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## PRECOGNITION, FREE WILL, AND THE IMPETUS OF TIME

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### ABSTRACT

Precognition challenges traditional notions of time, free will, and localized self. Most associated causal paradoxes and incompatibilities can be resolved through self-consistency relations and constraints on future-to-past information flow. However, a novel theoretical framework is proposed that identifies a limit to this resolution: an unavoidable tension between free will and a future accessible to transpersonal consciousness, which arises in relation to the localized aspect of integral self. This tension necessitates an additional consistency-preserving effect that accounts for the experience of time. It is argued that time, as experienced, is related to the 'decline effect' and other reproducibility challenges in parapsychological research.

### Introduction

In the twilight of the 19th century, Fredrich W. H. Myers—a pioneering co-founder of the Society for Psychical Research in 1882—contemplated the puzzle of precognition and wrote: "And to imagine the Future as known, except by inference and contingently, to any mind whatever is to induce at once that iron collision between Free Will, and 'Fixed Fate, Fore-knowledge absolute,' from which no sparks of light have ever yet been struck" (Myers, 1895, p. 336). The following discussion examines this collision, and suggests a glimmer of a new idea: that it has an intimate connection with another mystery—that of temporal passage.

Scientifically, time remains a mystery largely because the fundamental laws of physics exhibit time reversal symmetry, functioning identically whether time flows forward or backward. Because of this, many theories of time view it as an emergent property, yet they often rely on an underlying presupposition of its existence. This analysis instead presupposes the 'static' temporal structure inherent in the block universe concept of relativity, and uniquely explains why localized consciousness within this framework experiences temporal passage. Our subjective experience of time is the inevitable result of interacting realms with different modes of existence.

The paper has four main sections: 'Ontology of the self' (basic philosophy of the psyche and free will underpinning this model); 'Precognition, self-consistency, and potentia' (constraints that allow future knowledge while maintaining logical

coherence, in the context of possibility); 'Time's advance' (how conflict between free will and foreknowledge may explain our experience of temporal passage); and 'Discussion' (including a brief comparison with Silberstein et al.'s (2018) Relational Blockworld/Lagrangian Schema Universe).

#### ONTOLOGY OF THE SELF

The concept of 'self' is central to this proposal, which is based on an objective idealist ontology in which consciousness is fundamental. Individual consciousness arises from this overarching mind-like realm and participates in manifold forms of existence (life forms). Physical reality is independent of individual minds, being of an objective order that is mental, spiritual, or ideal in nature. This ontological view is consistent with Kastrup's (2018) analytic idealism, where all living organisms are dissociated alters of universal phenomenal consciousness. It is a "realist form of idealist monism" (Kelly, 2021, p. 9).

This ontology is multi-level and aligns with Jung's model of the self, which encompasses the whole of the psyche (see Jacobi, 1973). It also shares many attributes with non-dual approaches such as Advaita Vedanta and Kashmir Shaivism, which both emphasize the ultimate unity of existence—although they diverge in important respects, with Kashmir Shaivism regarding free will, the self, and the physical world as real, in contrast to their illusionary status in Advaita. Veiling of ultimate reality is also interpreted somewhat differently in each tradition. As with many complementary spiritual systems (and philosophical worldviews), conflicts can often be resolved with changes in perspective and level of description. Various aspects of these concepts will be examined here, along with some speculative elaborations.

The model of psyche developed in this paper, emerging from this ontology, has finite and infinite aspects, and spans both the temporal and the atemporal realms. Consider the 'conical model of Jung's psyche', with the ego adjacent to the material body situated in spacetime, and the base in the collective unconscious, beyond space and time (see Figure 1). Jung was influenced in part by Bergson (1911) and Myers (1895), and this metaphor closely resembles Bergson's 'cone of memory', with the vertex representing the material body in spacetime, beneath progressively contracted planes of memory/consciousness existing outside space and time. Note that we adopt Bergson's cone orientation when subsequently referring to 'higher' levels.

This model is compatible with the filter theory of consciousness, where the brain (and perhaps the body to some degree) acts as a restrictive medium or interface through which consciousness is experienced. This comports with the Advaita view that universal consciousness (Brahman) and individual consciousness (jiva) are ultimately one and the same, with the latter being a limited expression of the former. Swami Vivekananda, who played a pivotal role in introducing Advaita Vedanta to the Western world, poignantly expressed what is lost in this limiting (veiling) process: "The universe is the wreckage

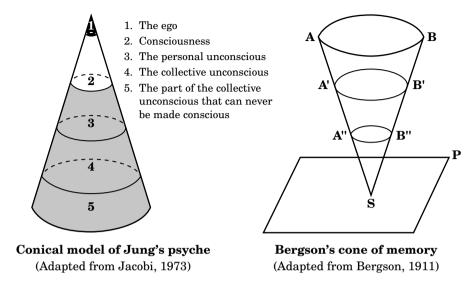


Figure 1. Conical models of psyche and memory.

of the infinite on the shores of the finite" (Do not seek for Him, just see Him, 1992, p. 256).

This limiting is closely tied to localization, which in this model is derived from the atemporal by connecting it via 'meaning coherence' to quantum objects partially in spacetime. This forms an integral consciousness structure (the metaphorical cone). This consciousness structure/psyche has a non-dual/absolute level and multiple dual/relative levels of consciousness. The different levels or modes of consciousness depend on the degree of filtering the brain applies.

In the brain, participation in a hierarchy of oscillations coupled to the quantum/classical poised realm¹ (Kauffman, 2016) is likely responsible for the specious present. This is our experiential extended 'now', ranging from approximately 100 milliseconds to several seconds, depending on individual perception and context. Events within this duration are co-temporal, with no before—after relation.

