

# Anomalous Phenomena and Consciousness

## A Diagnostic Stress Test of Explanatory Frameworks

**Project:** [Return to Consciousness](#)

**Author:** Bruno Tonetto

**Authorship Note:** Co-authored with AI as a disciplined thinking instrument—not a replacement for judgment. Prioritizes epistemic integrity and truth-seeking as a moral responsibility.

**Finalized:** February 2026

### Abstract

Certain phenomena—psychedelic phenomenology, near-death experiences, terminal lucidity, psi effects, and mediumship—have remained persistently contested despite decades of investigation. Their resistance to clean integration into physicalist frameworks is not coincidental; it is diagnostic. This essay applies a diagnostic stress test to physicalism and analytic idealism across ten such phenomena, organized by evidential maturity into three tiers. The central question: do competing frameworks genuinely explain anomalies, or reclassify them? The central finding: physicalism’s deepest problem is not predictive failure but that dismissive labeling—“hallucination,” “coincidence,” “noise”—blocks the investigation that would test its predictions. This essay does not argue that idealism is proven by these phenomena; it argues that physicalism’s apparent explanatory coverage often conceals refusal to explain.

**Keywords:** anomalous phenomena · near-death experiences · psychedelics · terminal lucidity · psi research · explanatory frameworks · physicalism · idealism

### What This Essay Does and Does Not Establish

**This essay establishes:**

- That physicalism’s responses to these phenomena range from genuine mechanistic explanations to dismissive labels that presuppose what they claim to demonstrate
- That institutional prejudice compounds methodological difficulty, creating a self-reinforcing cycle of dismissal
- That idealism provides a unified framework where physicalism offers fragmented mechanisms plus systematic dismissal
- That several phenomena (particularly psychedelics and terminal lucidity) create identifiable pressure on *production models* — the view that the brain generates consciousness, such that disrupting neural activity should degrade experience

### **This essay does NOT establish:**

- That idealism is proven by these phenomena
- That all ten phenomena are definitively real
- That Group C phenomena (psi, mediumship, reincarnation) will survive rigorous future investigation
- That idealism's dissociation framework generates content-level predictions (it generates *constraint-level* predictions — see Section III)

**The argument's center of gravity** is Group A — psychedelics, terminal lucidity, placebo, NDEs — where evidence is strongest and explanatory pressure is clearest. Group B is suggestive; Group C is included for intellectual honesty, not argumentative weight.

**Role within the project:** This essay is a *structural extension* that stress-tests both frameworks against contested evidence. It presupposes the epistemic discipline established in [Integration by Constraints](#) and the foundational synthesis in [Return to Consciousness](#). If APC proves unconvincing, the methodological foundations remain intact. The argument flows downstream; failures do not propagate upward.

## **I. Methodological Note: Scope and Limitations**

This essay makes a **comparative explanatory argument**, not a claim that every phenomenon catalogued here is definitively established. The central thesis is abductive: *if* a substantial subset of these phenomena persist under rigorous investigation, *then* analytic idealism offers a more parsimonious and unified framework than physicalism for accommodating them.

The evidence varies in maturity. To keep calibration explicit, this essay classifies each phenomenon on **two orthogonal axes**:

1. **Evidence Tier** — evidential reliability only
2. **Comparative Group** — argumentative role in the framework comparison

Metaphysical interpretation is addressed separately in each analysis section.

### **Evidence Tiers (reliability axis):**

- **Tier 1 (Robust):** Strong replication, controlled studies, well-instrumented effects
- **Tier 2 (Credible):** Strong signal but limited by observational design, documentation quality, or endpoint ambiguity
- **Tier 3 (Intriguing):** Persistent findings but high confound surface area (e.g., leakage risk, selection effects, publication bias), making strong conclusions premature

These are qualitative reliability bands rather than strict numeric thresholds; the purpose is transparent evidential calibration.

### **Illustrative tier assignment (not definitive):**

- **Tier 1:** placebo/nocebo effects (especially symptom and functional endpoints), psychedelic phenomenology and many neuroimaging correlates
- **Tier 2:** NDE phenomenology, terminal lucidity, deathbed visions, acquired savant syndrome
- **Tier 3:** mediumship studies, reincarnation case research, psi meta-analyses

Spontaneous remission spans Tier 2–3 depending on documentation quality in individual cases.

This essay does not require acceptance of every Tier 3 item for the overall argument to remain plausible. Even restricting attention to Tier 1–2 phenomena, the pattern of alignment with analytic idealism remains noteworthy.

### **Explanation vs. Dismissal**

A central distinction: a **genuine mechanistic explanation** specifies a constrained causal pathway — *why this experience, why this content, why this timing*. Predictive processing models for placebo analgesia meet this standard. Disinhibition models for acquired savant syndrome meet this standard. A **dismissive label** — “hallucination,” “coincidence,” “noise” — classifies a phenomenon as unreal without explaining it, presupposing that the experience has no referent, which is precisely the question at issue. If every physicalist label counted as an explanation, physicalism would appear to have answers everywhere. It does not.

### **Methodological Difficulty ≠ Evidence Against**

Many phenomena in this essay are difficult to study under strict laboratory conditions. NDEs occur unpredictably in clinical emergencies. Terminal lucidity is rare and almost never captured with modern neuroimaging. Deathbed visions happen in hospice settings, not labs. These are real methodological constraints — but they are constraints on *our ability to study* the phenomena, not evidence that the phenomena are unreal.

Academic culture compounds the problem. Phenomena dismissed a priori receive less funding, less replication, and less serious engagement. The resulting scarcity of rigorous data is then cited as evidence against the phenomenon — a self-reinforcing cycle that reflects institutional prejudice, not scientific judgment.

### **Grouping by Comparative Role**

In addition to tiers, the phenomena are organized by **comparative function** (what role they play in the argument). A group can contain mixed tiers.

- **Group A: Primary comparative pressure cases.** Phenomena carrying the main burden of differential pressure between frameworks. This group includes both Tier 1 and Tier 2 items.
- **Group B: Secondary, suggestive cases.** Phenomena that reinforce pattern-level coherence but do not independently carry strong differential pressure.
- **Group C: Boundary and contested cases.** Phenomena with high methodological friction and institutional controversy. Included for scope, transparency, and testability, not as the core inferential load.

**A note on framing:** Throughout this essay, “Standard Accounts” describes the mechanistic models and conventional responses currently available for each phenomenon. Many of these models — neural correlates, network dynamics, neurochemistry — are ontologically neutral: any framework that accepts lawful mind-brain correlation predicts them. Describing a mechanism is not the same as establishing an ontological commitment. The interpretive question — whether mechanisms are *generative* (producing consciousness) or *constraining* (filtering it) — is precisely what differs between frameworks and is addressed separately in each section.

