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[Gerd Leidig](#)*

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Article

Mind, Brain, and Being-in-the-World: The Resonance-Inference Model as a Neuro-Phenomenological Answer to Dualism

Gerd Leidig

Independent Researcher, Cologne, Germany; gerd.leidig@gmail.com

Abstract

This paper presents the Resonance-Inference Model (RIM) as a meta-theoretical framework that overcomes the “explanatory gap” between the first-person perspective of experience and the third-person perspective of neuroscience. The central thesis is that the RIM resolves Cartesian dualism not through reduction but through a synergetic synthesis, modeling the mind as an emergent ordering parameter of the brain-body-environment loop. The model integrates the free energy principle (Friston), the phenomenology of the embodied self (Gallagher), and spatio-temporal brain dynamics (Northoff). A philosophical genealogy is drawn from Schopenhauer’s anti-representationalist turn to modern enactivism (Thompson), and a mediating proposal between enactivism and predictive processing is offered. The paper also subjects the model to a stress test by addressing and integratively resolving key limit questions (e.g., on the nature of consciousness and the universality of the search for meaning). The implications for a non-reductionist, integrative science of the mind, as well as for the clinical practice of psychotherapy, are outlined.

Keywords: Resonance-Inference Model; predictive processing; enactivism; phenomenology; dualism; consciousness; synergetics

Public Significance Statement

This article presents a new scientific model that bridges the long-standing gap between brain and mind. By showing how our subjective experiences of meaning, purpose, and emotion are fundamentally linked to the self-organizing dynamics of our brain and body, this research offers a more holistic understanding of human consciousness. The findings have significant implications for mental health, suggesting that psychotherapy can be more effective when it addresses the whole person—unifying psychological, biological, and existential dimensions of well-being to foster genuine healing and resilience.

Introduction

Problem Statement

Since Descartes, a fundamental gap has shaped Western thought: the dualism between the subjective experience of the mind (first-person perspective) and the objective, physical world of matter (third-person perspective). In modern cognitive sciences, this gap manifests as the “explanatory gap”—the question of how and why neurophysiological processes give rise to the phenomenal quality of experience: what it is like to feel joy, fear, or meaning. This gap is not a purely academic question; it is the central obstacle to an integrative science of the human being and the theoretical root of many pathologizations. As long as mind and brain are conceptualized as separate domains, attempts to understand psychological suffering remain trapped in either a disembodied mentalism or a soulless reductionism. This paper argues that overcoming this dichotomy is the prerequisite for any genuine progress.

Presentation of the Thesis

The Resonance-Inference Model (RIM) presented here aims to close this explanatory gap (Leidig, 2025a). The central thesis is that the RIM offers a meta-theoretical framework that resolves dualism not through reduction but through a synergetic synthesis. It models the mind not as a property of the brain but as an emergent, causally effective ordering parameter that arises from the self-organizing dynamics of the brain-body-environment loop. By demonstrating how the formal logic of information processing (Friston), lived phenomenology (Gallagher), and neural dynamics (Northoff) are different descriptive levels of the same unified process, it provides a common language for the mental and the physical. This paper will not only present the model but also subject it to an internal stress test by addressing and integratively resolving the most challenging limit questions to its central theses. The implications of this reorientation are profound and far-reaching, especially for psychology and psychotherapy: it enables an understanding of suffering and healing that grasps the human being in their entire, indivisible psycho-physical unity.

Structure of the Paper

The following analysis unfolds the argumentative structure of the RIM step by step. First, the basic architecture of the model is presented. Building on this, an analysis of the spiritual dimension as the highest organizational level follows. Subsequently, the connection to the fulfillment of basic psychological needs is established. The fourth part examines the philosophical implications of the model, particularly its ability to resolve representational-logical dualism and to place this in a philosophical genealogy since Schopenhauer. The fifth part brings the RIM into dialogue with the current debate on representationalism and enactivism in cognitive science. A sixth chapter is dedicated to the limit questions of the model and attempts to resolve them integratively.