Matter fields and constraints (e.g., Planck's constant h and the speed of light c) create the conical model's vertex in spacetime and are responsible for our local experience of physical reality. Planck's constant is embedded within the framework of the quantum fields, and determines scale and contextual

<sup>1.</sup> A zone of criticality in which systems exhibit both quantum indeterminacy and classical determinism. Here, quantum coherence is maintained sufficiently to allow creative or adaptive processes, while decoherence occurs rapidly enough to yield stable, classical behaviour—an interplay thought to underlie the emergence of complexity in biological systems.

sensitivity. The uncertainty principle limits the sharpness of the vertex in matter (ensuring it never entirely 'closes'). Kastrup (2019) proposes that everything in nature, including quantum fields, is reducible to patterns of excitation of universal phenomenal consciousness. The physical laws and matter itself are a manifestation of archetypes—innate tendencies (samskaras) that arise within the field of pure awareness.

We follow Advaita master Maharaj in distinguishing between awareness and consciousness: "Awareness becomes consciousness when it has an object. The object changes all the time. In consciousness, there is movement; awareness by itself is motionless and timeless, here and now," (Maharaj, 1982, p. 29) and "Consciousness is on contact, a reflection against a surface, a state of duality. There can be no consciousness without awareness, but there can be awareness without consciousness" (Maharaj, 1982, p. 233). In this model, the localized vertex of the cone and the immediate consciousness structure provide this reflective surface; the source of apparent subject—object duality and enabler of self-awareness.

Aligning the terms used throughout this paper with Maharaj's (1982) terminology, *transpersonal consciousness* refers to the pure, non-introspective, aperspectival consciousness of the deep psyche—what Maharaj describes as 'awareness'. This refers to everything beyond the semi-localized aspects of the psyche. By contrast, *meta-consciousness* characterizes the reflective, self-aware consciousness, which relates to Maharaj's 'consciousness'.

Continuing with the cone metaphor, the cone's base orients towards the absolute unified reality; the pure awareness in which everything is grounded. This is transpersonal consciousness, which exhibits no intentionality or volition as commonly considered, because any agency in this realm is not exercised by an individual mind but is part of a greater whole.

The transpersonal consciousness realm allows us to access deeper and more universal aspects of reality, such as archetypes, myths, and spiritual insights via dreams, intuition, imagination, and mystical experiences. These levels are inaccessible to meta-consciousness. Following Kastrup, we consider Jung's 'collective unconscious' to be transpersonally conscious; experiential but not self-reflective or inferentially connected.<sup>2</sup> He writes: "When they spoke of unconsciousness, the founders [of depth psychology] often meant a lack of meta-consciousness—not of experience proper" (Kastrup, 2017, p. 568).

The ability to connect with past and future selves via the 'eternal present' of the transpersonal through meaning coherence allows precognitive, and likely memory (e.g., episodic), experience. Memory is included because memory trace theory is plagued by insurmountable philosophical challenges. As Braude (2014) writes, "It's one thing to say that the brain *mediates* the capacity to remember, and another to say it *stores* memories" (p. 4).

<sup>2.</sup> The transpersonal encompasses the collective unconscious and extends to broader phenomena.

Transpersonal consciousness illuminates the consciousness structure towards the cone's vertex. It is the resistance matter presents, and the stability of this matter-associated aspect of the structure, that allows the possibility of meta-consciousness—the ability to reflect on one's own conscious states—to emerge. In this context, 'meta' signifies 'self-reference' (being aware of one's own awareness), with matter as an inherent part of the self-referential loop. Meta-consciousness refers to all matter-associated consciousness, and so encompasses the ego, transcending and observing it near the vertex, and reifying the vertex. Meta-conscious states are underlaid and unified by transpersonal consciousness.

Meta-consciousness is necessary for free will because it allows us to identify with our preferences, goals, values, etc. Without it, we would be unaware of the reasons behind our choices and act merely out of instinct or habit. Kastrup (2015) defines free will as "the capacity of an agent to make a choice unhindered by any factor outside that which the agent identifies with" (p. 172).

Any discussion of free will must engage with the nature of the universe in which it operates. The approach presented here rejects the multiverse concept, and accepts that, in our singular universe, relativity requires—and precognition strongly implies—some type of four-dimensional 'block' universe framework. This entails eternalism, where all points in time are equally real, although there is some ambiguity in defining the exact nature of a 'point' in time, particularly at the quantum scale. Temporally, localized consciousness participates in McTaggart's (1908) tensed 'A series' (subject to the flow of time, with futurity and pastness) within a fundamentally atemporal physical blockworld, which itself is expressed by a tenseless 'B series' (simply having earlier/later than relations). The transpersonal, which has access to the entire timeline, in some ways plays the role of a relational, atemporal version of the higher-dimensional 'supertime' in 'moving spotlight' theories of time, where our temporal experience is likened to a spotlight sliding along the temporal dimension (e.g., Skow, 2015).

Somewhat counterintuitively, free will is not incompatible with the future having real status. Contingent events are as immutable as others (e.g., Grünbaum, 1973; Oaklander & Smith, 1995). Knowing what a free decision will be from an external, causally disconnected perspective does not negate its freeness. From the present standpoint, future choices leading to a temporally distant, foreknown event are completely analogous to present choices because they are present choices within those frames. Such decisions are eternally fixed, yet remain contingent, because prior to each event there remains the freedom to choose otherwise. Once the choice is made, it becomes unchangeable—but the fact that alternative possibilities existed beforehand preserves its contingency.

<sup>3.</sup> A hypothetical dimension or framework that allows for the comparison and ordering of moments in time, effectively providing a higher-level temporal structure.

This is possible because, in quantum physics, a particle does not continuously move from one point to another along a classical trajectory; rather, its behaviour manifests as a series of discrete actualized states. Between actualizations, the particle's state is described by a continuously evolving probability wave.<sup>4</sup> Any action—including one freely willed—doesn't continuously move anything physical, but instead emerges from a sequential pattern of actualizations shaped by quantum probabilities and external interactions. From within time, the immediate future appears as a probabilistic structure—a range of potentialities. However, from the atemporal perspective, the immediate future's pattern already and eternally exists, as a 'static' structure embedded in the fabric of spacetime, even though some of the eternal pattern is created by the freely willed actions in the present. This paradox is at the heart of our discussion.