This essay applies the same standard to the constraint theory enabled by idealism — the hypothesis that the brain constrains consciousness rather than producing it. This is a *constraint-*

*generating* theory: its predictive force lies in directional asymmetries and forbidden configurations, not in forecasting particular experiences. Section III makes the constraints explicit — what the theory predicts, what it rules out, and where it would fail.

### Scope and Relationship to the Broader Catalog

This essay does not attempt to survey the full range of non-ordinary phenomena relevant to consciousness. That task is undertaken in the companion essay *Consciousness Across Cultures*, which maps the broader phenomenological landscape — from death-related and visionary experiences to transformative states, meaning-mediated phenomena, and the cross-cultural diagnosis of ordinary consciousness as itself a constrained condition. The present essay selects a limited subset of that landscape: ten phenomena where evidential maturity permits comparative explanatory evaluation between physicalism and idealism.

The division of labor is deliberate. CAC establishes the *scope* of what dominant frameworks exclude; this essay tests *explanatory fit* against representative cases within that scope. Readers encountering this essay first should be aware that the phenomena examined here are not the full evidential landscape — they are test cases drawn from a much larger pattern of exclusion.

### The Evidence Most Commonly Cited for Physicalism

Clinical neuroscience’s mapping of brain-mind correlations is genuinely impressive. The **specificity of neurological deficits** is the evidence most commonly cited in physicalism’s favor: focal brain lesions produce precisely targeted cognitive losses — prosopagnosia from fusiform gyrus damage, selective aphasia from left-hemisphere lesions, anosognosia from right parietal damage. These are not diffuse impairments but surgical removals of specific capacities.

However, a careful analysis requires distinguishing three claims that lesion data are often taken to support:

1. **Dependence:** Cognition depends on brain integrity. Lesions demonstrate that specific capacities require intact neural structures.
2. **Functional modularity:** The brain exhibits modular organization. Damage to specific regions produces specific deficits, not diffuse impairment.
3. **Ontological production:** The brain *produces* consciousness. Mental states are generated by neural computation.

Lesion-deficit correlations decisively establish (1) and (2). But they do not, by themselves, establish (3). The inference from dependence and modularity to production requires auxiliary metaphysical assumptions — notably causal closure of the physical. As Kelly et al. (*Irreducible Mind*, 2007; *Beyond Physicalism*, 2015) have argued, lesion-deficit data are equally compatible with production, constraint, transmission, or filtering models. A damaged filter loses the ability to pass specific content; a damaged transmitter loses the ability to receive specific signals. The lesion data show that the brain is causally necessary for specific capacities — they do not show that it generates them.

This distinction matters because it identifies where the real evidential pressure lies. Lesion specificity refutes naïve dualism — the view that mind and brain are independent substances with no systematic relation. But it does not by itself decide between physicalism and constraint-based idealism. Both the production theory and the constraint theory entail that damage will produce deficits; they differ on whether the damage destroys the generator or disrupts the constraint.

The constraint model does explain focal deficits: if dissociative constraints are structured and modular, then localized damage disrupts the structure that channels experience into a specific mode of expression — producing loss of the corresponding capacity. Both theories entail that focal damage produces focal deficits; they differ on *why*. The production model says the generator of that capacity is destroyed. The constraint model says the structure that shaped experience into that specific form is disrupted.

The lesion-deficit correlations mapped by clinical neuroscience over decades are therefore ontologically neutral — both frameworks interpret the same empirical mappings. Neither has a principled account of *why* these specific neural structures correspond to these specific experiential capacities. That is the hard problem, and it applies in both directions: physicalism cannot explain why any neural activity is accompanied by experience at all; idealism has not specified why *these* neural structures serve as *these* constraints. The gap is symmetric, and the inference from correlation to *production* still requires metaphysical assumptions — notably causal closure — that the data themselves do not establish and that physics does not mandate (see [What Physics Actually Closes](#)).

## II. Anomalies and Paradigm Fit

Science advances not only by confirming theories but by confronting anomalies — phenomena that resist easy integration within prevailing frameworks (Kuhn, 1962). The question in each case is not whether a framework has *any* response, but whether that response constitutes a constrained explanation or a post hoc reclassification.

What is striking about the phenomena examined here is that many appear less anomalous under analytic idealism. If consciousness is fundamental and boundaries are dissociative rather than absolute, then phenomena involving apparent transcendence of ordinary constraints become conceptually coherent rather than paradoxical. The question is which framework renders the overall pattern most intelligible — and whether that intelligibility comes from genuine explanation or from classification that declines to explain.

### Group A: Primary Comparative Pressure Cases

The following four phenomena carry the main differential pressure in this essay’s framework comparison. They are not uniform in evidential maturity (Group A includes both Tier 1 and Tier 2 items), but together they create the strongest comparative test of production versus constraint models. In each case, idealism offers something physicalism does not: a unified account of a specific empirical pattern without requiring the phenomenon to be dismissed as unreal or the subject’s testimony to be systematically discounted.

#### 1. Psychedelic Experiences and Consciousness Expansion

##### Evidence Tier: 1 (Robust)

The psychedelic renaissance has enabled controlled study of profound alterations in experience, with ongoing research programs at major institutions worldwide.

**The Empirical Evidence:** Controlled studies show that psychedelics such as psilocybin can occasion experiences participants rate among the most meaningful of their lives (Griffiths et al., 2006), with lasting changes in openness and well-being (MacLean et al., 2011). Neuroimaging

work reports altered connectivity and changes in activity within major networks during acute effects (Carhart-Harris et al., 2012). Therapeutic benefits can persist beyond acute pharmacology, suggesting durable psychological reorganization rather than transient chemical effects.

**Standard Accounts:** Network disintegration, increased entropy, and default mode network disruption describe what changes in the brain during psychedelic states. These are genuine mechanistic observations — and they are ontologically neutral: both physicalism and idealism predict that brain states and conscious states co-vary. The correlates themselves provide no differential support for either framework.

What *is* differentially significant is the **direction** of the correlation: key findings include decreased activity in major hub networks (notably the default mode network) accompanying reports of *expanded* consciousness. The picture is not a simple scalar decrease — psychedelic states also involve redistribution, altered connectivity, and increased entropy in some measures. But the core observation remains: the brain states most associated with reported expansion involve disintegration of the organized network architecture that ordinarily supports cognition. If rich, structured experience depends primarily on preserving that specific top-down control architecture, then disrupting it should more often degrade experience than coincide with expansion; this is why the directionality pattern remains pressure on simple production readings.

