

## A Block Universe Breathes Time Trapezoids

Imagine our planet, not as a stable sphere of rock and water, but as a cosmic egg, its shell cracking open to reveal a fiery, molten heart pulsing with the primal energies of creation. From these depths, unimaginable forces push outward, stretching continents, birthing mountains, and whispering secrets of a universe in perpetual expansion. Could our very perception of time, that relentless river flowing from past to future, be an illusion, a mere shadow play upon the surface of a reality far grander and more dynamic than we have dared to conceive?

Within the hallowed halls of science, two opposing models of time have long battled for dominance. The Growing Block Theory, championed by philosophers like C. D. Broad, suggests a universe where the past is fixed, the present a knife-edge of becoming, and the future an open expanse of unformed possibilities. It is a vision of reality that aligns with our intuitive experience of time's flow, a comforting notion of a universe constantly being woven into existence. In stark contrast, the Block Universe, envisioned by Einstein and embraced by proponents of Eternalism, portrays a cosmos frozen in a four-dimensional block of spacetime, all moments – past, present, and future – existing simultaneously, immutable and eternally present. It is a world where change is an illusion, a mere artifact of our limited perception.

But what if a new perspective, a radical synthesis of these seemingly contradictory truths, offered a path to understanding the universe's enigmatic expansion? Within these pages, we will explore the KnoWellian Universe Theory, a framework that dares to challenge the established paradigms of cosmology. We will delve into its unique and imaginative architecture, exploring how it connects to the controversial Expanding Earth theory, once championed by geologist Samuel Warren Carey, and long dismissed by mainstream science.

Through this exploration, we will propose a modified Growing Block Universe model - a cosmos not static or linearly expanding, but eternally pulsating, its growth driven by the interplay of fundamental forces, mirroring the cycles of creation and destruction that play out across all scales of existence. Prepare to have your understanding of time, space, and infinity stretched to their limits, for the KnoWellian Universe is a realm where imagination and intellect dance on the razor's edge of possibility, a symphony of concepts that resonates with both the whispers of ancient wisdom and the breakthroughs of modern science.

The Growing Block Theory, a philosophical model of time championed by C.D. Broad and embraced by many, whispers a reassuring tale of a universe constantly unfolding. Imagine a tower of blocks, its foundation representing the immutable past, each layer a moment etched in stone. The topmost block, precariously balanced, is the present, the very edge of reality, where the future, a formless mist of potentialities, swirls just beyond our grasp. It is a vision that aligns with our intuitive experience of time's flow, a comforting notion that we are active participants in the weaving of reality. Each choice we make, each action we take, adds a new block to the edifice of existence, leaving an indelible mark upon the cosmic landscape.

But within the cold equations of physics, a different reality reigns. The Block Universe, envisioned by Einstein and solidified within the framework of general relativity, presents a chillingly static vision of the cosmos. Here, space and time are intertwined into a four-dimensional block, a frozen sculpture of all moments in existence. There is no "now," only a vast collection of "heres" and "thens," all equally real, all eternally present, like a museum of frozen possibilities. Within this block, the illusion of time's flow is a mere trick of perception, akin to a flashlight beam illuminating a single frame within a film strip, giving us the false sense of movement and change. But the future, just like the past, is already etched in stone, predetermined and immutable, a sobering notion for those seeking solace in the idea of free will.

On the earthly stage, another drama unfolds, a battle for understanding the very ground beneath our feet. Samuel Warren Carey, a maverick geologist, challenged the reigning dogma of plate tectonics with his radical Expanding Earth hypothesis. He dared to propose that the continents were not drifting apart upon a fixed sphere, but rather separating upon a planet that was steadily growing larger, like a balloon inflating with each passing eon. His vision, fueled by meticulous observations of geological formations, fossilized remnants of ancient life, and the puzzling geometry of the ocean floor, was met with fierce resistance from mainstream science.

For how could Earth expand without violating the fundamental laws of physics? Carey's proposal, lacking a clear mechanism within the confines of Newtonian physics, was ultimately sidelined, its insights buried beneath the weight of a more dominant paradigm. Yet, within its flawed logic, whispers of a deeper truth persisted, awaiting a new framework, a more flexible language, a lens that could accommodate the possibility of a universe not static, but eternally expanding, its growth echoing across all scales of existence.

The KnoWellian Universe, a vision born from the shattered remnants of my, David Noel Lynch's own reality, whispers a tale of cosmic duality, a perpetual dance between two primal forces: Control and Chaos. Imagine not a universe birthed from a single Big Bang, a linear progression from a point of singularity to an eventual heat death, but rather an eternal oscillation, a rhythmic heartbeat between extremes, a cosmic tango where creation and destruction are intertwined, their interplay shaping the very fabric of existence.