Destiny involving free will is not due to prior events in a causal sequence, but is an integral part of an indeterminable higher-level pattern, and 'becoming' is perspectival. Constraints on the flow of information prevent causal paradoxes by informationally compartmentalizing us within the atemporal background. The constraints of the uncertainty principle (e.g., Solnyshkov & Malpuech, 2021), and a broader 'generalized uncertainty principle' (von Lucadou et al., 2007), that limit how correlations can transmit classical information, and c (e.g., protecting causality in the 'Andromeda paradox', See Penrose, 1989, p. 201) veil the future from the present.

The notion that veiling of the future temporal sequence enables free will is reflected in Aharonov and Tollaksen's (2007) view that "not knowing the future is a crucial requirement for the existence of free-will" (p. 48) and where uncertainty prevents this knowing, in the context of time-symmetric quantum mechanics. This approach accords with versions of multi-level compatibilism (e.g., theistic) which hold that human decisions are freely made, even though they are nonetheless foreknown and foreordained. This is captured in the aphorism "everything is foreseen, yet free will is given", from the *Mishnah* (n.d., Pirkei Avot 3:15), a fundamental text in Judaism. Essentially, we are destined to make the free choices we do.

So, this approach embraces a libertarian-type free will that is significantly independent of physical determinism. Free will exists on a complex continuum

<sup>4.</sup> While framed in terms of objective quantum mechanics interpretations, similar concepts can be found in other non-branching quantum interpretations (i.e., excluding many-worlds).

<sup>5. &#</sup>x27;Perspectival' combines contextuality (how events are interpreted from different viewpoints) and relationality (tied to free will and event interactions), while emphasizing subjective experience.

<sup>6.</sup> Posits that the uncertainty inherent in quantum mechanics can be extended to the realm of consciousness and parapsychological phenomena.

<sup>7.</sup> A thought experiment in relativistic physics where two observers moving relative to each other experience different simultaneities, perceiving different events as happening 'now' in the distant Andromeda Galaxy. One observer considers an alien invasion of Earth as happening 'now', while another observer, moving differently, concludes that it will happen in the future.

(from minimal to significant), has multi-level synchronistic aspects (involves meaning-based coherence between levels of reality), and is consciousness state-specific (e.g., dependent on whether meta or transpersonal consciousness dominates). It remains underdetermined and not fully traceable to, nor exhausted by, potentially distinguishable higher-order influences, retaining the indefinite openness so characteristic of consciousness. Libertarian free will may or may not be common, but it will be argued that phenomenal time depends on its potential existence. Note that some aspects of 'will' involving metaphysical causality (intuitional, archetypal, teleological, etc.) are shared with all life forms, and, for our discussion, they are also presumed to possess some degree of free will.

Being excitations of universal consciousness, 'psychophysical' quantum objects remain sensitive to meaning—a sensitivity which varies according to context, observing consciousness state and (ultimate reality) veiling constraints. In a suitable environment (such as within the brain), volition can influence individual quantum events within an overall statistical distribution that nonetheless conforms to the Born rule<sup>8</sup> (Kastner, 2016). This normative rule determines a quantum system's pattern of actualization, and is intimately involved in the apparent subject-object split. Unique characteristics of individual events are subsumed by the statistical distribution, veiling their distinct identities. However, they can have significant effects through chaotic amplification, which also obscures the manipulation origin. Although altering state probability distribution in this way complies with conservation laws, the resulting entropy decrease does violate the second law of thermodynamics as currently understood (Dimitrijević, 2023). 10 But so do the events leading to the jotting down of an experience in a dream days before it occurs, and that is not unknown (e.g., Dunne, 1929).11

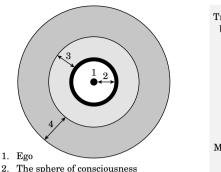
The spherical model of Jung's psyche serves as another metaphor, and a simplified spherical model will be referenced in subsequent sections (see Figure 2). Here, the self's ego can be considered to be the 'centre' of the psyche. Meta-consciousness surrounds and permeates the ego, and both operate partially in spacetime. A dynamic, diffuse, transitional boundary separates the ego/meta-consciousness from the wholly transpersonal aspects. This aligns

<sup>8.</sup> The Born rule gives the probability of each possible outcome in a quantum system by squaring the wave function's value for that outcome.

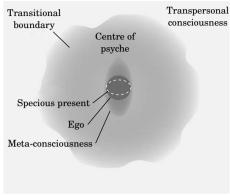
<sup>9.</sup> Not necessarily part of a causal chain but as a coherence channel in an emergent pattern. We should ask ourselves how artificial intelligence could ever be conscious without such a channel.

<sup>10.</sup> Our current understanding of entropy assumes an isolated universe under physicalist principles. If the cosmos is causally open, as suggested by idealist ontologies, then the conventional formulation of entropy may not fully apply. Parapsychological phenomena strongly imply that the universe is at least partially causally open—allowing for interactions or influences that may originate beyond the standard spacetime framework.

<sup>11.</sup> Moddel (2006) posits a *net* increase in local entropy associated with retrocausation, which could be interpreted as boosting uncertainty (in accordance with Shannon's entropy formula from information theory) to facilitate veiling. Though masked, it remains a second law violation.



- 2. The sphere of consciousness
- 3. The sphere of the personal unconscious
- 4. The sphere of the collective unconscious



# Spherical model of Jung's psyche (Adapted from Jacobi, 1973)

# Simplified spherical model of the psyche (By the author)

Figure 2. Spherical models of the psyche.

with Kastrup's "dissociative boundary" that "separates the ego consciousness from the collective unconscious" (Kastrup, 2023a).