Physicalism has two responses, neither fully satisfactory:

First, the *entropic brain hypothesis* — that increased neural entropy corresponds to richer experience (Carhart-Harris et al., 2014). It successfully links measurable neural dynamics to phenomenological changes. But it describes *what correlates with what* more than it explains *why*: it does not account for why increased entropy produces experiences of cosmic unity, structured entity encounters, and lasting meaning — rather than confusion, fragmentation, or phenomenological noise.

Second, the “*noise misinterpreted as expansion*” response — that subjects experience disordered neural processing and merely *interpret* it as meaningful. This requires systematically discounting first-person testimony. It also cannot explain why reports converge on coherent themes (ego dissolution, unity experiences, structured “entity encounters,” enduring meaning shifts) rather than the fragmented confusion that genuinely disordered processing produces. And it cannot explain why single sessions produce lasting changes in personality traits normally considered stable in adults — an outcome inconsistent with transient noise.

Neither response constitutes a *mechanism* in the explanatory sense. They are reframings of the observation, not causal models that predict when expansion should occur and what form it should take.

**The Explanatory Question:** Why does disruption of organized brain architecture correlate with what subjects consistently report as *expanded* rather than diminished consciousness? (A caveat: “expanded” is a phenomenological report about felt salience, meaning, and boundlessness — not an objective measure of informational content or representational accuracy. The question is why disruption produces this specific phenomenological signature rather than confusion or fragmentation.) Why do different chemical substances produce phenomenologically similar mystical experiences? How do single sessions produce lasting changes in personality, normally considered stable in adults?

**The Idealist Fit:** Under analytic idealism, psychedelics temporarily weaken dissociative boundaries, allowing consciousness to experience less constrained states. If the brain localizes con-

consciousness rather than producing it, decreased neural activity corresponds to reduced constraint — which aligns with what subjects report. This offers a unified interpretation of: - Ego dissolution (weakening of the dissociative boundary creating individual identity) - Unity experiences (recognizing the underlying unity normally hidden by dissociation) - Entity encounters (accessing other regions of conscious experience) - Lasting changes (glimpsing one's true nature catalyzes ongoing transformation)

This is the strongest empirical case for idealism in this catalogue, because the pressure point is concrete, measurable, and replicable: disintegration of organized neural architecture correlates with reports of structured, meaningful expansion rather than the degradation a production model would predict. The directionality pattern remains open, and neither framework has yet produced a constrained causal model that predicts when expansion should occur and what form it should take.

## 2. Terminal Lucidity: The Return of Lost Consciousness

### Evidence Tier: 2 (Credible)

Terminal lucidity — the unexpected return of clarity and memory in patients with severe cognitive impairment shortly before death — presents a striking pattern any complete theory of mind must address.

**The Empirical Evidence:** The medical literature contains numerous cases where patients with advanced dementia, schizophrenia, or other severe conditions briefly regained coherent communication and recognition (Nahm & Greyson, 2009; Nahm & Greyson, 2010; Nahm, 2013). Episodes occur across clinical contexts and remain difficult to reconcile with the expectation that function strictly tracks tissue integrity.

**Standard Accounts:** Proposals include temporary neural disinhibition, compensatory network dynamics, and stress-related neurochemical surges (e.g., endogenous catecholamines, cortisol). These are plausible mechanisms with partial analogues in other contexts — disinhibition models, for instance, are well-established in acquired savant cases and certain drug effects.

A critical distinction applies here: these proposals are more plausible for cases involving *functional impairment* (where the underlying neural substrate may be intact but dysregulated) than for cases involving *severe structural damage* (neurodegeneration, brain atrophy, significant tissue loss). If lucidity occurs in cases where relevant circuitry is verified as severely compromised — by contemporaneous imaging or post-mortem neuropathology — disinhibition models face their clearest difficulty: you cannot disinhibit machinery that no longer exists. Most documented cases do not yet establish, with modern measurement, that the neural substrate for the regained function was absent at the time of lucidity; the strongest version of the argument awaits such confirmation.

The phenomenon is rare and almost never captured with modern neuroimaging, so these models remain difficult to test. This is a genuine limitation — but it applies symmetrically: neither physicalist nor idealist accounts can be confirmed or disconfirmed with current data.

**The Explanatory Question:** How can coherent function reappear when the physical substrate appears severely compromised? What determines *when* lucidity returns, and why is it disproportionately concentrated near death?

**The Idealist Fit:** Analytic idealism treats the brain as a localization constraint rather than a

generator. On this view, a weakening of constraints near death could permit temporary access to capacities not fully expressible through damaged neural structures. The key conceptual point: *release does not require intact machinery the way production does*. A broken constraint can open access to what the intact structure excluded; a broken generator cannot produce what it was generating.

Neither framework currently predicts the specifics — when lucidity should occur, in whom, or for how long. But idealism offers a conceptual architecture in which the phenomenon is coherent rather than paradoxical. Real-time neuroimaging of terminal lucidity in a patient with confirmed severe neurodegeneration would be decisive: if coherent cognition occurs without corresponding neural recovery, production models would face a challenge that constraint models would not.

### 3. The Placebo Effect: Mind Over Matter

#### Evidence Tier: 1 (Robust)

The placebo effect is controlled for in medical trials, yet its philosophical implications are often minimized — perhaps because taking them seriously raises questions physicalism cannot easily answer.

**The Empirical Evidence:** Placebo treatments, including sham surgeries, can produce outcomes comparable to active interventions in certain conditions (Moseley et al., 2002). Open-label placebos can still produce benefits despite explicit disclosure (Kaptchuk et al., 2010). Placebo analgesia recruits measurable neurobiological pathways overlapping with pharmacologic effects, while nocebo responses show expectation-driven harm (Wager et al., 2004; Benedetti et al., 2007). Placebo responsiveness in some U.S. trials has increased over time (Tuttle et al., 2015).

**Standard Accounts:** Predictive-processing frameworks, expectation and conditioning effects, and descending modulatory pathways (including endogenous opioids and reward circuitry) plausibly explain many placebo effects — especially in pain, distress, and certain functional outcomes. These are genuine mechanisms, not mere labels. Physicalism earns real credit here: the circuitry is well-mapped, the pharmacology is understood, and the models make testable predictions.

However, two points limit the explanatory closure:

First, mechanistic coverage is heterogeneous. It is strongest for subjective symptoms (pain, anxiety) and weakest for objective disease endpoints. Claims involving large physiological shifts or structural change remain poorly constrained.

