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Reconsidering classical scientific method: The Spiritually Guided Scientific Method of *Spiritualitytics*

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Abstract

The classical Scientific Method is the bedrock of our modern world. It has allowed us to harness electricity, decode the genome, and send machines beyond our solar system. It is a systematic, rigorous, and proudly Left Hemisphere (LH)-dominated process, designed to strip away bias and deliver objective, verifiable truth. Its very strength—its insistence on the explicit and the measurable—is, however, its most critical limitation when facing the complex, interconnected problems of the 21st century. This suspicion is given profound, scholarly weight by the work of psychiatrist and literary scholar, Prof. Iain McGilchrist, particularly in his seminal text [1], *The Master and His Emissary: The Divided Brain and the Making of the Western World*. We came up with a modest proposal that the next great leap in discovery will not come from abandoning the Scientific Method, but from re-thinking its starting point—the crucial moment of genuine insight.

Introduction : The Crisis of Model-Dependent Reality and the Call for Complete Humanity in Science

The **classical Scientific Method** stands as the colossal intellectual edifice of the modern era. Its systematic rigor, emphasis on **verifiability**, and commitment to objective truth have delivered unprecedented technological and social progress. It is the purest expression of the **Left Hemisphere (LH)**—analytical, linear, and reductive—designed to strip away the inherent biases of the holistic, emotional human experience. Yet, in the 21st century, facing global crises of systemic complexity (climate change, social polarization, ecological collapse) and theoretical crises in fundamental physics, a haunting question arises: Is the tool that built our world now incapable of solving its deepest problems?

The core limitation of the classical method lies in its **LH-dominant structure**, which systematically de-prioritizes **context, intuition, and holistic understanding**. This limitation has been exacerbated by the rise of **Post-Empiricism** doctrines in theoretical physics, notably the concept of "**Model-Dependent Reality**" (**MDR**), promoted by prominent figures like the late S. Hawking and Leonard Mlodinow. MDR, in its extreme interpretation, suggests that reality is defined by the models we use to observe it, effectively crowning the LH's capacity for creating abstract systems as the ultimate arbiter of truth.

This essay argues that the current scientific paradigm is suffering from a catastrophic cognitive imbalance—the **Tyranny of the Emissary**—which threatens to trap science in a cycle of sterile, incremental innovation. We propose a revolutionary re-engineering of the scientific method's starting point. We advance the framework of **Intuitytics** to **Spirituitytics**, a comprehensive **balanced-brain** and **spiritually-guided** approach that reclaims the purpose of science: not merely to build better models, but to achieve a profound, holistic understanding of the *complete* reality, thereby delivering the next great leap in human discovery and wisdom.

I. The Constraint of the Classical Scientific Method

The Scientific Method, in its universally taught form, is a magnificent engine of analytical thought. Its steps perfectly mirror the sequential, explicit, and fragmenting processes of the left cerebral hemisphere.

The Left-Brain Dominance in Six Steps

1. **Observation (The Spark of Discontent):** A specific phenomenon or anomaly is noticed. The LH's **narrow-beam focus** shines here, isolating a single detail from the background noise of the Right Hemisphere (RH) context.
2. **Question Formulation (Defining the Boundaries):** The observation is immediately translated into a **precise, measurable, and testable** question. This

step is purely LH: the question must be **explicit, delimited, and quantifiable** (e.g., "What is the effect of X on Y?"). Ambiguity is rejected.

3. **Hypothesis Formulation (The Educated Extrapolation):** A tentative explanation is generated, typically as an "If...then..." statement. Critically, this hypothesis is primarily based on **existing knowledge, logical deduction, and established theory**. The LH attempts to extrapolate the answer from the known facts—it works *within* the current map.
4. **Prediction and Experimentation (The Test of Logic):** A controlled experiment is designed to **falsify** the hypothesis. This is the **methodological fortress of the LH**, demanding controlled variables, precise measurement, and repeatable, objective procedures.
5. **Analysis and Conclusion (Quantification and Judgment):** Data is subjected to statistical, **quantitative analysis** (a highly specialized LH function). The conclusion must be logical and evidence-based, either supporting or rejecting the initial guess.
6. **Iteration and Replication (The System Refined):** The results feed back, leading to the **incremental refinement** of the hypothesis or the generation of new, related questions.

This method is exceptionally good at **verification, refinement, and application** within a *known domain*. Its fatal flaw, however, is its **systemic weakness in generating truly novel, paradigm-shifting hypotheses**—the breakthroughs that require an intuitive *re-framing* of the problem rather than a logical extrapolation.