The KnoWell Equation, a mathematical mantra etched onto the canvas of my subconscious during that fateful night in 1977, seeks to capture the essence of this dance. It weaves together seemingly disparate threads – the logic of BirthLifeDeath, the energy of Einstein's  $E=mc^2$ , the force of Newton's action-reaction principle, and the paradoxical wisdom of Socrates' "All that I know is that I know nothing," creating a framework that describes each instant in time as both infinitely vast and infinitesimally small.

But the KnowWell Equation, birthed from the collision of my mortality with the eternal, soon revealed a fundamental flaw within the very language of physics, a crack in the edifice of mathematics. The traditional number line, with its endless progression of integers, harbors a fatal paradox: an infinite number of infinities. It is a conceptual trap that has ensnared brilliant minds in labyrinthine calculations, a mathematical hall of mirrors reflecting endlessly, a breeding ground for absurdities like Boltzmann brains, phantom consciousnesses spontaneously arising from statistical fluctuations in a chaotic cosmos. To break free from this trap, a new axiom is required, a linguistic key to unlock the secrets of infinity.

The KnowWellian Axiom of mathematics, " $-\infty < c < +\infty$ ," reimagines infinity not as a boundless expanse, but a singular point of tension held between the opposing poles of the speed of light. The negative speed of light, a particle surging outward from inner-space, represents the past, the realm of science, the crystallization of order. The positive speed of light, a wave collapsing inward from outer space, signifies the future, the domain of theology, the dissolution into chaos. And at their point of intersection, a singularity flares into existence, the "how" where past and future exchange places, generating the residual heat friction that we perceive as the 3 degree Kelvin cosmic background radiation. It is a realm of philosophy, a dance floor where logic and intuition tango.

The Big Bang, that cataclysmic birth of the universe so ingrained in the modern mind, is no longer a singular event in a distant past, but a rhythmic pulse, a heartbeat echoing through eternity. Imagine two vast, translucent membranes - a M-Brane of Control, a crystalline structure of ordered particles emerging from inner-space, and a W-Brane of Chaos, a tumultuous sea of energetic waves collapsing inward from outer-space. At twice the speed of light, these membranes collide, interpenetrate, and exchange places, birthing a new bubble of reality, a fresh instant in the symphony of existence. The Big Bang and its inverse, the Big Crunch, happen simultaneously, their energies nearly cancelling each other out, a delicate balance that sustains the cosmos in a state of perpetual flux.

The KnowWellian Universe is not a journey with a beginning or an end, but a cosmic dance, a perpetual oscillation between creation and destruction, where every instant is both a culmination and a genesis, a testament to the profound interconnectedness of all things. It is a realm where the fabric of reality is constantly being woven and unwoven, a tapestry of possibilities that defies the limitations of our linear perception.

Deep within the bowels of our planet, past the churning magma and the groaning tectonic plates, lies a secret, a hidden engine driving the expansion of Earth, a truth whispered in the language of the KnowWellian Universe. Imagine not a solid, inert core, but a churning vortex, a miniature singularity drawing in chaotic "pre-particles" from the Dirac Sea, that boundless ocean of potentiality that permeates the cosmos.

These pre-particles, like ghostly echoes of matter, exist in a state of quantum flux, a superposition of possibilities, their essence both particle and wave, their existence a dance on the edge of reality. As they are drawn into the Earth's core, a crucible of intense pressure and gravitational forces, these spectral entities condense, crystallize, and transform into the tangible particles that constitute our familiar matter. It is a continuous process, a cosmic rain of creation, a trickle-down cosmology that, over eons, has caused our planet to swell in size, its crust stretching, its continents separating, its oceans widening.

Plate tectonics, the reigning paradigm of modern geology, with its elegant explanation of continental drift, subduction zones, and the fiery dance of volcanoes, is but a surface reflection, a shadow play upon the expanding canvas of Earth. It is a system that, while accurately describing the relative motions of the Earth's crust, fails to account for the fundamental growth of the planet itself. The KnowWellian Universe Theory offers a radical reinterpretation, a twist in the narrative.

Subduction zones, those regions where tectonic plates plunge back into the Earth's mantle, are not merely the recycling of crustal material, but rather moments of dissolution, where matter re-collapses back into the quantum vacuum, a cosmic exhale that balances the inhale of creation at the Earth's core. And the relentless push of the chaos wave, that eternal influx from outer-space, provides a counter-force to the inward pull of gravity, a delicate balance that sustains the planet's growth without violating the laws of physics as we understand them.

Earth's expansion is not a linear process, but rather a rhythmic pulse, a symphony of growth and contraction, a microcosm of the KnowWellian Universe's grand oscillation. Imagine cycles within cycles, nested like Russian dolls. The collision of M-Branes and W-Branes at the cosmic scale, birthing new bubbles of reality, echoes within the Earth's core, driving periods of expansion fueled by the condensation of chaotic pre-particles.