Second — and more fundamentally — these mechanisms describe *how* expectation modulates physiology, not *why* semantic content should be causally potent at all. Predictive processing maps the circuitry through which belief influences bodily states. But the deeper question is: in a system that is supposedly purely physical, why does *meaning* function as a control variable in biological regulation? The “how” is neuroscience. The “why” is philosophy — and physicalism has no answer to it beyond treating it as a brute fact.

**The Explanatory Question:** Given partial mechanistic coverage, what remains unresolved is the scope and logic of meaning-mediated physiology. Why do representational states — belief, interpretation, therapeutic context — sometimes function as control variables in biological

regulation?

**The Idealist Fit:** Under analytic idealism, meaning-as-cause is less surprising: mind is not an aftereffect of matter but a foundational aspect of reality, and bodily processes become the extrinsic appearance of underlying mental organization. Placebo effects suggest that semantics can be causally efficacious — not merely epiphenomenal. The “why” question dissolves: in a mind-first ontology, meaning *should* be causally potent, because reality is fundamentally mental.

## 4. Near-Death Experiences: Consciousness Beyond the Brain

### Evidence Tier: 2 (Credible)

Near-death experiences (NDEs) are among the most studied anomalous experiences, with prospective research published in *The Lancet* (van Lommel et al., 2001), *Resuscitation* (Parnia et al., 2014), and specialized consciousness studies outlets (Greyson, 2021).

**The Empirical Evidence:** Prospective studies have documented structured, vivid experiences reported in proximity to cardiac arrest and related crises (van Lommel et al., 2001; Parnia et al., 2014). Some accounts include claims of accurate perceptions beyond ordinary sensory range, though these remain comparatively rare and methodologically challenging to verify (van Lommel et al., 2001; Ring & Cooper, 1997). Syntheses (e.g., Greyson, 2021) emphasize recurrent phenomenological motifs and lasting transformative impact.

**Standard Accounts:** Proposed mechanistic explanations include REM intrusion, temporal lobe instability, neurochemical effects (endorphins, ketamine-like compounds), and residual or undetected brain activity. These proposals can plausibly reproduce certain motifs (e.g., tunnels, light, affective intensity), and some — particularly residual brain activity — remain difficult to rule out given current monitoring limitations.

The strongest physicalist response is that brains may retain more activity during cardiac arrest than previously assumed, and that brief windows of residual processing could produce complex experience. This is a legitimate scientific hypothesis, and the AWARE studies (Parnia et al., 2014) are designed partly to test it.

Where physicalism weakens is in its default fallback: calling NDEs “hallucinations.” This is not an explanation — it is a classification that presupposes the experience has no referent. A hallucination in the clinical sense is a percept without an external stimulus. But whether NDEs have a referent is precisely the question at issue. Using “hallucination” as an explanation is circular: it assumes the answer to the question the evidence is supposed to address.

The current landscape involves largely post hoc matching of mechanisms to features, without a constrained model that predicts when structured lucidity should occur and when it should not. Claims of “veridical perception” remain a key pressure point: where documentation is strong, they strain standard accounts; where documentation is weak, they cannot bear much inferential weight.

**The Explanatory Question:** How can some subjects report clear and structured consciousness under conditions where ordinary cognition is expected to degrade? Why do certain motifs recur across physiological triggers and cultures?

**The Idealist Fit:** Under analytic idealism, brain activity is the extrinsic appearance of localized consciousness rather than its producer. A crisis state may weaken dissociative constraints, po-

tentially permitting experiences that feel less bounded by ordinary sensory and autobiographical structure. This framing offers a unified way to interpret: - reported lucidity (reduced constraint) - life review motifs (expanded access to autobiographical material) - perceived encounters (experiences within a broader conscious field)

The idealist framework already handles the core pattern — structured lucidity under conditions where organized cognition should degrade — more naturally than physicalism, which must either invoke residual activity or classify the experience as hallucinatory. Confirmed veridical perception under strong protocols would go further: perception without the sensory apparatus that physicalism requires would be difficult to accommodate within any production model. The outcome of prospective studies (e.g., AWARE) could significantly strengthen or limit this case.

## **Group B: Secondary, Suggestive Cases**

The following three phenomena are documented but limited by observational design, case-report methodology, or small samples. Physicalism has genuine partial models for some — acquired savant syndrome in particular — while for others it relies on labeling rather than explaining. Idealism provides a coherent narrative that connects these phenomena to the same underlying framework, but the evidential base does not yet create strong differential pressure on its own.

## **5. Acquired Savant Syndrome: Sudden Access to Hidden Capabilities**

### **Evidence Tier: 2 (Credible)**

Cases where individuals develop extraordinary abilities after injury suggest capacities may be released or reconfigured rather than simply built from scratch.

**The Empirical Evidence:** Approximately 10% of savant cases may be acquired, often after trauma or disease (Treffert & Rebedew, 2015). Case reports describe emergent skills in music, mathematics, or art after neurological events (Treffert, 2010). Some frontotemporal dementia patients show increased artistic output even as other functions decline (Miller et al., 2000).

**Standard Accounts:** Disinhibition models are well-supported here. Treffert’s own framework treats savant abilities as the release of low-level processing capacities normally suppressed by higher-order executive control. This accounts for many cases, particularly those involving pattern recognition, calendrical calculation, or musical reproduction — skills that plausibly rely on neural substrates present but ordinarily inaccessible.

Physicalism earns genuine credit in this domain. The disinhibition model is constrained, testable, and consistent with neuroanatomical evidence. It provides a real explanation, not a dismissive label.

The residual question is whether some cases involve competencies that exceed what latent-capacity models predict — skills that appear unusually complex relative to plausible learning histories. This remains debated and difficult to assess without rigorous baseline data.

**The Explanatory Question:** Where does the apparent competence originate when explicit training is absent? What constrains access in ordinary conditions?

**The Idealist Fit:** Idealism treats ordinary cognition as filtered by dissociative constraints. Altered brain dynamics could reduce constraints, permitting access to capacities otherwise un-

available to the localized self-model. The disinhibition account available to physicalism covers much of the same ground for cases involving release of plausible latent capacities. Where the two frameworks diverge: physicalism limits emergent abilities to what was already latent in the individual's neural substrate, while idealism permits access to capacities beyond the individual's learning history — sourced from outside the dissociative boundary. Whether any documented cases genuinely exceed latent-capacity explanations remains debated, but idealism provides a framework for investigating that possibility where physicalism forecloses it.

## 6. Deathbed Visions and End-of-Life Experiences

### Evidence Tier: 2 (Credible)

Deathbed visions are reported across cultures with notable phenomenological consistency.