The Architecture of Being-in-the-World: The Synergetic Entanglement of the Six Pillars of the RIM

The Resonance-Inference Model (RIM) is not an eclectic collection of disparate theories but a carefully constructed, dialectically arranged architecture in which each pillar closes an explanatory gap of the previous one (Leidig, 2025a). This entanglement makes it possible to describe human “being-in-the-world” as a unified, multi-layered, and self-organizing inference process that ranges from the fundamental logic of information processing to lived, felt reality.

Form & Content – The Algorithm of Experience

At the basis of the RIM stands Karl Friston’s *Free Energy Principle (FEP)* as the universal, formal grammar of the mind (Friston, 2010). The FEP describes every living system, from amoeba to human, not as a passive stimulus-response apparatus but as a proactive “inference machine.” Its fundamental, existential imperative is to minimize surprise (or, more mathematically precise, free energy). In other words, living beings constantly try to remain in states compatible with their own continued existence and to avoid unforeseen, potentially threatening states. This minimization of prediction errors occurs via two complementary paths. First, through *perceptual inference*: the system adjusts its internal “generative model” of the world to better predict incoming sensory signals. This is the essence of learning. When we receive an unexpected reaction from a friend, it creates a prediction error that forces us to update our model of the relationship. Second, through *active inference*: instead of changing the model, a system acts in the world to make the world conform to its predictions. When we are cold (a prediction error against the expected state of homeostasis), we put on a jacket, actively changing the sensory inputs until they match our prediction. This formal algorithm is universal and elegant, but it only explains the abstract *how* of mental processing. It is content-free and leaves the crucial question unanswered: *What* is the substance of the generative model being updated here?

At this crucial point, the RIM builds a bridge to phenomenology through Shaun Gallagher's theory of the *embodied self-pattern* (Gallagher, 2013). The central insight is that the "generative model" that Friston formally postulates is not abstract software or a set of propositions in the brain. It is what we immediately and inseparably experience as *our self*: a dynamic, processual, and multi-layered pattern rooted in lived, feeling experience (Gallagher, 2013; Zahavi, 2009). This self-pattern unfolds on several intertwined levels: the *embodied* (our basic sense of our own body, its posture, and interoceptive signals), the *affective* (our basic emotional mood that colors our perception of the world), the *social* (our implicit models about the intentions of others and our place in the social fabric), and the *narrative* level (the stories we tell about ourselves to give our lives coherence). The deepest and most powerful predictions (priors) are therefore not explicit sentences in our head like "I am a capable person." They are inscribed in the way we stand upright, how our stomach feels during a challenge, and which automatic action impulses arise within us. The FEP describes the universal algorithm of self-preservation; the embodied self-pattern is the concrete, lived, and felt code on which this algorithm runs.

Dynamics & Energy – The Engine of Change

Hermann Haken's *synergetics* provides the language for the dynamic form of change. Psychological states, especially chronic patterns of suffering, are understood here not as static deficits but as highly stable, self-organizing patterns—as *attractors* in the dynamic landscape of the mind. Such a maladaptive attractor, for example, a depressive pattern, consists of a self-reinforcing cycle of negative thoughts, depressed mood, social withdrawal, and physiological exhaustion. The system repeatedly "falls" back into this state because it is energetically the most stable. From this perspective, change is not a linear, step-by-step process but a fundamental, non-linear *phase transition*: the abrupt collapse of the old attractor and the emergence of a new, more adaptive pattern. However, such a transition cannot occur from a state of stability. It requires the entire system to first be brought into a state of instability and maximum potentiality—a state of *criticality*, aptly described by Haken as "on the edge of chaos" (Haken, 1983; Leidig, 2025a). In this state, the system is highly sensitive to the smallest fluctuations and ready for a fundamental reorganization.