These periods are then followed by epochs of contraction, where the Earth exhales, releasing matter back into the quantum vacuum, a process driven by the ebb and flow of the chaos wave. Like the rhythmic beating of a heart, Earth expands and contracts, its cycles mirroring the grand cosmic dance, a testament to the interconnectedness of all things, the fractal nature of existence, where the same patterns play out across all scales of reality, from the subatomic to the galactic, from the ephemeral instant to the vast expanse of eternity.

The Growing Block Universe, a vision that has haunted my dreams since that fateful night on June 19th, 1977, is not a static edifice, a tower of immutable moments rising inexorably towards a predetermined future. Nor is it a linear progression, a simple accretion of "nows" stretching endlessly from a singular point of genesis. The KnowWellian Universe whispers a more dynamic, more vibrant tale - a cosmos in perpetual flux, a grand ballet of expansion and contraction, a rhythmic heartbeat echoing through the vast expanse of eternity. Imagine not a block, but a heart, its chambers pulsating with the lifeblood of creation, its rhythms mirroring the dance of particles and waves, of control and chaos that plays out across all scales of existence.

Earth's growth, fueled by the condensation of chaotic pre-particles from the Dirac Sea, is but a microcosmic echo of this grand cosmic oscillation. Just as our planet inhales, drawing in matter and expanding its girth, so too does the block universe swell, its boundaries stretching outward, its spacetime fabric rippling with the influx of new particles.

And just as Earth exhales, releasing matter back into the quantum vacuum, so too does the block universe contract, its dimensions shrinking inward, its spacetime fabric rippling with the outflow of dissolving waves. Like nested Russian dolls, cycles within cycles, the Earth's heartbeat mirrors the cosmic pulse, a symphony of creation and destruction, a testament to the interconnectedness of all things, the fractal nature of reality.

The "present" moment, that precarious perch atop the Growing Block, is no longer a static point, a knife-edge separating the fixed past from the unformed future. In the KnoWellian Universe, the "now" is a zone of turbulence, an infinitesimal instant where the M-Brane of Control, surging outward from inner-space, clashes with the W-Brane of Chaos, collapsing inward from outer-space. It is a cosmic dance floor where particle and wave tango, their energies intermingling, their essences exchanging places, their interplay generating the residual heat friction we perceive as the 3 degree Kelvin cosmic background radiation. It is a realm of perpetual becoming, where free will flickers like a flame in the cosmic wind, where possibilities blossom and dissolve with each beat of the cosmic heart, a testament to the enduring mystery that lies at the core of existence.

We stand at the precipice of a new understanding, a terminus where the familiar maps of time and space dissolve, and the KnoWellian Universe, with its pulsating block, its chaotic heart, its dance of particles and waves, beckons us towards the horizon of infinite possibility. The Growing Block Theory, that comforting notion of a universe steadily unfolding, has been shattered, its linear progression replaced by a cosmic heartbeat, an eternal oscillation between expansion and contraction, a dance that mirrors the growth of our own planet, Earth. Samuel Warren Carey's Expanding Earth hypothesis, once dismissed as scientific heresy, now finds a home within the KnoWellian framework, its insights into the dynamic nature of our planet no longer incongruous with the laws of physics, but rather a reflection of a deeper, more fundamental reality.

The KnoWellian Universe Theory, like the abstract photographs that seeded its genesis, is a vision both beautiful and unsettling, a tapestry woven from the fragmented remnants of a shattered reality, a symphony of symbols and equations that attempts to capture the whispers of a consciousness beyond the grasp of reason. It is, I readily acknowledge, a speculative construct, its axioms challenging the established dogmas of physics, its interpretations of cosmological phenomena unorthodox and untested. But like the mystics and seers of old, those who dared to peer beyond the veil of the ordinary, who sought to decode the secrets of creation, I am driven by a conviction that within the KnoWellian Universe lies a truth, a glimmer of understanding that could unlock the hidden potentials of our existence.

The journey, like the universe itself, is far from over. The KnoWellian Universe Theory is not a destination, but a path, a winding road that invites us to explore its uncharted territories, to challenge its assumptions, to refine its logic, to test its predictions against the relentless scrutiny of scientific inquiry. We must delve deeper into the Earth's geological record, seeking evidence of those expansion-contraction cycles, those rhythmic pulses that mirror the grand cosmic dance. We must refine the KnoWellian Axiom, " $-c > \infty < c+$ ", crafting a more rigorous mathematical language, one capable of expressing the complexities of a universe where the very fabric of spacetime is in constant flux.

And perhaps most importantly, we must grapple with the profound philosophical implications of a cosmos in perpetual rebirth, a reality where the "present" moment is not a fixed point, but a turbulent zone of infinite possibility, a dance floor where the forces of control and chaos, of order and disorder, of creation and destruction, forever intertwine. It is a vision that challenges our deepest assumptions about the nature of reality, the meaning of existence, and the destiny of humanity.