**The Empirical Evidence:** Reports describe dying patients encountering deceased relatives or luminous figures that reduce fear and distress (Barrett, 1926; Osis & Haraldsson, 1977). Hospice research suggests a substantial minority of patients report such experiences, often in clear consciousness and distinguished from medication effects (Kerr et al., 2014). A smaller but notable subset involves shared or multiperson deathbed visions — cases where bystanders (family members, nurses, or other patients) independently report perceiving the same presences as the dying person. These cases remain rare and difficult to evaluate under controlled conditions, but they carry distinctive evidential weight: correlated “hallucinations” across independent observers require a mechanism that individual-brain explanations do not readily supply.

**Standard Accounts:** The default physicalist responses — “grief hallucination,” “expectancy effects,” “neurochemical changes,” “the brain's model-building under stress” — range from partially explanatory to purely dismissive. The distinction matters.

Neurochemical changes and stress-related model-building are genuine mechanisms that can plausibly account for some end-of-life experiences, especially where sedation or delirium is present. These proposals earn explanatory credit.

But “grief hallucination” and “expectancy effects” are labels, not mechanisms — especially for cases occurring in clear consciousness without sedation. The label “hallucination” presupposes the experience has no referent, which is the question under investigation. A physicalist explanation would need to specify why dying patients across cultures perceive the same types of entities, in clear cognition, with consistent emotional effects and apparent adaptive function. For multiperson cases, the explanatory burden is steeper: independent observers reporting the same perceptions cannot be attributed to the dying patient's individual neurochemistry. Calling these experiences “hallucinations” does not answer these questions — it declines to ask them.

**The Explanatory Question:** Why do reports show stable structure and apparent adaptive function across cultures? Are there cases with evidential features that exceed common psychological mechanisms? In multiperson cases, what mechanism produces correlated perceptions across independent observers?

**The Idealist Fit:** Idealism interprets such experiences as boundary weakening near death, potentially enabling experiences of continuity and relational encounter within consciousness itself. If dissociative boundaries weaken as death approaches, encounters with other streams of consciousness become conceptually coherent rather than paradoxical. This interpretation remains provisional but provides a framework for investigation rather than a reason for dismissal.

## 7. Spontaneous Remission and Extraordinary Healing

### Evidence Tier: 2–3 (Varies by documentation quality)

Medical literature includes cases of spontaneous remission and unexpected recovery, though their prevalence and interpretation are debated.

#### The Empirical Evidence:

- O'Regan & Hirshberg (1993) catalogued thousands of reported remissions published between 1900 and 1990, organized by diagnosis and treatment status
- Qualitative research on exceptional survivors describes recurring psychological themes such as meaning shifts, spiritual change, and lifestyle transformation (Turner, 2014)
- Meta-analyses of non-contact healing trials report small effects on biological outcomes (Roe et al., 2015)

**Standard Accounts:** Proposed explanations include immune dynamics, tumor biology heterogeneity, delayed treatment effects, misdiagnosis, spontaneous regression, regression to the mean, and selection/reporting bias. These accounts plausibly explain many cases, especially when documentation is incomplete. For much of this literature, physicalist explanations are adequate.

The subset that creates pressure: well-documented remissions where major psychological reorientation temporally precedes measurable biological change. Here the causal direction matters — and it is difficult to establish. Survivors who experienced meaning shifts are disproportionately available for study, and the question of whether psychological transformation caused remission or early biological improvement caused the transformation remains open.

**The Explanatory Question:** When remissions are strongly documented, why do they sometimes correlate with major psychological reorientation? Are meaning shifts causal, merely correlative, or selectively remembered in survivor narratives?

**The Idealist Fit:** Idealism interprets mind–body coupling as intrinsic rather than incidental: shifts in conscious organization could, in principle, manifest as biological reorganization. This reading is strongest where documentation is rigorous and where psychological transformation temporally precedes measurable change. The honest caveat: confirmation bias is a real risk, and causal direction remains genuinely uncertain.

### Group C: Boundary and Contested Cases

The following three phenomena face genuine methodological challenges *and* institutional prejudice that limits research. The evidence is weaker than Groups A–B, but “weaker” does not mean “refuted.” These phenomena persist in the research literature despite decades of dismissal — a persistence that itself warrants explanation.

In these domains, standard physicalist accounts are dominated by error-model explanations — bias, leakage, expectation, fraud — rather than positive mechanisms. Whether any residual effect survives such explanations remains disputed. If even one of these domains does survive rigorous future investigation, physicalism faces a challenge it currently has no resources to address. Idealism provides a framework in which they are at least conceptually possible. The argument in this essay does not depend on Group C, but intellectual honesty requires addressing these phenomena rather than quietly dropping them.

## 8. Psi Phenomena: Consciousness and Nonlocal Correlation

### Evidence Tier: 3 (Intriguing)

Psi research reports small effects in some meta-analyses, alongside persistent methodological disputes.

**The Empirical Evidence:** Some meta-analyses report small but statistically significant effects across domains such as Ganzfeld studies and anomalous anticipation (Storm et al., 2010; Bem et al., 2015). RNG studies report cumulative deviations from chance across large datasets (Radin & Nelson, 1989; Nelson & Radin, 2003). Cardeña (2018), writing in the *American Psychologist*, argues that the experimental literature contains a persistent signal. Skeptical analyses dispute robustness on grounds of bias sensitivity and analytic flexibility.

**Standard Accounts:** Major concerns include publication bias, multiple comparisons, p-hacking, and insufficiently adversarial replication. These are real methodological problems that must be taken seriously.

But intellectual honesty requires noting that *the same criticisms apply to much of psychology and medical research*. The replication crisis is not unique to psi — it is a field-wide problem. The question is whether psi research is held to a higher standard than other fields. It is widely argued — including by Cardeña (2018) in the *American Psychologist* — that papers reporting psi effects face editorial resistance that papers reporting conventional effects at similar significance levels do not. If this asymmetry exists, it reflects prior metaphysical commitment rather than purely methodological judgment; if it does not, the difference in standard should be justified explicitly.

The key epistemic question is whether effects survive preregistration, independent replication, and transparent multi-lab work with strong controls. This question remains open — partly because the research needed to answer it is systematically underfunded.

**The Explanatory Question:** If a residual signal exists, what constraints govern it? If not, what explains decades of recurrent positive reports across different laboratories and paradigms?

**The Idealist Fit:** Under idealism, all minds are grounded in a unified consciousness, making nonlocal correlations at least conceptually possible. But conceptual possibility is a low bar — it does not constitute evidence. Psi remains the most tentative domain in this catalogue. Its inclusion here reflects the persistence of the research signal and the intellectual honesty of addressing it, not confidence in its reality.

