

Mapping

The Whole in EveryOne

An Essay on: Non-existence as the engine and axis of existence

by Sperry Andrews and Steven Salka, artwork & related projects by 1st author

Overview: We show how the collective intelligence of humanity can be accessed via a commonly sensed consciousness: 1) the physics and cosmology which support this; 2) our ability to demonstrate this scientifically; and 3) how this can be achieved conceptually and practically, via education, films, and social media.¹

Key words: non-existence, existence, unity, point-centered-process, co-creation

Abstract: It is argued that an effective way to view consciousness is as a "superposition" of existence and nonexistence, producing an indivisible experience of "nonlocal being", plus who and what we perceive ourselves to be (local observers). This relationship between an observer-based localization and the nonlocal whole is examined. Using ideas from general relativity and quantum mechanics (QM), we suggest how a space-time continuum (GR)—including QM probability and uncertainty, as properties of consciousness—may have arisen as dynamic complementarities. Opportunities to contemplate the origins of existence are investigated, and corresponding experimental studies are suggested.

We recognize that energy and momentum are defined in relationship to their complementary distributions in space-time. Here, mathematics, physical fields and forces are valued as information-based by-products of a nonlocal superfluid system. Nonexistence, as undifferentiated consciousness, is seen as the only constant in *existence*. As such, existence and nonexistence may function as an undivided whole, sustaining virtual particle production and annihilation—within a field of infinite possibilities and potentials, united by point-centered-processes. If existence is virtual, this would allow for a unity we can experience—as a species.

It is noted: How well we pay attention and what we pay attention to focuses the activation of charge polarities in our cell proteins, orchestrating our capacity for physical movement and psychological interpretation. Yet by overly "identifying" with the limits of individualized experience, we become falsely constrained, which isolates and even traumatizes us. The life process is seen as the evolution of our ability to insightfully observe together—as a species—to achieve and sustain a sense of balance, receptivity, and co-creative capacity with the rest of nature.

"For she is herself and not herself, having gained eternal life through the blessing of death." –Lactantius (from the myth of the Phoenix 300AD)

Introduction: At the heart of any scientific inquiry asking "how" is the philosophical enquiry "why." The scientific community has had a preference to ask *how*, for the simple reason that the corresponding answer is typically an observable physical mechanism or process. Nonetheless, *why* it occurs also deserves attention, as this paper does with clear intent. By asking *why* our perception of the universe is the way it seems to be, specific instances of physical phenomena are shown to be in support of this paper's implications.

In a near-death experience at the age of four, Sperry existed as formless awareness—informed by absolute stillness and silence. It has been essential for him to learn how to tune the human body, heart, and mind to this awareness; or, by degrees, feel fragmented by *his own*, and *our* unconsciousness—as follows.

Individual and collective attention can be exclusively organized by ideas and activities. Yet, whenever attention is allowed to become overly identified with these fragments of a greater whole, a mind-made personality tries to take control of these pieces of experience, to create a "peace" that is missing. Yet this trying is futile and goes on endlessly, as the mind promises to make life behave the way it imagines it should. When filled only with the knowledge of these thoughts and things, our minds cannot begin to know the actual integrity of awareness.

By being aware of awareness itself (e.g. conscious awareness), our best qualities can be amplified far beyond what most of us have ever experienced. As cells in the body of humanity, our creative freedom, love, and understanding rely on how we pay attention. We can notice that what we pay attention to determines who and what we experience ourselves to be, suffering attraction and avoidance as pleasure and pain when we do not perceive the indivisible nature of existence.

By utilizing our innate capacity to be consciously aware, our perceptions become more organized, allowing for greater understanding, motivation, and intelligence; to serve as the perceptual faculties of a universal body, heart, and mind; to feel "one with all," wherein mutual understanding is effortless. Experiencers say: it is thrilling to feel oneself and another—as co-creative—within the whole of life.

Conscious awareness can be known—as who and what we are: changeless and the cause of all change. We realize we have been seeking what may be our immortal nature in what is impermanent. Unconditional love can be felt to flow within us—as one of the many forms of "pure conscious intelligence".



