body Interaction:** Mind and matter are dual-aspect expressions of one continuum; tanmatrons carry *tanmatras* through A-points to the *Citta*, while *tanmatras* of mental volition (from the *aham*) enters motor nerves via motor A-points.
- Chalmers' 'Hard Problem':** Brains do not manufacture qualia out of matter; they act as biological transceivers, receiving tanmatrons and projecting *tanmatras* onto the *citta*.
- Locke's Inverted Spectrum:** Inverted qualia are ruled out because the *tanmatras* (e.g. for particular colors like red) associated with particular physical frequencies (e.g. for photons) are fixed by the Cosmic Mind.
- Searle's Chinese Room:** Syntax (“blind” rule following) cannot generate conscious meaning (semantics) because silicon chips lack biological life and A-point gateways to receptive mental layers (*Citta*, *Aham*, *Mahat*) and the reflected consciousness (conscious self) required to generate semantics (meaning) and register *tanmatra*-generated experiences consciously.
- Jackson's 'Mary's Room':** Exposure to light carrying a concentration of “redness” tanmatrons (like from a red flower) provides Mary new phenomenal field coupling at her visual A-points, giving her genuine new experiential knowledge (of redness).
- Nagel's Bat Perception Anomaly:** Bat echolocation uses frequency bands outside human biological receptors. Translating these frequencies into human *tanmatra* bands via technology would allow feelings of “what it is like” to be a bat or other living beings.
- Direct vs. Indirect Realism:** Human minds directly encounter real sensory essences from physical objects, transmitted via emanated *tanmatras* through A-points, though physical objects themselves are thought projections of the Cosmic Mind.
- The Binding Problem:** Distinct *tanmatras* (for color, shape, sound etc. pass to the mental plate or *citta* through separate sensory A-points and form unified vibrational patterns on the single receptive screen of the *citta*.
- AI Consciousness:** Artificial silicon networks lack biological A-point gateways and mental layers, remaining non-conscious symbol manipulators.
- Absent Qualia / Philosophical Zombies:** Identical physical bodies in identical environments receive identical tanmatron inputs. A body without a mental plate (*citta*) cannot register qualia (and is a zombie); a body with a mind registers qualia normally.
- Evolutionary Enigma of Consciousness:** Subjective awareness exists because organisms evolved physical receptors and A-point interfaces to channel tanmatrons, enabling active perception of and navigation (via outgoing *tanmatras*) to the physical world.
- Panpsychism's Combination Problem:** Micro-experiences do not aggregate bottom-up; rather, individual minds evolve top-down, from the Cosmic Mind to dense matter to *citta*-atoms (*cittanu*) to *citta* to protozoic minds to metazoic minds to human minds.
- Cardiac Flatlining NDE Awareness and anesthesia:** When *tanmatras* are blocked from entering the mind during cardiac flatlines or anesthesia, the individual *citta* reverts to its baseline inner state illuminated by the *Atman*, retaining mental awareness.

Work-In-Progress: Summary of 6 Quantum Enigma Resolutions by Tanmatron Field Theory approach

Beyond consciousness studies, Tanmatron Field Theory extends this dual-aspect framework to offer conceptual reinterpretations of six primary quantum measurement pillars (presented here as a work-in-progress without mathematics):

- Double-Slit & Wave-Particle Duality:** Measurement triggers *Topological Phase-Locking* at detectors, constraining wave phase and localizing the continuous wave packet into a particle hit.
- Copenhagen Measurement Problem:** Replaces ad-hoc collapse with deterministic phase projection as quantum fields synchronize with the universal background mind-field (*Citta*).
- Schrödinger's Cat Enigma:** Macroscopic superpositions cannot persist because bound physical factors interact continuously with the background *tanmatric* continuum.
- Exclusion of Many-Worlds (MWI):** Multiverse branching is excluded by the Law of Attributional Capacity conservation ($\sum I_n = C_{\text{Total}} = 100$) and the topological singularity of 4D spacetime.
- EPR Paradox / Bell's Theorem:** Entangled particles form a unified tensor product state in a 25D Hilbert space; non-local coordination reflects shared field topology rather than faster-than-light signals.
- Quantum Zeno Effect:** High-frequency measurement sampling acts as a continuous topological anchor, resetting physical phase drift before state transitions accumulate.

FOR MATHEMATICAL PHYSICS, LAGRANGIANS & PROOFS:

Please read the complete article: "Explaining Qualia and Quantum Wave Collapse with Tanmatron Field Theory: A Dual-Aspect Research Program Unifying Consciousness Science and Quantum Foundations".

Available at: <https://richardgauthier.academia.edu/research>

3. FUTURE HORIZONS: Empirical Testing & Bio-Ethics

Testing for A-points; Anesthetic Interdiction Protocol: Prediction: Volatile anesthetics disrupt cortical A-point coupling. Microelectrodes record physical action potentials arriving intact at Layer IV terminals while subjective qualia reporting drops to zero with anesthesia—proving physical signals alone do not equal experience.

Neohumanist Bio-Ethics: Validate P. R. Sarkar's Neohumanism by technologically simulating non-human tanmatric experiences, validating his philosophy of the existential value of all living beings.