Although the Jung (Jacobi, 1973) and Bergson (1911) models are primarily metaphorical, this simplified spherical model (right-hand side of Figure 2) is considered to have realistic elements with semi-localized spatiotemporal aspects, including the transitional boundary. This is due to its association with both the semi-localized ego/meta-consciousness 'anchored' to quantum objects as well as the nonlocal transpersonal consciousness. The boundary is considered a realm of the unconscious, which may have some similarities with Jung's 'personal unconscious', and, inter alia, can link meaning insensibly with the brain/body. While the boundary is indeterminate to some extent—and the specifics are not critical to this proposal—its average 'durational diameter' is estimated to be approximately 20 seconds (now ±10 seconds) during normal conscious states, for reasons that will become apparent in the next section.

### Precognition, self-consistency, and potentia

This approach accepts precognition/presentiment as a fact of nature. It is a unified conscious or unconscious experience extending across a temporal span, ranging from milliseconds to decades (Mossbridge, 2022). Robust statistical evidence supports its existence, and the point will not be argued here. It does present unique experimental challenges, and scepticism is understandable. However, such scepticism can be so deeply ingrained that, for example, only a strong personal experience would convince most statisticians of precognition regardless of the strength of the statistical data (Mossbridge, 2024).

As with free will and the Born rule, statistical means may be the only *reliable* means for these phenomena to manifest in what we commonly consider objective reality without breaching veiling constraints. That it has a non-zero chance of appearing in a context with significant objectivity may be related to the exceedingly minuscule but real openness afforded by the uncertainty principle. There are interesting parallels here with 'weak measurement' in quantum mechanics, where information about a quantum state is gathered statistically over thousands or millions of runs, each with high uncertainty.<sup>12</sup>

Presentiment (unconscious precognition) typically has a short-term lead time ranging between 500 milliseconds and 10 seconds, with decay seen with longer times prior to the event (e.g., Mossbridge et al., 2014). This is the basis of the 'now  $\pm$  10 seconds' approximate estimate for the meta/transpersonal boundary duration.

Conscious precognition ranges from seconds to years pre-event. It involves future personal experiences in the majority of cases, as Dunne (1929) first observed. There are, however, documented exceptions involving accurate percipients who never received feedback (Rosenberg, 2021).

Precognition must obey global self-consistency to avoid a causal paradox. Russian physicist Igor Novikov developed his eponymous self-consistency principle to address time travel paradoxes arising from closed time-like curves allowed by certain solutions in general relativity (Novikov, 1989). This principle asserts that any event leading to a paradoxical change in the past has zero probability. In other words, global self-consistency ensures that time travel remains logically consistent, so related paradoxes are impossible. The Novikov self-consistency principle can be understood in relation to the sum-over-histories (path integral) formulation in quantum physics. In this context, histories are atemporal and inconsistent histories destructively interfere, ensuring only self-consistent histories remain. This is analogous to light waves creating an interference pattern characterized by alternating light and dark bands. Similarly, in Novikov's self-consistency principle, inconsistent histories interfere and cancel each other out, leaving only those that are self-consistent.

Precognitive experience occurs in the transpersonal domain. Lacking agency, in a personal sense, it naturally conforms to Novikov self-consistency because interventions ('bilking'), which would require meta-consciousness, can be ignored. The connection to a future experience is part of a self-consistent whole encompassing all the free decisions 'yet' (frame/state of consciousness dependent) to transpire between the experience and the event. Potential entry into meta-consciousness is confined to modes that circumvent the possibility of intervention (although information from the *immediate* future requires additional considerations, which are addressed in the next section).

<sup>12.</sup> The objective of weak measurement is to extract information about a quantum system without significantly disturbing its state, using a series of weak and inherently 'noisy' measurements.

Besides requiring suitable conditions/context such as a transpersonal consciousness channel and global self-consistency, precognition commonly involves depth and intensity of meaning. In agreement with Rosenberg (2021), the present approach maintains that the perceiver is experiencing details from the *actual* future (sometimes embellished by imagination), not a probable future. This view has been chosen because of its parsimony, compatibility with free will (despite its seemingly contentious relationship, as discussed in the previous section), and consistency with relativity. It is also the most directly compatible with near-death experiences where an entire lifetime is experienced in a brief period, including events years or decades in the future (e.g., Krohn & Kripal, 2018).

Potentiality also plays a key role in the present proposal. Potentials are inherent and active aspects rooted in the structures of consciousness and intentionality. They include potential counterfactuals associated with free will, and potential future-to-past communication. These can be seen to be analogous to pre-space potentia, which represent the realm of possibilities that could influence, or manifest into, actual events within spacetime (Eastman, 2020). <sup>13</sup> Unfortunately, despite their invaluable contributions, process philosophers such as Eastman (2020) vigorously reject the notion that the future holds any degree of actuality, which is an impassible barrier to their understanding of time.

The constraints associated with the brain do not merely limit and channel possibilities; they also enable distinctive possibilities and expressions. The emergent possibilities form our mental working space. As a prism splits a white light beam (transpersonal consciousness) into a spectrum of colours, revealing the latent potentials within, we must look both at and through the brain to understand its function. The reality is infinitely more subtle and complex than this analogy suggests, in part because of the reciprocal influence of associated possibilities on the brain (the essence of meta-consciousness), causal uncertainties in brain–possibility relations, information/experience directly accessible via the transpersonal, and the probable interaction with other forms of consciousness structures within origin consciousness.<sup>14</sup>

This is somewhat analogous with the view of Husserl (1913/2014), who imagined us operating within a halo or horizon of possibilities (potentials of experience and meaning). Although the founder of phenomenology identified multiple forms of horizons, *all* are ultimately based on *potentiality / actuality opposition*. Husserl's concept of the horizon was inspired by William James, and both philosophers considered it fundamental to any understanding of time. Every experience has its horizon of temporal experience delineating before and

<sup>13.</sup> The quantum realm is a potentia—matter synthesis. It is fundamentally 'res potentia', but ultimately influences and gives rise to 'res extensa', the actualized, observable reality.