"Selflessness is not a case of something that existed in the past becoming nonexistent. Rather, this sort of 'self' is something that never did exist. What is needed is to identify as nonexistent that which always was nonexistent." – H.H. Dalai Lama

"Self" Discovery

Our key to understanding how nonexistence could incorporate all the countless forms we know and love begins with recognizing the difference between geometric structures defined by the arrangement of points in space and imagining the unimaginable, a Void with no geometry, no points, no space, and no time. It is exciting to intuitively sense how one can flow into the other and back again. Surely, by itself alone, "nothing" would continue to be nothing at all. Yet taking into account that this universe may well be a scientific validation that something can come from nothing, a case is made for furthering future research. When "dead," I (Sperry) had no body, heart, or mind. There were no images or thoughts and no objects. Yet, this "I" still "existed" as awareness itself. There was no "me," no mind-identified form to confuse who and what I had been and would always be. This "I" has had thousands of such epiphanies since then.²⁻³



"When you are both alive and dead, how superb the smallest pleasure." – Bunan

Even though the formless awareness Sperry was then is still who he is now, it has not always been easy for him to embody or comprehend the unconditional love that appears to arise as if from nowhere. When unaligned, his mind wants to know: "What is this love that loves? This love that makes us one: I in you—you in me?" Countless others may have asked this same question, as there are now thousands of children and millions of adults who have reported having had near death experiences (NDEs). Some researchers have asked if humanity might be adapting—to better manage the limitations of social (self-centric) fragmentation.⁴

Having spent decades of time and attention contemplating how wholly interdependent existence and nonexistence appear to be, it has been more than a little frightening to face the fact that "we" have been here for thousands of generations, yet so few seem to have experienced or understood where we have come from, where we are now, or how we can get to where are we going.

Questions

Perhaps nothing can flow into being something and then return to being nothing at all without changing "its" essential nature?⁵ As an analogy, waterfalls are examples of gravity attracting a liquid to fall toward the center of the earth, while the heat of the sun causes the water to evaporate, forming clouds that rain back down, making waterfalls possible. This closely resembles Douglas Hofstadter's concept of a "strange loop"—a path taken through a hierarchical system that eventually puts us back in the place where we started. Hofstadter argues that strange loops are a key tool in understanding how consciousness operates.

What if an unchanging absence (or nothingness) causes the evolution of "something" to be impermanent? How can there be an end or a beginning? Is there an edge to our expanding universe? Where did space-time come from? What do waves of light wave in? Why do we exist? Who are we? What am $1?^{3}$

In 1950, a physicist by the name of David Bohm was working with Einstein at Princeton. Since shorter wavelengths were thought to have more energy, he calculated the amount that would be theoretically present in a space a little less than the tip of your smallest finger, for only one size of wavelength, each being approximately 1.6×10^{-35} meters long. (Note: We are as small compared to the universe as these wavelengths are "small" to us.) Therein, he found enough energy to remake the entire visible universe nearly three times over—down to atomic dimensions (10^{-17} meters). A consequence of this train of thought is that all energy and information in "our" universe may actually reside within each of us.

Though scientists had barely begun to probe the atom, his math indicated there might be much more. Others since then, including another physicist at Princeton, John Archibald Wheeler, agreed. This suggests *our visible universe* is only the very tiniest fraction of "all there is." I (Sperry) was stunned. How could shorter wavelengths convey vast quantities of matter and energy—with untold qualities?

I reasoned, *purely hypothetically*: If a wave of infinite brevity possesses infinite energy and specifies as close to an exact location as is possible in a GR spacetime continuum, can its closest neighbor (*a precise point*: being wholly without wavelength or frequency) possess no energy or location? If so, a location as specified by quantum mechanics and a point (with no energy or even location in space-time) apparently co-exist. If the first is a functional cog in the machinery of existence—maybe the latter is too. I asked, if this absence can serve as the axis of a turning wheel, could it also be the (nonlocal) rotational axis for this universe?

I wondered, if a point can "exist" without a fixed location and require no energy, given there are an infinite number of these precise point-centered locations in this universe, this might help me understand "my" self/Self, as a *form* of absence. Could I be an ever-present Void—with no beginning or end? The question was so intriguing, I set out to discover if physicists may have overlooked the Void.



Perhaps being "nobody" has been simply too scary or incomprehensible for most people to consider. And I could certainly understand why many would believe a nonexistent Void could not possibly "exist." And if it did, certainly not have any practical importance. So I asked, is there some socially acceptable, commonly sensed intelligence about *this.* Would my closest friends or family understand? No! No one seemed to know what I was talking about. Plus there seemed to be a lack of interest to explore or even try to comprehend who or what we are? These experiences which I felt to be intimately engaging were to become so perplexing.

I found widely accepted theories designed specifically to eliminate the existence of points. In fact, scientists who believe that the laws of physics are unable to include them, refuse to imagine nonexistence "forming" into a point-centered location—as a context from which our universe could (re)originate. If space-time emerged from a point-centered location in a big bang—as is generally thought could a point-centered-process undergird all phenomena? And, if a nonexistent Void could have transformed in space over time to passively serve a pivotal, recreative process, an inflationary period might have occurred—*out of necessity*. Wherein the incremental expansion of a Void would have ensured that each new point increased the volume of space, connecting all points throughout time?