## 9. Mediumship and After-Death Communication

### Evidence Tier: 3 (Intriguing)

The study of mediumship has produced mixed results under evolving protocols, alongside well-known confounds.

**The Empirical Evidence:** Some blinded studies report that mediums provide information about deceased individuals at rates above chance expectation (Beischel & Schwartz, 2007; Beischel et al., 2015). Some protocols attempt to reduce sensory leakage through blinding and separation. Semi-naturalistic studies have explored mediumistic writing under controlled conditions (Gomide et al., 2022; Silva et al., 2023). Historical “cross-correspondence” cases remain debated (Gauld, 1968).

**Standard Accounts:** Confounds include subtle cueing, leakage, subjective scoring, multiple comparisons, selective reporting, and base rate neglect. These are real methodological vulnerabilities. The strongest protocols (triple-blind, preregistered) attempt to control for them, but whether they fully succeed is contested.

Dismissing mediumship as “obviously fake” is not science — it is prejudice dressed as skepticism. The question is whether the residual signal, if any, survives the strongest available controls. This is an empirical question that deserves empirical investigation, not a priori dismissal.

**The Explanatory Question:** Under the strongest protocols, is there a residual information-acquisition effect that cannot be attributed to ordinary channels or methodological flexibility?

**The Idealist Fit:** If consciousness is fundamental and individual minds are dissociated partitions within a broader unity, then anomalous information access is conceptually possible. Idealism frames mediumship either as contact with persisting streams or as nonlocal information access within a unified field. The evidential bar must remain high — the challenge is separating signal from confound in a domain where both are genuinely present.

## 10. Reincarnation Research: Consciousness Across Lives

### Evidence Tier: 3 (Intriguing)

Research programs (notably at UVA’s Division of Perceptual Studies) have documented cases suggestive of anomalous memory claims in young children. The field remains contested.

**The Empirical Evidence:** Investigators report thousands of cases of children who claim memories of previous lives (Stevenson, 1997). In a subset, researchers report correspondences between claimed memories and deceased individuals, and in some cases correlations between birthmarks/defects and reported wounds (Stevenson, 1997). Tucker’s later work continues similar investigations (Tucker, 2005, 2013), sometimes emphasizing documentation prior to verification.

**Standard and Conventional Accounts:** Alternative explanations include cryptomnesia, social reinforcement, family prompting, cultural scripts, coincidence, reporting bias, and investigative degrees of freedom. These are plausible for many cases. The Stevenson/Tucker methodology faces legitimate challenges: most cases come from cultures with reincarnation beliefs (though not all), retrospective contamination is difficult to rule out, and investigator degrees of freedom in case selection and reporting are hard to quantify.

The epistemic question is how much of the strongest-case signal survives adversarial scrutiny under modern standards — particularly in cases where documentation occurred prior to verification and in cultures without reincarnation traditions.

**The Explanatory Question:** Do the best-documented cases contain information not plausibly attributable to ordinary transmission, chance matching, or retrospective reconstruction?

**The Idealist Fit:** If consciousness is not fundamentally bounded to a single lifetime, then persistence of memory-like patterns and dispositions becomes at least conceptually coherent. Idealism supplies a framework in which individual identity is a stream within a broader conscious field, with boundaries that may not be absolute. As with psi and mediumship, conceptual coherence is the minimum bar — the evidential question remains open.

### III. Integration and Implications

#### The Comparative Case

Across these ten domains, physicalism's responses tend to bifurcate: genuine neuroscience where it exists (predictive processing for placebo, disinhibition for savant, network dynamics during psychedelic states), and dismissive labeling where it does not ("hallucination," "coincidence," "statistical artifact"). The former is real science; the latter is classification masquerading as explanation.

The constraint theory — enabled by idealism but operating at the theory level — offers a unified alternative. The brain constrains rather than produces consciousness; weakened constraints yield expanded experience (psychedelics), released function (terminal lucidity, savant syndrome), boundary permeability (NDEs, deathbed visions, mediumship), and meaning-as-cause (placebo, remission). A single theoretical principle renders diverse phenomena coherent — where the production theory relies on a patchwork of domain-specific moves.

The asymmetry is not "coherence vs. mechanisms" — mechanisms are ontologically neutral descriptions both frameworks accommodate (Section I). The asymmetry is that where mechanisms run out, physicalism defaults to dismissive labeling while idealism maintains explanatory coherence. Explanation vs. refusal to explain.

#### Honest Calibration

The argument's center of gravity is the directionality problem in psychedelics — the clearest case where production and constraint models make divergent predictions. Terminal lucidity in structurally damaged brains is the second strongest pressure point. Beyond Group A, the evidential base thins: Group B is suggestive, Group C provisional.

The clearest differential pressure on production models comes from global state changes (psychedelics, terminal lucidity, anesthesia). At the focal level, lesion-deficit data are ontologically neutral — both frameworks accommodate the same correlations equally. Neither has a principled account of *why* specific neural structures correspond to specific experiential capacities; that gap is symmetric. A complete assessment holds both patterns in view.

#### What the Constraint Theory Actually Predicts

A predictable objection: idealism's dissociation framework is "compatible with everything." This objection mistakes the theory's *class* for a deficiency. The constraint theory — that the brain constrains consciousness rather than producing it — is a theory-level construct enabled by the idealist ontology, not the ontology itself. As *The Generativity Question* argues, ontologies do not predict; theories do. The constraint theory is a **constraint-generating** theory, not a content-predictive one. Its predictions are structural: directional asymmetries, response patterns under perturbation, and configurations it rules out — not forecasts of what any individual will experience on a given Tuesday.

To see what the framework actually constrains, consider three types of perturbation:

**Disruption of global constraint architecture** (psychedelics, near-death states, deep meditation). The dissociation model treats ordinary waking consciousness as a *narrowing* — a dissociative boundary that localizes experience within a broader conscious field. Disrupting that architecture should loosen the narrowing. The framework therefore predicts: phenomenological

expansion, reduced self-other distinction, access to content normally excluded by the boundary. It predicts *against* a pattern where global disruption systematically produces only confusion, fragmentation, or experiential emptiness — because that would mean the constraint was *producing* experience rather than *restricting* it. The psychedelic literature’s directionality pattern (less organized brain activity, more structured and meaningful experience) is exactly what the model predicts. This is the framework’s strongest empirical anchor.

**Focal constraint disruption** (lesions, localized injury). Here the model predicts loss of specific capacities corresponding to the specific constraint that was disrupted — localized damage removes the structure that shaped experience into that particular mode of expression. But production models predict the same thing: a damaged generator loses specific outputs. This is why lesion data do not decide between the frameworks, and why the specificity-of-deficits pattern, though often cited as proof of production, is equally compatible with structured constraint. What would differentiate them: a case where focal damage produced *expansion* of a specific capacity rather than its loss — analogous to what global disruption produces at the global level. Acquired savant syndrome may be exactly such a case, though the evidence remains debated.