The energetic drive for this dynamic process is provided by Luc Ciompi's fractal affect logic (Ciompi, 1997). Here, the RIM accomplishes one of its most central syntheses: it equates the abstract, information-theoretic quantity of "free energy" from the FEP with the concretely experienced, phenomenological reality of "emotional tension." Affects are therefore not mere reactions to external stimuli but the immediate, felt correlate of a neurodynamic imbalance and the primary, global operator that organizes and structures our entire cognition (Leidig, 2025a). In the language of synergetics, this experienced emotional tension functions as the decisive control parameter. An increase in emotional tension—for example, through confrontation with painful truths in therapy—increases instability in the system and can push it over the threshold into a state of criticality. The emotional energy contained in suffering thus becomes the fuel for the phase transition and, consequently, for profound, structural change.

Motivation & Manifestation – The Goal and Its Stage

After establishing the formal logic (Friston), phenomenological content (Gallagher), dynamic form (Haken), and energetic drive (Ciompi) of being-in-the-world, the final two pillars close the crucial gap to lived reality: they give the entire process a goal and a physical stage.

Klaus Grawe's consistency theory provides the motivational grammar that gives the inference process its ultimate direction (Grawe, 2004). The four basic psychological needs he postulated—attachment, orientation/control, self-esteem enhancement, and pleasure/displeasure—are interpreted in the RIM as the highest, most abstract, and evolutionarily deepest priors of our generative model. They are the fundamental assumptions our system makes about the conditions for its own flourishing. The pursuit of consistency is thus nothing other than the organism's attempt to shape its actions and experiences in such a way that these core predictions are continuously met. Grawe's

“inconsistency experience”—the tormenting feeling that life is not “right”—is the precise phenomenological description of a state of chronically high free energy (Leidig, 2025a). It is the lived experience that arises from a massive and persistent discrepancy between the predictions of our basic needs and the incoming sensory data (both intero- and exteroceptive).

Finally, Georg Northoff’s spatio-temporal neuroscience situates this entire process on the physical stage of the brain’s intrinsic dynamics (Northoff, 2023). The self-pattern that Gallagher speaks of is not a disembodied abstraction; it is encoded in the fundamental “basic melody” of the brain’s spontaneous, oscillatory activity. These complex, spatio-temporal patterns are not just a side effect but the physical manifestation of the inference process. A healthy, consistent self-pattern corresponds to flexible, rich, and complex neural dynamics. Pathology, on the other hand, is literally a disturbance in the music of the brain: a depressive pattern, for example, manifests as a rigid, sub-critical, and monotonous rhythmicity that loses the ability to flexibly adapt to new information. The brain remains trapped in a maladaptive attractor, which manifests on the experiential level as Grawe’s inconsistency experience (Leidig, 2025a). Northoff thus provides the crucial neurodynamic correlate that shows how the abstract pursuit of motivational consistency takes form in the concrete, physical self-organization of the brain.

Psychological Construct	Friston (FEP/PP)	Gallagher (Self-Pattern/4E)	Northoff (Spatio-temporal Dynamics)	Haken (Synergetics)	Ciampi (Affect Logic)	Grawe (Consistency Theory)
The Self	The generative model that minimizes free energy.	A dynamic, multi-layered pattern of embodied processes.	A process mirrored in the spatio-temporal structure of brain activity.	A macroscopic ordering parameter.	A fractal hierarchy of affectively charged programs.	An agent driven by the pursuit of need satisfaction.

Affect/Emotion	Experience of prediction errors (valence) & uncertainty (arousal).	An integral, embodied aspect of the self-pattern.	Specific patterns of global brain dynamics.	A control parameter (emotional tension).	A global operator that organizes cognition.	The result of evaluation with respect to basic needs.
Psychopathology	Faulty inference (rigid priors, false precision weighting).	A rigid, dysfunctional pattern of "sense-making."	A disturbance of the intrinsic spatio-temporal brain dynamics.	A stable, maladaptive attractor.	A state of critically high emotional tension.	A state of chronic inconsistency (violated basic needs).

Source: Adapted from Leidig (2025a).