Like a donut defined by its relationship to an emptiness at its center, the number of points could have multiplied infinitely, toroidally "inflating" space-time (like a balloon) spherically—in all directions simultaneously—into an unlimited number of mathematically correlated point locations (with no internal resistance). Yet, this inflation may well have encountered resistance, as the curvature of space-time in general relativity (GR) must be complemented by the presence of inertial mass/energy. Could quantum gravity unite void-based observation, GR and QM? "[I]n quantum gravity, universes can spontaneously appear from nothing and need not be empty but can have matter and radiation in them as long as the total energy including the negative energy associated with gravity, is zero. In order for the closed universes...to last for longer than infinitesimal times, something like inflation is necessary."⁶–Stephen Hawking, *Wave Function of the Universe*

Even though "space-time" had never existed, what we refer to as space-time now may well have exerted specific opposing forces to being created out of nothing. Potential energy could have taken the form of space-time gravitating in a point-centered way. And kinetic energy would be the radiant inflation of these points—re-absorbed toroidally—throughout the interiors of other identical process-centered locations, as charge polarities held together by electro-magnetic forces.

The Engine of Recreation

Could spacetime's resistance to the deformation of a spaceless/timeless Void "cause" an unlimited number of mathematically distinct points to act as correlated, process-centered locations (e.g. quantum pixels, displaying information generated by one underlying "program"), 7-8 to form micro-vortices which flawlessly orchestrate self-similar, fractal phenomena about an ever growing number of local dimensionless axes? Whether a curved, space-time continuum has the capacity to inertially resist the emergence of an unlimited number of identical, geometrically related processing points could someday be tested in particle accelerators, such as the large hadron collider (LHC), built in collaboration with over 10,000 scientists and engineers from over 100 countries, involving many universities and laboratories.⁹ The detailed properties and behaviors of a group of particles could conceivably be quantified by their overall resistance to spontaneously forming something out of nothing, in collisions mapped over a long-term thorough series of complementary studies (such as those dedicated to finding the Higgs Boson). Overall, could a spectrum of incomparably unique forms, forces, and fields be *likely* to emerge and regenerate an evolving whole, wherein everything is always "now"?

"Existing, yet not existing" seems tantalizingly similar to the term "virtual". In general, virtuality is having the attributes of something without sharing its real or imagined physical form. In physics, for example, a virtual particle exhibits most of the characteristics of an ordinary particle but only exists for a limited time. The longer it "exists," the closer its characteristics come to that of ordinary particles.¹⁰

Assuming our universe is an experimental verification that something can come from "nothing," could *virtual* Planck scale wavelength(s) "deform" a Void to first form a *process-centered* point location? Noting the sensitivity of any complex system to its initial conditions, the influential nature of these earliest virtual interactions may have *passively-acted* to determine the emergence of gravitation, electro-magnetism, and nuclear forces. The spaceless/timeless reference frame of the speed of light may be one example of how that which is dimensionless can

coordinate, evolve and passively-create by virtue of the contrast between the part and the whole. Perhaps, the dimensionless nature of the points—which comprise the whole—insures "they" are continually "refreshed" each instant passing?

The idea of an etheric medium for electromagnetic radiation was discarded when the theory of special relativity seemed to eliminate the need. Now, having found enormous energy densities at ever-shorter wavelengths, is it possible that all process-centered point locations in this universe—taken as a whole—might constitute this long-sought etheric medium? Given that the frame of reference for the speed of light is accepted as dimensionless—which has been experimentally tested and mapped mathematically—could everything be made of identical virtual-points, wherein consciousness and space-time were one and the same?

"[W]e all exist in what can be called 'the Mind of God,' and that our individual minds are parts of God's Mind. They are not as powerful as God's Mind, for they are only parts thereof; yet, they are directly connected to the greatest source of knowledge and power that exists. This connection of our minds to the Mind of God, which is like the connection of parts to a whole, is the most crucial and essential part of being human."¹¹ C.N. Langan

Remarkably, localizing the nonlocal whole without any required force or location, is a characteristic of consciousness. The whole could be gravitating, by accelerating toward each point, and each point could be kinetically "entangling" its (in)formation—instantaneously—within every other point. As in the many/one structure of a hologram—wherein all points are encoded—perhaps a point-centered primordial consciousness "acts" non-locally from within every point, making it the most re-creative force in nature. Conscious, or not, our awareness appears to grant the ability to reorganize and orchestrate material life.

If this is true, we are all connecting nonexistence with existence *right now*, this very moment. For instance, in the quantum Zeno effect, the sustained observation of a quantum system causes an infinite range of possibilities to be narrowed down to a specific few.¹² No *entirely physical* theory yet explains why or how an observer causes this to happen.