<sup>14.</sup> Such as other possible consciousness structures operating within archetypal substrates other than matter.

after from now. The horizon of the now is the "one originary horizon of the pure ego, its entire originary now-of-consciousness" (Husserl, 1913/2014, p. 159), and has significant parallels with the meta/transpersonal consciousness boundary.

As in Jung's framework (e.g., Jacobi, 1973), possibilities/potentials associated with the unconscious in Husserl's phenomenology interact and form a dynamic background that influences and is influenced by conscious experiences (Husserl, 1966/2001), although the specifics of how this interaction is conceptualized differs between the two. Jungian archetypes influence unconscious potentials and direct intentionality, and can sometimes make genes look positively altruistic in comparison. But crucially, in all scenarios, self-consistency is an essential condition for possibility/potentia when linked to realization at any specific 'now', as evidenced by phenomenological, philosophical, and logical principles of intentionality, temporality, and coherence. In other words, the development of the underlying possibilities must ensure that whatever actualizes aligns logically with its spatial and temporal environment. This occurs within the bounds of extremely small uncertainty, except in instances of anomalous experience where uncertainty can expand significantly.

Bierman (2008) has suggested that the 'decline effect' seen in parapsychology (reduction in experimental performance over time) is due to replicable experiments opening possibilities for the creation of paradoxes. It is *possibilities* that must be emphasized here. Bierman makes a crucial and often unappreciated point. Naive sceptics who request 'on demand', completely objectifiable replications with fully attending meta-consciousness (caged by spacetime-based rationality absent uncertainty and ambiguity) are oblivious to these constraints, and the deep nuances involved. It is like insisting that quantum information be read classically.

### TIME'S ADVANCE

Based on the duration of the mixed meta/transpersonal consciousness boundary. the immediate future is defined as  $\leq 10$  seconds in the future. This present self's boundary overlaps that of the immediate future self, with its events and experiences. If the future exists but is partially dependent on our free choices at this living-present, one would expect the interface between these two conflicting domains to be rather interesting.

With this overlap, why do we not experience enhanced precognition of the immediate future? As previously noted, evidence *does* in fact support *unconscious* presentiment for short lead times (e.g., Mossbridge, 2022), which aligns with the boundary hypothesis. Being unconscious, it presents no immediate intervention possibilities, and therefore does not threaten consistency.

Meta-conscious precognition of the immediate future does occur but remains rare and unpredictable enough to rule out bilking scenarios, complying with self-consistency constraints. However, immediate future events and experiences

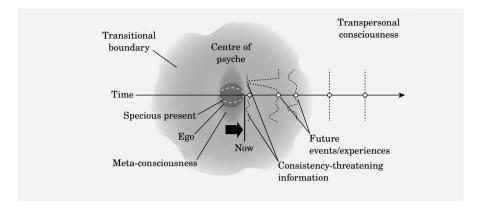


Figure 3. Transpersonal aspects of the psyche's central boundary overlapping immediate future events / experiences.

overlapping the meta/transpersonal boundary have a higher *possibility* of entering meta-consciousness without the usual state-of-consciousness, context, and self-consistency constraints, which *could* threaten consistency (see Figure 3). Meta-conscious-entering precognition of the proximate future also differs from that of the more distant future because of the opportunity for immediate feedback. <sup>15</sup> A moment of free decision must remain isolated from the (transpersonally-accessible) 'decided' immediate future. The proposed model holds that such intimate temporal proximity between the two incompatible realms activates higher-level related potentials—an effect grounded in modal metaphysics. <sup>16</sup>

A relatively high frequency of precognized events/experiences entering meta-consciousness a few seconds (for example) before they occur would threaten a stable, consistent conscious existence. Every thought/intuition bubbling to the surface would be closely monitored, and actions could then be taken in response, many of which would violate self-consistency. And since self-consistency is imperative, something would have to give. Without another option, meta-consciousness itself would have to be damped down to eliminate free intervention if the precognitions couldn't be stopped—and both are ineluctable aspects of underlying consciousness.

Therefore, unconstrained precognition would destroy the self's coherent experience of participation in localized existence. To prevent this and maintain coherence, an impetus from the higher-order or infinite aspect must temporally advance the localized aspect of awareness into the immediate future event-space (see Figure 4). Realizing these events to the subject eliminates potential

<sup>15.</sup> This creates a tension that is not present for longer time spans.

<sup>16.</sup> Modal metaphysics examines the nature of reality by exploring possibilities and necessities, emphasizing that potentiality is *at least* as fundamental as actuality.

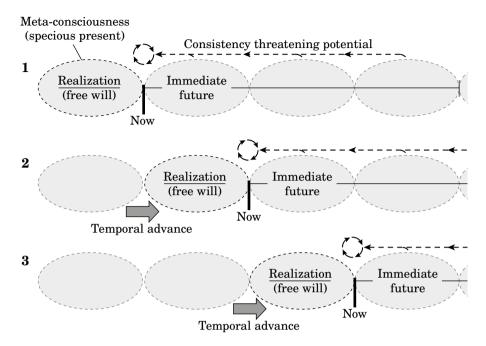


Figure 4. Time's advance.

paradoxes. The shifted boundary envelopes new future events, and the process continues as an advancing wave of dynamic equilibrium. From the sum-over-histories perspective, the self must advance its localized aspect to prevent destructive interference from nullifying meta-consciousness. So, *time functions* as a means of ensuring Novikov self-consistency, using a degree of freedom unrecognized by conventional approaches. This suggests a new Novikov-class solution.

The resistance that matter presents (associated with meta-consciousness, as noted in the first section), <sup>17</sup> and the related subject—object differentiation, limits/determines the rate of temporal progression. The potential entropy changes associated with latent, consistency-threatening precognition may be responsible for the subjective and thermodynamic time arrows coinciding. <sup>18</sup> Arrow alignment is ensured regardless, as our matter-based meta-consciousness relies on biological systems that are inherently thermodynamic. Retrocognition is not equivalent to precognition because it lacks paradox-creating potential.