The Spiritual Dimension as the Highest Prior and Control Parameter

The RIM integrates a spiritual dimension as the highest organizational level of human existence. This dimension is not a mere addition but a neurocognitive necessity that arises from the logic of the

model itself. Viktor Frankl's "will to meaning" is interpreted as the ultimate *master prior* of the entire system—as the deepest and most abstract prediction an organism can make about its existence (Frankl, 1985; Leidig, 2025b). Such a master prior functions as the most elegant model for complexity reduction: it provides a superordinate hypothesis about the coherence and value of life, enabling the system to subsume a maximum number of life experiences, including suffering and adversity, under a single, stable assumption. A state of meaninglessness is thus the information-theoretic collapse of the generative model at its highest level, leading to a state of maximum uncertainty and free energy—what Frankl called the "existential vacuum."

At the same time, the "spiritual self-pattern" functions as a global control parameter in the sense of synergetics, regulating the neurodynamic balance (criticality) of the entire system. Spiritual dissonance, i.e., an unstable or absent master prior, leads to a dysregulation of neural dynamics, which can manifest in rigid, sub-critical states (depression, apathy) or chaotic, super-critical states (mania, fanaticism). "Vertical resonance," on the other hand, the phenomenological correlate of a coherent meaning-prior, stabilizes the system in a state of optimal flexibility and adaptability. The energy required for such a profound transformation is provided by the affective tension of existential suffering itself. The feeling of meaninglessness is thus not only a symptom but also the potential fuel for its own overcoming (Ciompi, 1997).

Meaning as the Ultimate Foundation of Consistency

The pursuit of meaning is not a fifth category of need alongside the four basic needs postulated by Grawe, but rather it represents the ultimate form of establishing consistency. It answers the overarching, meta-motivational question of *for what purpose* the consistency of the other needs should be established at all (Leidig, 2025a). Grawe's needs (attachment, control, self-esteem, pleasure/displeasure) describe the "horizontal" level of striving for security and well-being within the given world. The spiritual dimension, in contrast, describes the "vertical" level of being-in-the-world; it gives this horizontal striving a superordinate context, a direction, and a significance.

This hierarchical structure also resolves the historical conflict between Frankl's transcendent, objective search for meaning and Alfried Längle's immanent, processual approach of Personal Existential Analysis. From the RIM perspective, these are not competing models but complementary descriptions of different levels of the inference hierarchy. Längle's four fundamental motivations describe the necessary basal priors whose fulfillment creates the neurobiological and psychological conditions of possibility for Frankl's master prior to be activated stably and sustainably at all (Längle, 2005). A system chronically occupied with minimizing basal prediction errors (e.g., existential anxiety due to a lack of security according to FM 1) cannot muster the cognitive resources to form and pursue stable, long-term, and abstract meaning-priors. Längle thus describes the necessary foundation that Frankl's top-down approach needs in order not to be void (Leidig, 2025). He operationalizes the bottom-up process of "internalizing" values and "inner consent," which creates the bodily-affective basis on which the "defiant power of the human spirit" can build.

Overcoming Dualism: The RIM as a Meta-Theoretical Bridge

The most philosophically far-reaching claim of the RIM is to overcome representational-logical dualism.

The Two Perspectives of the Self: Lived Experience and Neurodynamic Process

The key to overcoming dualism lies in the RIM's ability to integrate two fundamentally different but inseparably interwoven descriptive levels of the self: the perspective of immediate experience (first-person) and the perspective of objective, processual events (third-person).

The first-person perspective describes "what it is like" to be a conscious, existential being—the world of qualia. In the RIM, this perspective is represented by theories that focus on subjective experience. Shaun Gallagher's phenomenological, embodied self-pattern emphasizes the lived unity

of body, mind, and environment; the self is not a 'thing in the head' but a processual pattern that unfolds in action. Luc Ciompi's affect logic describes how this lived reality is energized and structured by emotional tension; affects are not mere reactions but the primary language of our being-in-the-world. The existential and motivational dimension is covered by Frankl and Grawe: experienced meaning (or agonizing emptiness) and the feeling of coherence through fulfilled basic needs are the central coordinates on the map of our lived experience.

The third-person perspective describes the objective, measurable, processual mechanisms that underlie subjective experience. It is the language of natural science. In the RIM, this perspective is represented by Karl Friston's formal, mathematical models of inference, which describe experience as a process of prediction error minimization. Georg Northoff's measurable spatio-temporal dynamics of neural activity provide the physical manifestation of this process; the feeling of coherence or fragmentation has a direct correlate in the rhythms and patterns of brain activity.