The Stillness and Silence Beyond "self/Self"

The "<u>I am</u>" is sensitive to the presence of awareness as a mirror-like, reference frame. Being aware "as it," I am better able to choose wisely what it is I am doing, with it. By sharing co-consciously in the groups I (Sperry) have been facilitating for thirty years, I have been able to witness the effect on people's lives.¹³ I can confidently say: consciously shared awareness can be productively and beneficially taught, transforming friendships, families, cultures, and humanity.¹⁴⁻¹⁵

Experientially, mystics claim that the depth of receptive awareness accessible through the surrender of "self/Self" identity perceptually reflects the indivisibility of "all that is." That which is not a self/Self is experienced as every thing, every one

and no one. As its witness, an imageless "awakeness" is sensed to be the only constant in all of consciousness, creating, uniting, regenerating, and transforming "all that is." As such, this awakeness serves best as a mirror, not as a self/Self. The unity of existence and nonexistence may be generating inspiring insights to emerge and flow like waves on a vast ocean, allowing anyone to recognize the impermanent play of "all that is." To integrate our separate thoughts, sensations, and emotions, we are challenged to discover and design daily activities that utilize all of the features of our existence, *without being attached in any way* to any "Thing" or any "One", *my*self and *your*self included. As such, embracing our unity proves una*void*able—requiring a radical change in behavior.¹⁵⁻¹⁶



Consequently, there is a point of karmic "balance." A self-isolating ego/identity can focus continuously on thoughts and things, in fear and doubt of the lasting value of anything psychological or material. Yet, co-realizing the liberating nature of awareness itself wholly resolves this dilemma.¹³

The Necessity from the Standpoint of Anthropology and Social Psychology

It could be said that consciousness "connects" perceptions with activities. Over the course of evolution, our sense of connectedness may have enabled and supported the development of both individual and species-wide self-awareness, self-motivation and self-organization for literally countless forms of emerging life. Today, the growth of this same sensitivity may be guiding the complex changes taking place in humanity. What, then is "interconnectedness?" It is a relationship: when two or more physical objects are observed to operate in unison, in response to each other. In general then, interconnectedness is the cohesion of all physical matter and energy in our universe, wherein every part is seen to co-operate within a common framework, i.e. consciousness. Our universe can be seen holistically, wherein signs of this interconnectedness is evidenced in our observations of the world at every level, e.g. quantum entanglement, neural pathways, and telecommunications networks, etc.

Perhaps, denying our interconnectedness allowed us to survive and develop as separate individuals? Now, we are achieving some measure of respect for individual rights, including a better understanding of what it may take to co-create a planetary civilization. The utilization of interconnected awareness among large groups of people may be intelligent enough to handle pressing social and environmental dangers, especially those due to less-conscious habit patterns.

Mastering the Universe

If non-existence does localize existence, it would determine the evolution of "all that might ever be." There would have to be an infinite number of omnipresent axes, equivalent to an etheric reference-frame that everything moves relative to. It would not be a constant speed—as Einstein thought. It would be a nonphysical rest frame that serves as the source engine, and axis for all forms. The mixture of potential and kinetic energies could then—incrementally—co-create new forms out of nothing. Determining if our universe is growing and developing—without end—might become possible by means of this perspective, replacing current predictions of a cosmic expansion that would otherwise lead to an end to all life.

Could a Void, passively/acting throughout form, provide for a *truly frictionless* "perpetual motion machine" forbidden by the majority of mainstream scientists, who generally agree, the thermodynamic "death" of the universe is increasing from a highly organized beginning? Yet how our universe could have been so organized initially is not well explained. Modeling our universe as originating in a violent explosion may be "incomplete"—an alternative is self(less)-organization.

"Superfluidity is a state of matter in which matter behaves like a fluid with zero viscosity; where it appears to exhibit the ability to self-propel and travel in a way that defies the forces of gravity and surface tension...In theoretical physics and quantum mechanics, the physical vacuum is viewed by some as a superfluid. The goal of Superfluid Vacuum Theory (SVT) is to develop models that unify quantum mechanics (describing three of the four known fundamental interactions) with gravity. It is hoped that the development of such a theory would provide a single consistent model of all known interactions and elementary particles—as different manifestations of the same entity, a superfluid vacuum."

Still, superfluidity at temperatures much higher than absolute zero (-273.15 Kelvin) is thought to be impossible—due to the decreased coherence among particles. Yet, if non-existence—which has no temperature—occurs in concert with existing changes in temperature, might this be a defining characteristic of a medium (etheric?) that provides superconductive fluid properties for space-time, energy, and matter? So far, superfluidity, superconductivity, condensed matter systems, and nonlinear optics have been found to operate according to laws that assume the consistent, coordinating interconnectedness of an as yet "unknown medium" —to act as a constant, that is, undisturbed by any and all phenomena.