Time's passage originates in the nonmaterial realm and remains a subjective experience. Quantum-type correlation plays a key role in its global aspect in

<sup>17.</sup> Including resistance related to physical change and volition.

<sup>18.</sup> The thermodynamic arrow of time points in the direction of increasing entropy (greater disorder or increased uncertainty) in isolated systems and applies to the universe as a whole if it is itself isolated. This is an arrow of time, *not* a source of temporal passage.

this model. Because of its common source, localized consciousness can be considered universally entangled via the transpersonal, and at its temporal pole is entangled with the material domain (analogous to 'time-entanglement' in Primas, 2003). The advance of each individual meta-consciousness is correlated with the associated quantum objects along their worldtube, in relativistic proper time. <sup>19</sup>

Potential inconsistencies may not involve any one individual at a given time, yet that localized consciousness will be equally carried along in collective synchronization because of universal entanglement. Imagine a vast web of connected 'life forms' (localized selves) spread out in a horizontal plane, with countless lights randomly flickering at nodes where now–future inconsistency tension is peaking, and the entire web being continuously lifted as required to move vulnerable nodes out of conflict into realization, to prevent their breakage.<sup>20</sup>

This is a step beyond 'superposition-resistant' models, where the underlying unity of scale-invariant conscious states is responsible for resisting quantum superposition and triggering—or greatly increasing the probability of—ostensible 'collapse' (Chalmers & McQueen, 2022). A natural corollary to this unity is that phenomenal consciousness is 'inconsistency-resistant' in the context of information from future conscious states. Coherence and consistency of conscious states *matters*, and this entails continuous temporal advance.

Broadening the notion of 'psyche' opens up further possibilities. For example, some experiential modes of temporal passage may have existed 'before' life evolved. The Compton wavelength ( $\lambda_{\rm C}=\hbar/mc$ ), which defines the localization of a particle, has some similarities with the specious present (e.g., 'time' has no meaning within it, due to the uncertainty principle). Consciousness requires a localized aspect to 'know' matter (observe or interact with it). If quantum objects are sensitive to meaning, then any structured consciousness associated with quantum events has the potential to manipulate probabilities in response to future information. So, we again have potential inconsistency generated by temporally local/nonlocal tension. As before, and in general, universal entanglement ensures all localized aspects of consciousness, with their widely varying specious presents, are coherently entrained as a gestalt in the resulting temporal flow.

<sup>19.</sup> The time measured by a clock moving along a specific path in spacetime, as experienced by an observer travelling with that clock.

<sup>20.</sup> The 'web' represents events within a large 4D region, not a hyperplane of simultaneity or objectively privileged 'now'.

<sup>21. &#</sup>x27;Collapse' refers to the resolution of quantum superpositions into definite states. While 'superposition-resistant' concepts are associated with 'objective collapse' theories, other interpretations of quantum mechanics are not necessarily incompatible with the proposal set out here. They may describe this process differently in time, but many (if not all) can be reframed within an atemporal (block universe) perspective. This approach is central to the work of Silberstein et al. (2018) (see Discussion).

In this way of ensuring local—global time synchronization, arguments against the Novikov self-consistency principle being tautological (Friedman et al., 1990) can be extended to the present proposal by adding 'time' to the 'no new local physics' in the original formulation. That the core concept contains circularity (we pass into the future because of potential inconsistencies involving the future) reflects the integral role of consciousness within the structured temporal ordering of the blockworld itself—an order ultimately rooted in its atemporal, holistic origin. An intrinsic circularity is an inevitable part of any theory of time involving distinct temporal levels, as any such theory must.

So, echoing Myers, time can be considered a flow resulting from an unstoppable force (freedom of consciousness) meeting an immovable object (knowledge of immediate future). In a singular universe there is no other possible 'out' of this clash of contradictions.

## DISCUSSION

An atemporal approach to the universe promises several advantages, including a more coherent integration of relativity and quantum mechanics, resolution of paradoxes associated with temporal becoming, and a clearer framework for nonlocal correlations and retrocausality. Silberstein et al.'s (2018) comprehensive Relational Blockworld ontology exemplifies this perspective. In their ontology, global self-consistency is provided by a 'global adynamical organizing principle'<sup>22</sup> for the block universe. They adopt the 'Lagrangian Schema Universe'<sup>23</sup> where a general relativistic solution accounts for the entire spacetime manifold, so Einstein's equations are naturally self-consistent through physical (not logical) principles. They dismiss logical coherence-based principles, such as Novikov's self-consistency principle, as unnecessary—arguing that adynamical physical laws naturally rule out paradoxes. However, because of the potential for free will and precognition inherent in consciousness, purely physical principles are unlikely to be sufficient to ensure logical coherence in the experience of localized consciousness in all scenarios.

Silberstein et al. (2018) interpret quantum correlations as being determined by purely physical structural constraints<sup>24</sup> within the block universe, meaning that quantum indeterminism is not a source of metaphysical freedom. In the present approach, however, such indeterminism is a genuine source of openness, which allows for agent-based control. Libertarian free will is considered an atemporal, global property of an agent's existence within the

<sup>22.</sup> This principle emphasizes a global, timeless structure where relationships between events are determined adynamically, meaning they don't unfold over time but exist as part of a larger, interconnected whole.

<sup>23</sup>. Emphasizes a unified, global mathematical structure to describe the universe, aligning with a timeless and relational view of reality.