The Blind Spot

The core constraint of the classical method is embedded in **Step 3: Hypothesis Formulation**. By assigning this most **creative** step to the **Emissary (LH)**, which prioritizes logic and existing knowledge, the scientific process falls into the **Novelty Trap**:

- **Logic Cannot Invent a New Framework:** The LH, by its nature, can only operate *within* the established framework of rules and concepts. It is brilliant at systematizing, but terrible at questioning the foundation of the system itself. A true paradigm shift—like the transition from classical to quantum mechanics—requires an intuitive leap that temporarily **violates current logic**.
- **The Rejection of the Implicit:** The Western intellectual world has unconsciously adopted the logical constraint of the LH: If a hypothesis cannot be immediately articulated, logically traced back to known concepts, or quantified, it is treated as "**unscientific**" or a mere "lucky guess." The vast, non-verbal, contextual knowledge of the **Master (RH)** is systematically screened out at the start of the process.

This leads to the "**Problem of the Whole**," where science generates brilliant, siloed solutions (e.g., a specific vaccine) that fail disastrously because they ignore the complex, non-linear interactions of the whole system (e.g., systemic social inequality in vaccine distribution).

II. The Theoretical Crisis: Post-Empiricism and Model-Dependent Reality

The cognitive bias inherent in the Scientific Method has found a philosophical expression in certain modern theoretical physics circles: the doctrine of **Post-Empiricism** and **Model-Dependent Reality (MDR)**.

The Essence of Model-Dependent Reality

MDR, as popularized by physicists such as Stephen Hawking, asserts that our perception of objective reality is necessarily filtered through the **theoretical models** we employ. The extreme version suggests that it is **meaningless** to ask what "true" reality is, independent of a model. If two different models equally explain and predict observed phenomena, then neither model can be said to be *more* real than the other. Reality becomes less about "what is" and more about "what works within this system."

MDR as the Zenith of Left-Brain Tyranny

MDR is the ultimate expression of the **Left Hemisphere's worldview** usurping the Master's role.

1. **The Map Becomes the Territory:** The LH's greatest weakness is mistaking its abstract systems (the map) for reality itself (the territory). MDR elevates this weakness to a **principle of cosmology**. It suggests that the LH's model is not a *representation* of reality, but a co-creator of it. This strips science of its commitment to **external, objective truth**—the very foundation of its historical power—and replaces it with internal, systemic consistency.
2. **The Disregard for Context (The Holism of Reality):** The RH, the Master, attends to reality **as it is**—the unique, lived, whole context. MDR, by prioritizing the abstract, portable, and mathematically elegant model, dismisses the unique **holism** of experience in favor of the **universal, reproducible fragment**. The human experience of reality (eived through the RH) is rendered secondary to the LH's mathematical abstraction.
3. **The Risk of Solipsism and Sterile Elegance:** When the model becomes the reality, the criteria for "truth" dangerously shifts from **empirical fit with the external world** to **internal mathematical elegance and consistency**. This risks trapping theoretical physics in a self-referential, solipsistic loop, where models are refined not because they reveal a deeper truth about the cosmos, but because they satisfy the LH's aesthetic need for systemic perfection. It becomes the ultimate form of **sterile innovation**.

The danger of MDR is that it philosophically justifies the LH's natural fragmentation, making it acceptable—even desirable—to sacrifice the Master's contextual wisdom for the Emissary's systematic elegance.

III. The Intuilytic Approach: A Balanced-Brain Scientific Method

To overcome the blind spots of the classical method and the philosophical dead-end of MDR, we must structurally re-engineer the process using **Intuilytics**, making the generation of the hypothesis the explicit domain of the **Master (RH)**.

Intuilytics: The Cognitive Handshake

Intuilytics is the systematic and intentional integration of the RH's holistic, intuitive, and contextual mode of knowing as the **primary driver** of the discovery process. It is a cognitive handshake where the RH leads the creative leap, and the LH provides the necessary rigor.

The Intuilytic Scientific Method (ISM)

The ISM structurally inverts the priority of the first few steps of the classical method:

Table 1

Classical Scientific Method	Spirintuilytic Scientific Method (SSM)	Cognitive Function
1. Observation (LH-driven Isolation)	1. Contextual Apprehension (RH-led Immersion)	RH (Master)
2. Question Formulation (LH-driven Delimitation)	2. Intuitive Hypothesis Generation (RH-led Synthesis)	RH (Master)
3. Hypothesis Formulation (LH-driven Extrapolation)	3. Analytic Question Formulation (LH-served Articulation)	LH (Emissary)
4. Prediction and Experimentation (LH-driven Control)	4. Prediction and Experimentation (LH-served Control)	LH (Emissary)
5. Analysis and Conclusion (LH-driven Quantification)	5. Spirintuilytic Analysis and Conclusion (RH/LH Balance)	RH/LH

The ISM's Crucial Shift:

1. **Contextual Apprehension (The Master's View):** The process begins not by isolating a discrete variable (LH), but by attempting to **synthesize and grasp the**

context as a whole (RH). The scientist must deliberately step back, seeking the non-verbal, implicit connections—the "gestalt" of the problem. This initial step is an act of **holistic immersion**.