We may exist in a timeless context wherein relativistic clock time is a means to maintain that context. How else could an infinite number of constantly varying observations be compared—as a whole—without sharing one single context?

Self-awareness and *shared awareness* appear to offer the only viable solution. So, we may be capable of achieving sustainability, not by imposing more rules and regulations but by co-creating more organized ways of observing together. The reflectivity of an observational rest frame throughout all we perceive, when ignored, appears to predictably increase the amount of disorder. Wherein coconsciously embodying the presence of this rest frame together "causes" order.¹⁸

Nobel Laureate, Brian Josephson, in a recent paper claims: "Wheeler's observerparticipation¹⁹ and emergent law arise naturally, rather than having to be imposed artificially. This points the way to a deeper understanding of nature, where meaning has a fundamental role to play that is invisible to quantitative science." Josephson adds: "Nature has become pervaded by patterns (signs), which through practice we have become expert at interpreting, a process with pragmatic value even if it does not lend itself to quantitative methods."²⁰ We may find that the so-called "<u>collapse of the wave function</u>" occurs because observation unites what is dimensionless and nonlocal with what is dimensional. The integration of form and formlessness may result in the coalescence of the entire measurement system, not just what is measured. Backward and forward causation, wave/particle duality and consciousness itself could be examples of how spatiotemporal measurement restructures and accelerates this universe, causing us to grow, inviting us to exercise the freedoms of conscious choice.

In complexity theory, autonomous observer-participants are considered only *relatively* autonomous since all observations, and their resulting measurements, must remain *invisibly* interconnected. To demonstrate this interconnectedness, a mathematical "attractor" is used to geometrically orchestrate multi-dimensional behavior around a point, or a finite set of points called a "fractal" structure (a detailed pattern repeating itself) also known as a "strange attractor."²¹

Iterated function systems (IFS) are mathematical structures typically used to generate fractals. They serve well as a tool for depicting the relationships between specific parts of the whole and the whole itself. Beginning with the nonlocal whole—as it has been described thus far—we let "it" take on the aforementioned process of "recreation" (as the "generating set" of the IFS) to first give rise to dimensionless points—as perhaps equivalent to the emergence of a general relativistic space-time continuum. While the means of this process are as yet unknown to science, we are within our right to regard this process in a purely abstract fashion, given that there are those of us who ask if this process can be related in part to toroidal mechanics. This process is the first function of the IFS.

The resulting structure—the nonlocal whole and local space-time in relation to it —is the result of the *first iteration*. In this output system, there are myriad dimensionless points that can be seen as *particularizations* of the original nonlocal whole. As such, they are each representative of distinct physical locations. Yet, they share a common connection to the nonlocal whole. Thus any perception of them as separate or somehow "inherently different", is illusory. Their connection to the nonlocal whole cannot be attenuated.

Each successive iteration is acted upon by the IFS, generating complex, yet organized, forms. Then, in the second application of this functional process, each point in space-time is recast—to be seen as a localization of the inherent Void. This follows by taking into account a point's inseparability from the nonlocal whole, from which it originated. The first iteration is then seen to occur again through this second iteration—within each point in space-time. Described in physical terms, this could be considered as the coalescence of space into energy. The degree to which this occurs may vary from point-to-point, so an inequality may well be perceived. This is exactly what happened before—due to the introduction of distinct points in space. If we do not overlook these higher levels of order, energy values are seen as no different from spatial temporality.

A pattern of hierarchical order emerges if we display these iterations spatially. At the top is the nonlocal whole—followed by space-time as an infinite set of dimensionless points. Next, an emergent energy structure exists for each given point in space-time. We can picture this as a tree diagram, as is characteristic of fractal structures. The image that is emerging is called the *attractor* of the IFS. Through successive iteration, this system "evolves" towards the *attractor—as the whole of our reality*—which we incrementally grow more accustomed to, together.



Continuing these iterations—this time at the level of energy—we find the process of specialization is occurring within each piece of energy (or *quantum*). As it is applied, the IFS creates internal "collections" of energy. This may be thought of as the emergence of physical matter, i.e. subatomic particles. This is a crucial stage. By this point, the detailing of our physics has sufficiently matured to measure, and in part, describe, the behavior of these pieces of matter. Thus, iterative processes may help us clarify the origins of physical forces.