The crucial achievement of the RIM is not just to acknowledge both perspectives but to see them as two sides of the same coin. It creates a bridge by showing that the phenomenological and motivational level of experience (Gallagher, Ciompi, Frankl, Grawe) is the content and driving force of what is formally described on the processual level as a neurodynamic mechanism (Friston, Northoff). "Emotional tension" is the experienced form of "free energy"; the "embodied self-pattern" is the lived reality of the "generative model."

Downward Causation Through the "Slaving Principle" as a Solution

The RIM resolves the traditional mind-body problem not by postulating a mysterious interaction but by reframing the question itself through the principles of synergetics. The solution lies in Hermann Haken's "slaving principle" (Haken, 1983), which describes the relationship between microscopic and macroscopic levels in complex systems. The mind—understood as the highest, slowly changing self-pattern, such as a life purpose or a core belief—is not conceptualized as a separate, immaterial substance but as an emergent, macroscopic *ordering parameter*. This global state arises from the complex interaction of countless, rapid neural processes (bottom-up emergence). However, once this ordering parameter is established, it "enslaves" the subordinate neural processes, massively constraining their degrees of freedom and possible future states. This *downward causation* is not a physical force in the sense of a mechanical impact that would violate the laws of physics. It is rather a formal or informational causation. A change at the level of meaning (a change in the ordering parameter) is a change in the global boundary conditions under which the neural processes operate. The emergent order structures the dynamics of its own components.

A vivid example is the relationship between a single water molecule and a vortex. The vortex (the ordering parameter) arises from the chaotic movement of countless individual molecules (bottom-up), but once the vortex exists, its global form dictates the trajectory of each individual molecule (top-down). Analogously, a deeply ingrained belief like "I am unlovable" (a stable, maladaptive ordering parameter) shapes the brain's inference architecture by controlling the precision weighting of prediction errors. Social signals that contradict this belief (e.g., a compliment) are dismissed as irrelevant (low precision), while ambiguous signals are interpreted in line with the belief (high precision). The belief thus perpetuates itself by "enslaving" neural processing.

Using the distinction introduced by Marcus Willaschek, this relationship can be framed even more precisely: it is not primarily causal but conceptual. The global state (meaning) is the condition of possibility for the meaningful organization of local neural activity (Willaschek, 2015). Mind and brain are thus two different but inseparable descriptive levels of a single, self-organizing system. Dualism dissolves because the question of the interaction of two substances is replaced by the question of the relationship between different organizational levels within a single, embodied system (Tschacher & Storch, 2009).

Philosophical Genealogy: Schopenhauer's Anti-Representationalist Turn

This reframing of the mind-body problem has a long philosophical tradition, brilliantly anticipated by Arthur Schopenhauer. Schopenhauer faced the same problem as modern cognitive science: the dualism established by Kant between the world as it appears to us (phenomenon) and the world as it is in itself (noumenon). His revolutionary solution was to break this dualism from within. He identified the unknowable “thing-in-itself” as the *Will*—a blind, incessant striving—to which we have a single, privileged access: the immediate, inner experience of our own body as a lived *body* (*Leib*) (Schopenhauer, 1819/1988). Our body is given to us in a dual way: viewed from the outside, it is an object among objects, a “representation.” Felt from the inside, however, it is the direct manifestation of the Will. This feeling of hunger, desire, effort, and pain is not a mental image of something but the thing itself revealing itself to us.

This turn to the body as the primary site of world experience is a fundamentally anti-representationalist move. It breaks through the “veil of representation” by finding a point where being and knowing coincide. In doing so, Schopenhauer directly paves the way for the phenomenology of the 20th century, especially for thinkers like Merleau-Ponty and his concept of the *corps propre* (the lived body) (Merleau-Ponty, 1966). The RIM is a direct neurocognitive formulation of this insight: Gallagher’s theory of the embodied self-pattern is the philosophical heir to Schopenhauer’s lived body, while the emphasis on interoception and Ciompi’s affect logic provides a scientific language for precisely that inner experience of the Will that Schopenhauer recognized as the key to overcoming dualism.