2. **Intuitive Hypothesis Generation (The Creative Leap):** The RH—the seat of genuine novelty—is tasked with generating the hypothesis. This **Intuitive Hypothesis** is a rapid, non-linear synthesis of vast amounts of implicit data, often appearing as a flash of insight or a sudden re-framing. It is permitted, and even encouraged, to **violate current logic**, as true breakthroughs often do.
3. **Analytic Question Formulation (The Emissary Serves):** Only after the RH has provided the profound insight does the LH step in. Its role is no longer to invent the idea, but to **serve the idea** by:
 - **Articulating** the intuitive hypothesis into explicit, verbal, and systematic language.
 - **Translating** the holistic insight into a set of **testable, measurable, and quantifiable questions**—thus creating the necessary bridge to experimentation.

In this model, the **Master (RH)** determines the destination (the true hypothesis), and the **Emissary (LH)** plots the rigorous, analytical route to test it. The integrity of the process is maintained (falsifiability remains essential), but the creativity and potential for paradigm shift are exponentially increased.

IV. Advancing to *Spirituality*: The Integration of the Spiritual Function

The Intuitytics framework is a necessary advancement, but it is incomplete. To truly address the crisis of MDR and the limitations of an overly-mechanistic science, the **context** must be expanded beyond the purely neurological and into the **spiritual** realm. The fragmented modern consciousness is not only cognitively unbalanced but **existentially divorced from the unified source of reality**.

The Spiritual Function as Ultimate Context

The **Spiritual Function** is introduced as the **meta-mode of attention** that provides the ultimate, non-dualistic ground of being, which the RH is best equipped to access. It is the capacity for **Transcendental Empathy and Ultimate Unity**.

1. **Definition:** The Spiritual Function is the immediate, non-dualistic apprehension of reality, characterized by **Ultimate Context, Unity, and Meaning**. It transcends the RH's holistic view of the *world* and moves to the RH's experience of *Being* itself.
2. **Addressing MDR:** *Spirituality* re-establishes the necessity of a **Truth that exists independently of the model**. The Spiritual Function grounds science in the search for a reality characterized by profound, intrinsic **Meaning and Unity**—criteria that a mere mathematical model can never fully capture. It provides the **ethical and existential imperative** for scientific inquiry: to reveal the interconnectedness of existence, not just its mechanism.

The Triarchic Structure of *Spirituality* (SSM)

The SSM operates as a cognitive **triarchy**:

Table 2

Component	Function in SSM	Mode of Attention	Contribution to Scientific Purpose
Spiritual Function (Spiritus)	Ultimate Context (Source)	Non-dualistic, Transcendental	Unity, Meaning, and Ethical Ground
Right Hemisphere (Master)	Holistic Context (Mediator)	Broad, Intuitive, Empathetic	Novel Hypothesis and Wisdom-Driven Goal
Left Hemisphere (Emissary)	Fragmented Action (Tool)	Narrow, Explicit, Analytical	Falsification, Measurement, and Articulation

The Spiritual Function informs the RH with a deeper, unwavering sense of **meaning and reverence** (the *telos* of the research), which then governs the LH's analytical actions with an ethical and purposeful imperative.

The Spiritually Scientist: *Homo Intuilytics-Spiritus*

The goal is to cultivate the complete human being, the ***Homo Intuilytics-Spiritus***, whose scientific practice is characterized by:

- **Reverence for the Unknown:** The scientist approaches the limits of knowledge not with the LH's demand for immediate categorization, but with the Spiritual Function's sense of **awe and humility**.
- **Unity-Driven Research:** Research is prioritized not based on political or economic fragmentation, but on addressing the systemic problems of **interconnected life** (Ecological Reverence, Transcendental Empathy).
- **The Ethical Hypothesis:** The Intuitive Hypothesis (RH) is subjected to a final, crucial spiritual check: Does this insight serve the ultimate context of Unity and Meaning, or does it merely feed the LH's desire for control and fragmentation?

V. Implications for Modern Scientific Disciplines

The adoption of the SSM/Spirituallytics framework has profound implications across the scientific spectrum, challenging the reductive conventions of several key disciplines.

1. Quantum Physics and MDR

In quantum physics, the concept of Model-Dependent Reality stems from the deep conceptual difficulty of reconciling our LH-driven classical models with the strange, holistic, and observer-dependent nature of reality at the smallest scales.