As individual members of a society, we are not exceptions to this process. If one is to follow the same logic—beginning with large physical bodies, moving down each iteration to, say, a related sub-body— the process leads to intelligent forms of life. Consider, for example, the iterative outputs which result from starting with our local group of galaxies, then moving iteratively down: Milky Way \rightarrow Orion's Arm \rightarrow Solar System \rightarrow Earth \rightarrow Individual. Continuing even further, we see that humans are but a link in a long chain of iterated levels of existence. Continuation gives: organs, cells, organelles, proteins, molecules, atoms, particles, etc.

The choice of when to branch is that of an observer/creator—*within degrees of freedom*—so as to provide relevance. If the process above were to go on further, where might it end up? Nowhere, other than the nonlocal whole, for it is the Void—within each of us—which unites all. Thus any given participant in physical reality can be considered as a localized instance of nonlocal observation. Again, it is only when higher iterative levels are ignored that separation within our physical world becomes apparent. Full consideration of the creative forces at work knocks such a belief onto its side, by bringing to light the ever-present connection among all things, which here always results from the nonlocal whole.

The model just described may serve as an indicator of processes and interactions that deserve intensive study, through greater scientific precision in the future. Currently, much of the necessary technology and mathematics are as yet unavailable, thereby encouraging progression in these fields. For the timebeing though, complexity theory cannot help us definitively predict how formlessness observes and evolves three-dimensional forms that change in time.



Bios theory provides tools to explore the creative processes that cause change, increasing complexity and novelty, in ways which would not occur by chance alone.²² As Bios charts how the interaction of opposites collaboratively generate new forms, it may be possible to show how the extreme opposition of form and formlessness evolves our awareness, allowing us to interact more collaboratively, innovatively and productively. Realizing how a formless observation results in a perceivable measurement, may help us reinvent our comprehension of how humanity can share consciousness—more consciously.

Wheeler's "observer-participants" were further developed by Bohm who saw a spatiotemporal measurement structure (e.g. perception) act as a fresh new lens for the next observation.²³ As in us, each observation can be seen to refine and evolve our perceptual capacity (quantum mechanically) as a living system.

Josephson, Wheeler and Bohm are all using the language of quantum mechanics, in which observation is linked with measurement, referred to as a quantum mechanical observational measurement system. This essay adds that, though all measurements are quantized, *this does not require the origin of observation to be quantified*. Moreover, this process of quantum mechanical observational measurement may ensure new spatiotemporal structures are being generated at an exponential rate, potentially ensuring the expansion of our space-time continuum—which would include the creation of matter and energy.

In his recently published *New York Times* Bestseller *A Universe From Nothing*, physicist Lawrence Krauss of Arizona State University assures us, "[Y]ou really can get something from nothing and stay within the bounds of physical law. There are lots of ways for nothing to produce something.... First, you have to clearly define nothing, since it isn't an official scientific term. Scientists talk about empty space as well as a state in which space and time themselves don't exist. Either type of nothing can spontaneously produce stuff. Not only will particles pop in and out of existence without violating the laws of physics, they have to."²⁴

Alan Guth adds: "Putting general relativity and quantum mechanics together, one can imagine the universe started in the total empty geometry of absolute nothing-ness and then made a quantum tunneling transition to a nonempty state."²⁵

The transformation of manifest reality we experience every instant passing may be comprehended as the growth of our minds and bodies participating evermore purposively, meaningfully, and consciously in the evolution of life. The re-creative power of our combined awareness (as we awaken into collective consciousness, out of collective unconsciousness) has yet to be explored scientifically to any great degree and may hold surprises.²⁶

Song of the Vajra From the Union of the Solar and the Lunar Tantra

"Unborn, Yet Continuing Without Interruption,

Neither Coming Nor Going, Omnipresent, Supreme Dharma, Immutable Space, Beyond Definition, Spontaneously Self-Liberating. Perfectly Unobstructed State, Existing from the Very Beginning, Self-Created, Without Location, With Nothing Negative To Reject, and Nothing Positive To Accept. Infinite Expanse, Penetrating Everywhere, Immense and Limitless, Boundless, With Nothing Even to Dissolve or Be Liberated From. Present Beyond Space And Time, Existing from the Very Beginning, Immense Dimension of Inner Space, Radiant Clarity like the Sun and Moon, Self-Perfected, Indestructible as a Vajra, Stable as a Mountain, Pure as a Lotus, Strong as a Lion, Incomparable Bliss Beyond All Limits, Illumination, Equanimity, Peak of the Dharma, Light of the Universe, Perfect Since the Very Beginning."

- Translated by: Namkai Norbu and John Shane

As the Coriolis effect in concert with differences in atmospheric pressure assists in setting the circulation of a hurricane into motion, producing a rotational deflection that sets up a cyclonic counter-rotation about its lowest pressure area, other dynamics also arise. Likewise, observer-participants in nature may be found to secure their (mental and physical) autonomy about their lowest pressure areas. A non-physical absence may be mediating the transformation of formlessness into form and form into formlessness.