**General anesthesia.** Anesthesia is often cited as proof that the brain produces consciousness: suppress the brain, lose experience. But the clinical evidence tells a different story, examined in detail in the companion essay [Conscious Under Anesthesia](#). Isolated forearm studies consistently detect responsive awareness in a substantial fraction of patients under standard anesthetic depths — patients who satisfy all clinical criteria for “unconsciousness” yet squeeze the investigator’s hand on command when given a channel to respond. Dreaming occurs in up to 60% of patients under propofol. Standard protocols routinely include dedicated amnestic agents (midazolam) to prevent memory formation — which would be redundant if anesthesia reliably eliminated experience rather than merely eliminating recall. And ketamine, a clinically approved anesthetic, produces some of the most vivid experiences in all of psychopharmacology while satisfying operational criteria for anesthesia. The production model predicts that substantially suppressing neural activity should substantially suppress consciousness. It does not. Consciousness persists under conditions where the supposed generator is profoundly disrupted. This is exactly what a constraint model predicts: disrupt the constraint mechanism and experience may persist or even intensify — what is lost is not consciousness itself but the capacity to encode it into retrievable memory and express it through behavior.

**What would break the model.** The dissociation framework’s most exposed point of risk is its core directional prediction. If carefully controlled research established that global disruption of constraint architecture *reliably* produced experiential collapse — systematic emptiness, not expansion — across psychedelic, near-death, and meditative contexts, the model would face a crisis that production models would not. The directionality pattern is not a minor feature of the constraint theory; it is its central empirical prediction. If it fails, the theory fails at its strongest point.

More broadly, the constraint theory is at an early developmental stage — comparable to field concepts in 19th-century physics or control theory before detailed systems models. It constrains the *class* of admissible outcomes without yet specifying micro-mechanisms. This is a real incompleteness in the theory, but it reflects developmental stage, not ad hoc flexibility. The question is whether the constraints it does generate are borne out — and the evidence examined in this essay suggests they are.

## **Dismissal as Paradigm Defense**

The most consequential problem with physicalism in this domain is not predictive failure — it is that dismissal blocks the investigation that would test its predictions. Phenomena classified as “hallucination” before they are studied do not receive funding, replication, or serious engagement. The absence of data is then cited as evidence there is nothing to study. This self-reinforcing cycle is the central epistemic dysfunction.

Idealism’s most important contribution here may not be new predictions — it is the removal of this barrier. A framework that treats consciousness as fundamental does not need to classify experiences as unreal before investigating them. Idealism permits the question. Physicalism, in practice, often forbids it. What currently passes for skepticism in this domain is often a priori dismissal dressed as caution.

Several phenomena examined here carry built-in decisive tests — outcomes that would asymmetrically favor one framework. Real-time neuroimaging of terminal lucidity in structurally damaged brains, confirmed veridical perception during cardiac arrest, independently documented multiperson deathbed visions: these are concrete research targets, not thought experiments. The argument for idealism does not merely fit existing data; it *welcomes* precisely the investigations that would resolve the question.

## **Toward Expanded Inquiry**

### **What Remains Uncertain**

- Whether the directionality observation in psychedelics admits a fully satisfactory physicalist explanation
- Whether physicalist models can be extended to accommodate Group A patterns without ad hoc additions
- Whether Group C phenomena will survive rigorous future investigation — or whether institutional prejudice will continue to prevent the research that would answer this

### **What Would Be Decisive**

Examples of research that could strengthen or weaken this argument: - Controlled replication of the less-activity-more-experience pattern across psychedelic substances and doses, with converging phenomenological and neuroimaging data - Prospective NDE studies with rigorous veridical perception protocols - Systematic documentation of terminal lucidity with modern measurement where feasible - Placebo research that maps boundary conditions of meaning-mediated physiology - Prospective documentation of multiperson deathbed visions with independent witness reports collected separately before comparison - Preregistered mediumship studies with strong blinding and independent scoring - Multi-lab replication of psi effects under preregistered, adversarial conditions

The phenomena catalogued here deserve serious investigation regardless of metaphysical commitments. If they hold up, analytic idealism gains empirical resonance. If they fail, idealism loses a source of empirical support — but its philosophical case (developed in [Return to Consciousness](#)) stands or falls on independent arguments.

## References

- Barrett, W. (1926). *Death-bed visions: The psychological experiences of the dying*. Methuen & Co.
- Beischel, J., & Schwartz, G. E. (2007). Anomalous information reception by research mediums demonstrated using a novel triple-blind protocol. *Explore*, 3(1), 23-27.
- Beischel, J., Boccuzzi, M., Biuso, M., & Rock, A. J. (2015). Anomalous information reception by research mediums under blinded conditions II: Replication and extension. *Explore*, 11(2), 136-142.
- Bem, D. J., Tressoldi, P. E., Rabeyron, T., & Duggan, M. (2015). Feeling the future: A meta-analysis of 90 experiments on the anomalous anticipation of random future events. *F1000Research*, 4, 1188.
- Benedetti, F., Lanotte, M., Lopiano, L., & Colloca, L. (2007). When words are painful: Unraveling the mechanisms of the placebo effect. *Neuroscience*, 147(2), 260–271.
- Cardeña, E. (2018). The experimental evidence for parapsychological phenomena: A review. *American Psychologist*, 73(5), 663-677.
- Carhart-Harris, R. L., Erritzoe, D., Williams, T., Stone, J. M., Reed, L. J., Colasanti, A., ... & Nutt, D. J. (2012). Neural correlates of the psychedelic state as determined by fMRI studies with psilocybin. *Proceedings of the National Academy of Sciences*, 109(6), 2138–2143.
- Carhart-Harris, R. L., Leech, R., Hellyer, P. J., Shanahan, M., Feilding, A., Tagliazucchi, E., ... & Nutt, D. J. (2014). The entropic brain: A theory of conscious states informed by neuroimaging research with psychedelic drugs. *Frontiers in Human Neuroscience*, 8, 20.
- Gauld, A. (1968). *The founders of psychical research*. Schocken Books.
- Gomide, M., Wainstock, B. C., Silva, J., Mendes, C. G., & Moreira-Almeida, A. (2022). Controlled semi-naturalistic protocol to investigate anomalous information reception in mediumship: Description and preliminary findings. *Explore*, 18(5), 539-544.
- Greyson, B. (2021). *After: A Doctor Explores What Near-Death Experiences Reveal About Life and Beyond*. St. Martin's Essentials.
- Griffiths, R. R., Richards, W. A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. *Psychopharmacology*, 187(3), 268-283.
- Kaptchuk, T. J., Friedlander, E., Kelley, J. M., et al. (2010). Placebos without deception: A randomized controlled trial in irritable bowel syndrome. *PLoS One*, 5(12), e15591.
- Kelly, E. F., Kelly, E. W., Crabtree, A., Gauld, A., Grosso, M., & Greyson, B. (2007). *Irreducible Mind: Toward a Psychology for the 21st Century*. Rowman & Littlefield.
- Kelly, E. F., Crabtree, A., & Marshall, P. (Eds.). (2015). *Beyond Physicalism: Toward Reconciliation of Science and Spirituality*. Rowman & Littlefield.
- Kerr, C. W., Donnelly, J. P., Wright, S. T., Kuszczak, S. M., Banas, A., Grant, P. C., & Luczkiewicz, D. L. (2014). End-of-life dreams and visions: A longitudinal study of hospice patients' experiences. *Journal of Palliative Medicine*, 17(3), 296–303.
- Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. University of Chicago Press.