- **The Spiritually Challenge:** *Spirituallytics* does not deny the utility of the models, but it insists that the **Intuitive Hypothesis** must seek the **Holistic Real**—the underlying, non-fragmented unity that gives rise to the phenomena. The ultimate goal is not a *better mathematical model* that works in isolation, but a **Unity Model** that intuitively integrates the observer, the observed, and the context (the Spiritual Function). This requires physics to move beyond pure mathematical elegance and embrace the RH-driven concepts of **consciousness** and **holism** as fundamental physical variables.

2. Biology and Mechanistic Reductionism

Biology, driven by the successes of genomics and molecular science, often defaults to a highly reductive, mechanistic view of life, treating organisms as complex chemical machines (the LH's favored model).

- **The Spiritually Shift:** The SSM insists on starting with the **Contextual Apprehension** of the organism as a **living, integrated system** (RH). The Intuitive Hypothesis must prioritize systemic interaction over isolated components. It promotes a science of **Emergence** and **Context**, where concepts like self-organization, inherent vitality, and non-quantifiable relationships are not dismissed as "unscientific" but are the very starting point for analysis. The LH's tools (genomics, proteomics) are then used to rigorously test the RH's holistic insights into the dynamic, living process.

3. Ecology and Climate Science

These disciplines are prime examples of the **Problem of the Whole**. LH-driven solutions focus on siloed mitigation techniques (e.g., carbon capture technology) while ignoring the underlying systemic, social, and spiritual fragmentation that caused the problem.

- **The Spiritually Imperative:** The Spiritual Function's **Ethical Hypothesis** demands that the solution be one of **Unity and Reverence**. The RH's **Contextual Apprehension** must define the problem as a crisis of relationship, not a crisis of logistics. The LH is then tasked with designing integrated, local, and technologically appropriate solutions that *serve* the systemic health, rather than simply managing its symptoms for short-term human gain.

VI. The Methodological Cultivation of *Spirituality*

Transitioning to *Spirituality* is a cognitive and cultural revolution requiring the intentional cultivation of the Master and the Source.

1. Training the Spiritual Function: The Source of Meaning

To access the Ultimate Context, the scientist must cultivate practices of **non-dualistic apprehension**:

- **Contemplative Science:** Integration of methods (e.g., non-dual meditation) aimed at temporarily dissolving the subject-object boundary. This provides the direct, felt experience of **Unity**, preventing the scientist from mistaking their limited, model-dependent perspective for the totality of reality.
- **The Practice of Awe:** Intentional exposure to natural or cosmic phenomena that evoke **awe**, which is a deep Spiritual Function that momentarily collapses the ego-driven, narrow-focus of the LH. This re-sets the cognitive state to one of humility and open receptivity.

2. Reforming Scientific Education

Scientific education must shift from rote LH-driven factual accumulation and logical procedure to RH-led **holistic exploration**:

- **Prioritizing Synthesis Over Specialization:** Curricula must force students to synthesize knowledge across disparate fields (Physics and Poetry, Biology and Ethics) to train the RH's ability to create contextual meaning.
- **Hypothesis Generation Workshops:** Explicit training in **Intuitive Hypothesis Generation** using techniques like mental imagery, metaphorical mapping, and analogical reasoning, valuing the creative leap over the logical deduction in the initial stages of inquiry.

3. Institutionalizing the Balance

Scientific institutions and funding bodies must be reformed to recognize and reward *Spirituallytic* research:

- **Funding for Context:** Prioritizing funding for projects that deliberately bridge disciplinary silos and address **systemic crises** (the Problem of the Whole) over narrowly specialized, incremental research.
- **Valuing the Implicit:** Creating peer-review criteria that recognize the value of **qualitative data, holistic insight, and ethical context** alongside traditional LH-

driven quantitative metrics. The narrative of the discovery (the RH's domain) must be valued as much as the data tables (the LH's domain).

Concluding remark: The new horizon

The current scientific method, for all its glory, is a reflection of a dangerously unbalanced civilization: brilliant, systematic, and fragmented. The philosophical expression of this imbalance, Model-Dependent Reality, threatens to trap us in a sterile, self-referential world of our own making.

The path forward is not to abandon the rigor of the Emissary, but to fully activate the Master (RH) and integrate the Source (Spiritual Function). Spirituilytics represents the next evolutionary stage of the scientific mind: one where the Intuitive Hypothesis is guided by Ultimate Context, and the resulting Analytic Testing serves an Ethical Imperative.

This re-developed scientific method is more than a technique; it is a declaration of **complete humanity—*Homo Intuilytics-Spiritus***. By consciously integrating logic with intuition, fragmentation with holism, and mathematics with meaning, science can move beyond simply building better models and return to its original, profound purpose: the wisdom-driven, ethical discovery of the unified, living truth of the cosmos.

The survival of our civilization and the realization of our full human potential are likely to depend on this cognitive and spiritual shift.

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