Dialogue with the Present: The RIM in the Context of Enactivism

The reorientation of the RIM from a purely psychotherapeutic to a philosophical model finds its strongest confirmation in the dialogue with current cognitive science. *Enactivism*, as developed by Evan Thompson and Francisco Varela, is the direct heir of the anti-representationalist tradition (Thompson, 2007). It naturalizes Schopenhauer’s metaphysical Will through the biological principle of *autopoiesis*—the ability of a living system to continuously produce itself by creating a boundary (e.g., a cell membrane) and thus distinguish itself from its environment. The most fundamental goal of any organism is therefore the maintenance of this autopoietic organization. From this perspective, cognition is not the processing of information about an external world but “sense-making”: the process by which an autonomous system structures its environment as meaningful and relevant with respect to its own self-preservation. The cognitive apparatus here is not primarily the brain but the entire embodied system in its dynamic coupling with the environment.

This perspective leads to a fundamental conflict with the theory of Predictive Processing (PP), which describes the brain as the constructor of internal “generative models” and thus appears to stand in the tradition of representationalism. PP postulates that the brain does not perceive the world directly but creates an internal simulation of the world and merely checks it against sensory data. For enactivism, this is a return to Cartesian dualism, in which an inner observer views an inner representation. It is precisely at this point that the RIM can act as a crucial mediator. It proposes a reinterpretation of the core concepts of PP in light of enactivism: the “generative models” are not understood as passive, pictorial world-reflections but as dynamic, action-oriented models of interaction. Such a model does not primarily represent what an object is, but what one can do with it—it is a model of action affordances. The deepest “priors” are thus not abstract assumptions but embodied skills and habits of action.

The minimization of prediction error (free energy) is also reinterpreted in this reading. It is not a purely internal, computational process in which an internal model is compared with external data. Instead, it is the process of actively maintaining a stable, dynamic coupling between the organism and the environment. A prediction error is phenomenologically the experience of a disturbance of this coupling—the moment when the world no longer corresponds to our action-oriented expectations. The two ways of error minimization—perceptual and active inference—are then two

strategies for restoring this coupling: either we adjust our action model (learning) or we change the world through our actions so that it fits our model again. The RIM thus proposes an “enacted will”: a synthesis of Schopenhauer’s insight into the striving, embodied nature of life, Thompson’s biologically grounded sense-making through autopoiesis, and Friston’s formal inference principle as the universal dynamic that describes this process of existential self-preservation.

Stress Test and Synthesis: The RIM in Dialogue with Its Limit Questions

The robustness of a scientific model is demonstrated not by the absence of criticism but by its ability to productively integrate limit questions and potential inconsistencies and to evolve through them. This chapter subjects the RIM to such a stress test by addressing the three most challenging critical objections. The aim is not to defensively refute them but to use them as a catalyst for a deeper and more precise formulation of the model—a “healing” consideration in the sense of perfecting the theory.

The Energy of Experience: From Metaphor to Mechanism

The first and perhaps most fundamental challenge concerns the central synthesis of the RIM: the direct equation of the information-theoretic quantity of “free energy” (Friston) with the phenomenologically experienced “emotional tension” (Ciompi). The critical objection is that this connection risks being a category error or a scientifically impermissible, purely metaphorical bridge between two incommensurable levels of description. To address this criticism, the RIM resolves the static equation into a dynamic, neurophysiologically grounded *causal loop*.