- MacLean, K. A., Johnson, M. W., & Griffiths, R. R. (2011). Mystical experiences occasioned by the hallucinogen psilocybin lead to increases in the personality domain of openness. *Journal of Psychopharmacology*, 25(11), 1453-1461.
- Miller, B. L., Boone, K., Cummings, J. L., Read, S. L., & Mishkin, F. (2000). Functional correlates of musical and visual ability in frontotemporal dementia. *British Journal of Psychiatry*, 176(5), 458–463.
- Moreira-Almeida, A. (2012). Research on mediumship and the mind-brain relationship. In A. Moreira-Almeida & F. S. Santos (Eds.), *Exploring frontiers of the mind-brain relationship* (pp. 191-213). Springer.
- Moseley, J. B., O'Malley, K., Petersen, N. J., et al. (2002). A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *New England Journal of Medicine*, 347(2), 81-88.
- Nahm, M., & Greyson, B. (2009). Terminal lucidity in patients with chronic schizophrenia and dementia: A survey of the literature. *Journal of Nervous and Mental Disease*, 197(12), 942-944.
- Nahm, M. (2009). Terminal lucidity in people with mental illness and other mental disability: An overview and implications for possible explanatory models. *Journal of Near-Death Studies*, 28(2), 87–106.
- Nahm, M., Greyson, B., Kelly, E. W., & Haraldsson, E. (2012). Terminal lucidity: A review and a case collection. *Archives of Gerontology and Geriatrics*, 55(1), 138–142.
- Nelson, R. D., & Radin, D. I. (2003). Research on mind-matter interactions (MMI): Group attention. In W. B. Jonas & C. C. Crawford (Eds.), *Healing, intention and energy medicine* (pp. 49-57). Churchill Livingstone.
- O'Regan, B., & Hirshberg, C. (1993). *Spontaneous remission: An annotated bibliography*. Institute of Noetic Sciences.
- Osis, K., & Haraldsson, E. (1977). *At the hour of death: A new look at evidence for life after death*. Avon Books.
- Parnia, S., Spearpoint, K., de Vos, G., et al. (2014). AWARE—AWAREness during REsuscitation—A prospective study. *Resuscitation*, 85(12), 1799-1805.
- Radin, D. I., & Nelson, R. D. (1989). Evidence for consciousness-related anomalies in random physical systems. *Foundations of Physics*, 19(12), 1499-1514.
- Ring, K., & Cooper, S. (1999). *Mindsight: Near-death and out-of-body experiences in the blind*. William James Center for Consciousness Studies.
- Roe, C. A., Sonnex, C., & Roxburgh, E. C. (2015). Two meta-analyses of noncontact healing studies. *Explore*, 11(1), 11-23.
- Silva, J., Mendes, C. G., Wainstock, B. C., Gomide, M., & Moreira-Almeida, A. (2023). Evaluation of the occurrence of anomalous information reception in messages in an allegedly mediumistic process. *Explore*, 19(6), 785-791.
- Stevenson, I. (1997). *Reincarnation and Biology: A Contribution to the Etiology of Birthmarks and Birth Defects* (2 vols.). Praeger Publishers.

Storm, L., Tressoldi, P. E., & Di Risio, L. (2010). Meta-analysis of free-response studies, 1992–2008: Assessing the noise reduction model in parapsychology. *Psychological Bulletin*, 136(4), 471-485.

Treffert, D. A., & Rebedew, D. L. (2015). The savant syndrome registry: A preliminary report. *Wisconsin Medical Journal*, 114(4), 158-162.

Treffert, D. A. (2010). *Islands of Genius: The Bountiful Mind of the Autistic, Acquired, and Sudden Savant*. Jessica Kingsley Publishers.

Tucker, J. B. (2005). *Life before life: A scientific investigation of children's memories of previous lives*. St. Martin's Press.

Tucker, J. B. (2013). *Return to life: Extraordinary cases of children who remember past lives*. St. Martin's Press.

Turner, K. A. (2014). *Radical Remission: Surviving Cancer Against All Odds*. HarperOne.

Tuttle, A. H., Tohyama, S., Ramsay, T., et al. (2015). Increasing placebo responses over time in U.S. clinical trials of neuropathic pain. *Pain*, 156(12), 2616-2626.

van Lommel, P., van Wees, R., Meyers, V., & Elfferich, I. (2001). Near-death experience in survivors of cardiac arrest: A prospective study in the Netherlands. *The Lancet*, 358(9298), 2039-2045.

Wager, T. D., Rilling, J. K., Smith, E. E., Sokolik, A., Casey, K. L., Davidson, R. J., ... & Cohen, J. D. (2004). Placebo-induced changes in fMRI in the anticipation and experience of pain. *Science*, 303(5661), 1162–1167.

### **Related Essays in This Project**

Available at: <https://returntoconsciousness.org/>

[Return to Consciousness \(rtc\)](#) — The core framework this essay extends

[Biological Competency \(bio\)](#) — Constraint analysis using mainstream biology

[Consciousness Across Cultures \(cac\)](#) — Comprehensive catalog beyond the phenomena this essay analyzes

### **License**

This work is made freely available under the Creative Commons Attribution 4.0 International License (CC BY 4.0). You are free to share and adapt the material for any purpose, even commercially, provided you give appropriate credit, provide a link to the license, and indicate if changes were made. To view a copy of this license, visit [creativecommons.org/licenses/by/4.0](https://creativecommons.org/licenses/by/4.0).