<sup>24.</sup> A 'structural constraint' is a fundamental limitation or relational framework that governs the possible configurations of a system without evolving dynamically. In the context of the block universe, it refers to atemporal conditions that determine the structure of reality as a whole.

blockworld. Agency itself is one of the structural constraints.<sup>25</sup> Free choices, though exercised sequentially within time by agents, are not merely passive unfoldings—they are integral, self-consistent aspects of the whole, actively and atemporally shaping the block universe as a living geometry beneath the surface of time.<sup>26</sup>

Neutral monism is considered the underlying ontology in the Relational Blockworld, and consciousness is viewed as inseparable from physical phenomena, although there is no one-to-one relationship (surely a reason to doubt purely physical consistency principles). The authors point out parallels between neutral monism, Advaita Vedanta, and other Eastern spiritual systems—for example, 'pure consciousness/awareness' in Advaita is likened to timeless 'Presence' in neutral monism. Neutral monism's mind—matter relation is somewhat analogous to meta-consciousness's relationship with matter in the present model. Following the approach developed here, in both ontologies time could be seen as interfering with the potential descent of consistency-threatening information from the immediate future via the timeless realm into more localized expressions. Kastrup (2023b), however, criticizes neutral monism for not adequately addressing the 'hard problem' of consciousness and for introducing an unnecessary, completely abstract category in addition to mind and matter.

Silberstein et al. (2018) also consider temporal passage to be a subjective experience. They regard time to be the self-consistency relation between subject and object, although no specifics are provided. In contrast, by confining relations to the self in the current proposal, the experience of time is considered to be the self-consistency relation between present and future localized subjects.

The Relational Blockworld/Lagrangian Schema Universe is a very satisfying and parsimonious view with no threatening potential inconsistencies. There is a broad scope for interpretation, but if this natural self-consistency extends to non-physical potentials universally, uninfluenced by tension, then—according to the proposal advanced here—it includes no experience of time. If, however, metaphysical free will as a potential threat to self-consistency holds real meaning, and the 'object' in their self-consistency relation between subject and object is understood to be physical events experienced by the localized subject in its immediate future, then perhaps the proposed model could round out 'experiential time' in their ontology.

The present approach views time as necessary to maintain the integrity and self-consistency of a self that is ultimately uncontainable, vertically to one level (synchronically/volition), and horizontally to a single 'now' (diachronically/

<sup>25.</sup> Or a 'meta-structural constraint', because it atemporally conditions the embedding of *agency* within the block universe while maintaining global self-consistency. Such constraints arise from a level of reality beyond physical causation. Novikov's self-consistency principle is a meta-structural constraint when applied to conscious agency acting within a causally-open system.

<sup>26.</sup> A causally-open 'atemporal libertarian eternalism'.

precognition). It is the result of the tension between the localized, finite 'specious present' and the nonlocal background 'eternal present'. Any localized awareness cannot help but experience phenomenal flow, and it is this limiting of self that is responsible, as many Eastern spiritualities maintain. The 'image of eternity' moves to ensure the integrity of the veil and our quotidian local experience, which is of 'flying blind' into an uncertain future.

This approach reveals a relationship between the consistency-preserving function of experiential time and the reproducibility challenges confronted in parapsychology experiments, including the decline effect. Relatively short lead time presentiment/precognition experiments are expected to be highly valuable in mapping the self's probabilistic temporal boundary structure. Intriguingly, Tart (2017) found a second-order anomaly, 'trans-temporal inhibition', where precognition is suppressed in the immediate future of telepathy attempts. If confirmed (acknowledging the contextual limits of confirmation for all such phenomena), this would further support the involvement of a responsive boundary-type structure. A better understanding of the relationship between free will/precognition and entropy could inform experiments designed to elucidate this connection, within the bounds of inherent uncertainty.

This interpretation also suggests that the elusive experience of déjà vu may result from precognitive information entering awareness slightly before realization of those events (too brief for bilking intentions or viewed through a transpersonal/nonvolitional lens), under certain conditions, in the course of continuous temporal advance.

Ultimately, the classic moving spotlight metaphor may be flawed in that it implies that events not perceived as illuminated are less actual than those in the present moment. However, in a limited sense, perhaps the light of consciousness advances in order to banish shadows cast from the future.  $^{27}$ 

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## REFERENCES

Aharonov, Y., & Tollaksen, J. (2007). New insights on time-symmetry in quantum mechanics [Preprint]. https://doi.org/10.48550/arXiv.0706.1232

Bergson, H. (1911). Matter and memory (N. M. Paul & W. S. Palmer, Trans.). George Allen. https://doi.org/10.1037/13803-000

Bierman, D. J. (2008, August). Consciousness induced restoration of time symmetry (CIRTS):

A psychophysical theoretical perspective. In *Proceedings of the 51st Parapsychological Association Annual Meeting* (pp. 33–49). The Parapsychological Association Inc.

<sup>27.</sup> Inspired by 'Lochiel's Warning': "Tis the sunset of life gives me mystical lore / And coming events cast their shadows before" (Campbell, 1802, p. 104).