The mechanism unfolds in three steps: First, a state of chronically high free energy—that is, a state in which the organism’s generative model poorly predicts the world—is not the cause of negative affect but its information-theoretic description. What is formalized at the third-person level as high free energy is directly experienced at the first-person level as negative valence, as “emotional tension” or inconsistency experience. Second, this experienced negative affect acts as a crucial alarm signal. As argued by Tucker et al. (2025), such affective states activate evolutionarily old control systems (e.g., in the brainstem) that modulate the global balance of excitatory and inhibitory neurotransmission (E/I balance) in the brain. This change in the neurochemical landscape has a direct consequence for the inference process: it changes the precision weighting, i.e., the “volume” with which predictions (priors) and sensory data (prediction errors) feed into the inference. A state of high tension typically increases the precision of sensory data and decreases that of the priors, opening the system to new learning. Third, and finally, the successful decrease in free energy, i.e., the rate at which prediction errors are reduced, is in turn phenomenologically experienced as positive valence—as a feeling of relief, coherence, or resonance (Joffily & Coricelli, 2013).

This dynamic loop is placed on a final, non-dualistic foundation by Northoff’s (2023) concept of the “common currency.” Free energy (the information-theoretic level), E/I balance (the neurophysiological level), and emotional valence (the phenomenological level) are therefore not separate entities that causally interact. They are three different but inseparable descriptive levels of the same underlying reality: the self-organizing, intrinsically phenomenal, spatio-temporal dynamics of the brain. Through this refinement, the connection between energy and experience is elevated from a potential metaphor to a mechanistically plausible and empirically testable model of affect dynamics.

The Emergence of Consciousness: The “Slaving Principle” and the Limits of Explanation

The second critical objection targets the explanatory power of the synergetic “slaving principle.” While Haken’s principle elegantly explains the formal dynamics of downward causation—how a macroscopic ordering parameter (e.g., an intention) “enslaves” microscopic neural activity—it remains silent on the “hard problem of consciousness.” It does not explain *why* such an ordering parameter is associated with subjective experience and phenomenal qualia at all. This objection is valid and requires a precise clarification of the RIM’s explanatory claim.

The model's integrative response is to specify the scope of the "slaving principle": it is not postulated as a theory of qualia but as a theory of the dynamic organization of the physical preconditions for coherent, conscious experience. For this, the RIM draws on the Criticality Hypothesis (Tucker et al., 2025). This hypothesis states that consciousness in its richest and most flexible form arises when the brain operates in a state of criticality—a dynamic balance between rigid order and chaotic disorder. From this perspective, the "slaving principle" is precisely the mechanism that explains how a mental ordering parameter (a thought, a feeling, an intention) structures and "enslaves" the global neural dynamics in such a way that the system is guided into and maintained in this optimal operating state of criticality. However, the metaphor of "stage" and "actors" is itself dangerous, as it reintroduces the very dualism between a content-free form (consciousness as a stage) and its contents (qualia as actors) that the RIM seeks to overcome. A phenomenologically more precise reading, oriented towards Brentano and Heidegger, resolves this tension. Consciousness, as Brentano (1874/1973) showed, is necessarily intentional consciousness—it is always already a consciousness of something. There is no empty stage that is subsequently filled with content; the form and content of consciousness are inseparable. In this light, the "slaving principle" does not describe the organization of a stage, but the dynamic stabilization of the event of "unconcealing disclosure" (Heidegger's *aletheia*) itself (Heidegger, 1927/2006). It explains how a coherent, intentional act of being-in-the-world emerges from and is sustained by fluctuating neural dynamics. The "ontological mystery" then no longer consists in the question of what qualia are made of, but in the fact that this process of self-organizing disclosure takes place at all. The RIM thus clarifies the formal, dynamic conditions under which the world appears to a subject, but not the fundamental mystery of this appearance itself.

Finally, a more fundamental, non-dualistic answer is offered again by Northoff's spatio-temporal neuroscience. If one assumes, as Northoff suggests, that brain dynamics are intrinsically and fundamentally phenomenal, the "hard problem" in its classical form no longer arises. The question is then not how consciousness emerges from non-conscious matter, but how the already existing, diffuse phenomenal field of the brain is shaped into the structured, coherent consciousness that we experience as our self. Within this framework, the "slaving principle" describes the organization within a conscious field, not the ontological leap from non-conscious to conscious. Through this clarification, the explanatory claim of the RIM is sharpened: it positions itself as a robust, scientifically grounded theory of the dynamic organization of the mind, without claiming to finally solve the "hard problem," but to productively reframe it.