Particles and galaxies might spin due to general relativistic asymmetries, as suggested by Haramein and Rauscher.²⁷⁻³¹ With each local observation, the nonlocal whole could conceivably be refreshed with new information, changing its structural complexity, mass/energy density, and rate of expansion. Are sub-atomic forms rapidly un-forming and reforming, reciprocally giving rise to zeropoint energies? This may be the means by which the Void (experientially) receives and reflects its manifestations; objectively *perceiving* phenomena as it occurs through the forms that exist in relation to it.

The inertial resistance of space-time (mentioned earlier) could be quantified using what is known about spin and charge polarity, particle production plus plasma formation in self-gravitating systems such as atoms, molecules, cells, solar systems, galaxies, the universe as a whole, and self/Self-centric life.

In order to solve the unanswered riddles of physics at this most fundamental of levels, the absence of all fields, forces, and particles may well prove essential. Gravitation and observation may be holding the whole *together, and* share an equivalence, as they flawlessly and seamlessly mediate the acceleration and transformation of this universe. If interactions are organized by nonexistence, new physical, mathematical, and cosmological profiling would be possible.

Without a unique formless axis uniting our perceptions of physical phenomena, how could all forces, fields, and particles function so instantaneously, cocreatively and cohesively? Our sentient spirited lives may be evidence that nonduality matters absolutely. Could the complementarity between classical and quantum physics be an accident? As, in the former, the parts add up to the whole, and in the latter, the whole creates the parts?

Non-Conscious Causation

How can non-conscious observation result from the interaction of an indivisible Void-based rest frame with a rapidly growing number of localized, observer driven, particle systems? Each system could be seen as observing the whole from its own perspective, both passively and actively generating new forms from other forms—by co-evolving their complementary qualities. Creation might be guided by this capacity, refining form-based reality through reflexive action, information, knowledge, and wisdom—to more closely align with the flawless unity and "character" of an incomparable, immeasurable Void. If observed and observant, all phenomena would obey the laws of physics with exquisite precision; maintaining the dynamic stability of nonexistence; continuously functioning as a "spaceless/timeless" reference frame; coordinating all electromagnetic phenomena; while serving as the center of gravity and causal-attractor of all potential energy; ensuring a path of least resistance, a moment of inertia, plus an axis of momentum for a "Self-aware" universe.³²

Though nonexistence (as in no-mind) may be bounded by countless forms and information, it has no boundaries or divisions and no resistance nor internal structure to hold it together. Ironically, a Void (in its empty state) cannot imagine anything about the potential of space-time, as it has no form with which to do so.

If we model the Void from our three-or-four dimensional point of view as a collection of identical dimensionless points, while considering all points as indivisible and included within every other point, insights from similar approaches such as the <u>Newman–Penrose formalism</u> may have enormous power and potential.³³ By discovering a logical way that "something can come from nothing," we may be able to understand the importance of what is "nonphysical" and how pivotal nonexistence may well be to understanding "our" nonlinear role in the standard equations of physics.

Corroboration

"Plasma is considered one of the four fundamental states of matter (the others being solid, liquid, and gas) and is by far the most common phase of ordinary matter in the universe, both by mass and by volume. It is loosely described as an electrically neutral medium of positive and negative particles (i.e., the overall charge of a plasma is roughly zero). Though unbound: these particles are not 'free.' When these charges move they generate electrical currents with magnetic fields. As a result, they are affected by each other's fields. This governs their collective behavior—which otherwise exhibits many degrees of freedom."³⁴

Constrained by the curvature and inertia of a newly emerging, rapidly changing space-time, geo-metrically frictionless point-centered locations could move relative to one another, throughout the quantum vacuum in the form of counter-rotating particle/waves and packets, exhibiting wave/particle duality.

There is agreement to five decimal places that 99.99999% of all matter and energy is "empty" space. Plus, there is the current consensus that something on the order of 96% of the total energy density in the universe is not plasma or any other form of ordinary matter but a combination of cold dark matter and dark energy. Cosmologists are actively looking to find what these non-luminous, unknown forms of energy and matter might be made of, if they "exist" at all.

Particles moving relative to one another have been modeled by William Unruh of the University of British Columbia at Vancouver as accelerated quantum mechanical observational measurement systems where acceleration is defined as a constant change in direction relative to one another in space over time. The key prediction of his theory (Unruh effect) is that a particle or person, both being quantum mechanical observers, would find themselves in a *classically* structured system of particles (as we find ourselves now, precisely because we are changing direction in space over time). Unruh also showed that a QM system would measure "nothing" on average when at rest or traveling at a constant velocity. As particles are also at rest in their own reference frame, a person may detect, as well as share, the complementary paradox of meditatively perceiving a Void comprised of virtual super-positions, and wave-like possibilities.