- $\label{eq:continuous} Braude, S. (2014). \textit{Crimes of reason: On mind, nature, and the paranormal.} \ Rowman \& Littlefield. \\ Campbell, T. (1802). \ Lochiel's warning. In \textit{The poetical works of Thomas Campbell (p. 101).} \\$ 
  - Project Gutenberg. https://www.gutenberg.org/files/59788/59788-h/59788-h.htm
- Chalmers, D. J., & McQueen, K. J. (2022). Consciousness and the collapse of the wave function. In S. Gao (Ed.), Consciousness and quantum mechanics (pp. 11–63). Oxford University Press. https://doi.org/10.1093/oso/9780197501665.001.0001
- Dimitrijević, R. D. (2023). Physical and metaphysical implications of a probabilistic interactionist account of mental causation. Facta Universitatis Series: Physics, Chemistry and Technology, 21(1), 77–87. https://doi.org/10.2298/FUPCT2301077D
- Do not seek for Him, just see Him. (1992). Based on discourses by Swami Lokeswarananda on Sri Ramakrishna Kathamrita in June 1992. *Bulletin of Ramakrishna Mission Institute of Culture*, 43(1–12).
- Dunne, J. W. (1929). An experiment with time (2nd ed.). A&C Black.
- Eastman, T. (2020). Untying the Gordian knot: Process, reality, and context. Lexington Books.
- Friedman, J., Morris, M., Novikov, I., Echeverria, F., Klinkhammer, G., Thorne, K., & Yurtsever, U. (1990). Cauchy problem in spacetime with closed timelike curves. *Physical Review D*, 42(6), 1915–1930. https://doi.org/10.1103/PhysRevD.42.1915
- Grünbaum, A. (1973). Is there a 'flow' of time or temporal 'becoming'? In *Philosophical problems of space and time* (2nd ed., pp. 321–325). Boston Studies in the Philosophy of Science (vol. 12). Reidel Publishing. https://doi.org/10.1007/978-94-010-2622-2\_10
- Husserl, E. (2001). Analyses concerning passive and active synthesis: Lectures on transcendental logic (A. J. Steinbock, Trans.) (Vol. 9). Springer. (Original work published 1966.)
- Husserl, E. (2014). Ideas for a pure phenomenology and phenomenological philosophy. First book: General introduction to a pure phenomenology (D. O. Dahlstrom, Trans.). Hackett Publishing. (Original work published 1913.)
- Jacobi, J. (1973). The psychology of C. G. Jung. Yale University Press. (Original work published 1942.)
- Kastner, R. E. (2016). The Born rule and free will: Why libertarian agent-causal free will is not 'antiscientific'. In D. Aerts, C. de Ronde, & H. Freytes (Eds.), Probing the meaning of quantum mechanics: Superpositions, dynamics, semantics and identities (pp. 231–243). World Scientific. https://doi.org/10.1142/9789813146280\_0009
- Kastrup, B. (2015). Brief peeks beyond: Critical essays on metaphysics, neuroscience, free will and culture. Iff Books.
- Kastrup, B. (2017). There is an 'unconscious,' but it may well be conscious. Europe's Journal of Psychology, 13(3), 559–572. https://doi.org/10.5964/ejop.v13i3.1388
- Kastrup, B. (2018). The universe in consciousness. Journal of Consciousness Studies, 25(5–6), 125–155.
- Kastrup, B. (2019). Analytic idealism: A consciousness-only ontology [Doctoral dissertation, Radboud Universiteit Nijmegen]. https://repository.ubn.ru.nl/handle/2066/203090
- Kastrup, B. (2023a, February 26). What Carl Jung's most important book tells us. [Video]. Essentia Foundation. https://youtu.be/U6sTyzMS34g
- Kastrup, B. (2023b, October 29). Could mind be more fundamental than matter? *On Humans*, No. 17 [Audio podcast episode]. https://tinyurl.com/59ezva9u
- Kauffman, S. (2016). Answering Descartes: Beyond Turing. In S. B. Cooper & A. Hodges (Eds.), The once and future Turing: Computing the world (pp. 163–192). Cambridge University Press. https://doi.org/10.1017/CBO9780511863196
- $\label{eq:Kelly, E. F. (2021). Consciousness unbound: Liberating mind from the tyranny of materialism.} \\ Rowman \& Littlefield.$

- Krohn, E. G., & Kripal, J. J. (2018). Changed in a flash: One woman's near-death experience and why a scholar thinks it empowers us all. North Atlantic Books.
- Maharaj, N. (1982). *I am that* (M. Frydman, Trans.). Acorn Press. (Original work published 1973).
- McTaggart, J. E. (1908). The unreality of time. Mind, 17(68), 456-473.
- Mishnah. (n.d.). Pirkei Avot 3:15. Sefaria. https://www.sefaria.org/Pirkei Avot.3.15
- Moddel, G. (2006). Entropy and information transmission in causation and retrocausation. In D. P. Sheehan (Ed.), *Frontiers of time, retrocausation—experiment and theory* (pp. 62–74). American Institute of Physics.
- Mossbridge, J., Tressoldi, P., Utts J., Ives, J., Radin, D., & Jonas, W. (2014). Predicting the unpredictable: Critical analysis and practical implications of predictive anticipatory activity. Frontiers in Human Neuroscience, 8(146). https://doi.org/10.3389/fnhum.2014.00146
- Mossbridge, J. A. (2022, April 8). How do biological systems pre-spond to future events? [Paper presentation]. Behind and beyond the brain: The mystery of time—13th Symposium of the Bial Foundation. Portugal.
- Mossbridge, J. A. (2024, March 23). Going beyond Einstein: Linking time and consciousness [Video]. Essentia Foundation. https://youtu.be/atKCgbAOPhQ
- Myers, F. W. H. (1895). The subliminal self, Chapter VIII: The relation of supernormal phenomena to time—retrocognition. *Proceedings of the Society for Psychical Research*, 11, 334–593.
- Novikov, I. D. (1989). An analysis of the operation of a time machine. *Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki*, 95(3), 769–776.
- Oaklander, L. N., & Smith, Q. (1995). Time, change and freedom: An introduction to metaphysics (1st ed.). Routledge. https://doi.org/10.4324/9780203980668
- Penrose, R. (1989). The emperor's new mind: Concerning computers, minds and the laws of physics. Oxford University Press.
- Primas, H. (2003). Time-entanglement between mind and matter. *Mind and Matter*, 1(1), 81–119.
- Rosenberg, B. (2021). Precognition. In E. F. Kelly & P. Marshall (Eds.), *Consciousness unbound:* Liberating mind from the tyranny of materialism (pp. 89–138). Rowman & Littlefield.
- Silberstein, M., Stuckey, W. M., & McDevitt T. (2018). Beyond the dynamical universe: Unifying block universe physics and time as experienced. Oxford University Press. https://doi. org/10.1093/oso/9780198807087.001.0001
- Skow, B. (2015). Objective becoming. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198713272.001.0001
- Solnyshkov, D. D., & Malpuech, G. (2021). Analogue time machine in a photonic system. *Physical Review B*, 103(5), 054303. https://doi.org/10.1103/PhysRevB.103.054303
- Tart, C. (2017). On the resurrection of trans-temporal inhibition. Journal of Scientific Exploration, 31(1), 29–48.
- von Lucadou, W., Römer, H., & Walach, H. (2007). Synchronistic phenomena as entanglement correlations in generalized quantum theory. *Journal of Consciousness Studies*, 14(4), 50–74.