The Hierarchy of Inference: Universality and Cultural Context of Meaning

The third and final objection concerns the model's universality assumption, particularly the positing of Viktor Frankl's "will to meaning" as the universal master prior at the top of the inference hierarchy. The criticism is that this could be a strong, potentially Eurocentric and culturally specific assumption that neglects the diversity of human value systems and existential orientations. The RIM's integrative response to this challenge lies in a crucial differentiation: the distinction between the universal *structure* of the inference hierarchy and the culturally variable *content* of its highest level.

From the perspective of synergetics and the FEP, the existence of such a slowest, most abstract, and most global ordering parameter is a formal necessity for any complex, self-organizing system. Such a master prior is essential to ensure global coherence and stability over long periods, to resolve ambiguities at the lower, faster levels of the hierarchy, and to give the entire system an overarching direction for active inference. The crucial point, however, is that the content of this master prior is culturally and biographically shaped. Frankl's "will to meaning" is a brilliant and, in the Western, post-traditional context, enormously effective conceptualization of this principle. In other cultural or historical contexts, however, this highest ordering parameter can take on completely different contents: it can be conceptualized as striving for "harmony with the Dao," "fulfillment of Dharma," "submission to the will of Allah," "preservation of family honor," or "solidarity in the class struggle."

All these different value systems fulfill the same formal, system-stabilizing function: they provide an ultimate reference point that gives life coherence and guides action beyond immediate gratifications.

This differentiation transforms a potential weakness into a strength. The RIM evolves from a potentially dogmatic model to a flexible, transcultural framework for a new form of neuro-anthropology. It posits the empirically testable hypothesis that all human cultures must develop mechanisms for forming such a master prior and invites research into how this universal systemic necessity is filled with different existential, religious, and philosophical contents. The question is no longer whether humans are meaning-seeking beings, but how this search manifests itself in the diverse languages and life-forms of humanity.

Conclusion

In the preceding analysis, the Resonance-Inference Model (RIM) has laid out its external architecture and its internal philosophical genealogy. In grappling with its most demanding limit questions, it has furthermore demonstrated its internal robustness and capacity for development. By refining the link between information-theoretic energy and experienced affect from a metaphor to a neurodynamic mechanism, by phenomenologically grounding its explanatory power regarding consciousness, and by decoupling the universality of its structure from the cultural variability of its content, it moves beyond the status of a promising draft and establishes itself as a resilient, meta-theoretical framework. On this consolidated foundation, the RIM proves to be a robust and far-reaching contribution to the philosophy of mind. Its central achievement is the overcoming of representational-logical dualism, not through reductionist leveling, but through a synergetic synthesis that conceives of the formal logic of predictive processing, the lived experience of phenomenology, and the processual reality of neurodynamics as complementary descriptive levels of a single, indivisible process. The model demonstrates its meta-theoretical power by drawing a coherent line of tradition from Schopenhauer's groundbreaking anti-representationalist turn to modern enactivism. Furthermore, it makes a constructive contribution to the current debate by offering a plausible mediating proposal that reconciles the seemingly incompatible positions of enactivism and predictive processing through the concept of action-oriented, "enacted inference."

The implications of this approach are profound. The RIM undertakes a crucial reassessment of human experience: phenomena such as meaning, purpose, resonance, and existential experience are liberated from the realm of ephemeral, subjective illusions. Instead, they are positioned as real, causally effective, and neurobiologically grounded ordering parameters that, as central drivers, structure and guide the self-organizing dynamics of our being-in-the-world. For clinical practice, this means a paradigm shift: psychotherapy is no longer understood as the repair of defective individual parts (e.g., cognitive schemas or neural circuits) but as a process of reorganizing the entire, embodied being-in-the-world—as a realignment of the fundamental resonance relationship between the individual and their lifeworld. Ultimately, the RIM thus lays the foundation for a new, integrative science of the mind that takes seriously and makes researchable the human being in their entire, indivisible psycho-physical and existential unity. It is a plea for a science that not only explains how the brain works but also understands what it means to be human.

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