As the surface of this world turns, we change direction in space over time. As the earth falls toward the sun at over a million kilometers an hour (km/h), as our solar system orbits the center of the Milky Way at 600,000 km/h, as our galaxy orbits a common center of gravity with other galactic clusters (all of them hurtling toward the Virgo Cluster of galaxies at over a million km/h), the particles within us are accelerating. In light of this, it seems sensible why we perceive a concrete world of matter yet find greater experimental accuracy using quantum mechanics.

The Planck length is commonly considered to be a cut-off frequency for the appearance of particle phenomena. Yet why would we need particles for life to

exist if there is "*enough energy in just one cubic centimeter to remake the entire visible universe nearly three times over*"? It seems plausible that informationbased structures might still be shared and observed; that life may be thriving in the super-coherent energy ocean below the Planck length. It seems we have found life everywhere, even thriving at hundreds of degrees Fahrenheit next to volcanic vents at the bottom of the ocean. The building blocks of life, amino acids, have been found through spectral analysis to be abundant in otherwise seemingly empty space. John Hagelin submits that string & M theory pre-suppose space-time is a field of pure awareness.³⁵

It is accepted that the point of emission for a photon from an electron on one side of the universe and its absorption by another electron (a universal distance away) is considered the same point - as there is no space or time between any two points in the frame of reference of the speed of light (FRSL) for a massless particle. Hagelin states: "The speed of light is widely considered the limiting speed, or ultimate speed, because at the speed of light, the traveler (e.g., Mr. Photon) arrives instantly. (Indeed for massless particles, there is never any passage of time. There is no time, as we experience it. Only now.)" This point of view is not well understood though, as it implies that all points would exhibit equal intensity. We may wonder too how the FRSL localizes the nonlocal whole? Bohm suggested the idea of a holomovement: an indivisible interconnecting system, wherein every point is mapped to every other point. If there are no barriers—between any two points—many realities may, in fact, be possible.

In his recently published *New York Times* Bestseller *A Universe From Nothing*, physicist Lawrence Krauss of Arizona State University assures us, "[Y]ou really can get something from nothing and stay within the bounds of physical law. There are lots of ways for nothing to produce something.... First, you have to clearly define nothing, since it isn't an official scientific term. Scientists talk about empty space as well as a state in which space and time themselves don't exist. Either type of nothing can spontaneously produce stuff. Not only will particles pop in and out of existence without violating the laws of physics, they have to....even the laws of physics may not be necessary or required."³⁶

Alan Guth adds: "Putting general relativity and quantum mechanics together, one can imagine the universe started in the total empty geometry of absolute nothingness and then made a quantum tunneling transition to a nonempty state. Calculations show that a universe created this way would typically be subatomic in size, but that is no problem. Vilenkin was able to invoke inflation to enlarge the universe to its current size."³⁷

John Archibald Wheeler conceived of: "It from bit. Otherwise put, every 'it'—every particle, every field of force, even the space-time continuum itself—derives its function, its meaning, its very existence entirely—even if in some contexts indirectly—from the apparatus-elicited answers to yes-or-no questions, binary choices, bits. 'It from bit' symbolizes the idea that every item of the physical

world has at bottom—a very deep bottom, in most instances—*an immaterial source and explanation* [emphasis added]; that which we call reality, arises in the last analysis from the posing of yes-no questions and the registering of equipment-evoked responses; in short, that all things physical are information-theoretic in origin and that this is—a participatory universe." ³⁸



Einstein argued Heisenberg's uncertainty principle implies that uncertainty in time is related to uncertainty in energy $[\Delta E \circ \Delta t = h / 2 \square]$. If clock time originates each moment from a precise, timeless, point-centered reference frame, the uncertainty in energy predicted by Heisenberg's equation would be considered infinite. Furthermore, an exact physical location [for x] implies infinite uncertainty for mass and velocity $[\Delta mv \circ \Delta x = h / 2 \square]$. Both special and general relativity suggest causality is intimately interlinked with a timeless placeless "now".

This may support Alexander Vilenkin's model, of a quantum vacuum fluctuation "borrowing" virtual energy for an unlimited amount of time.³⁹ He writes: *"Tunneling is described by the laws of quantum mechanics, and thus 'nothing'* should be subject to these laws. The laws of physics must have existed, even though there was no universe." ⁴⁰

Interestingly, the uncertainty principle is also used as the key argument in Hameroff and Penrose's Orch-OR (orchestrated objective reduction) theory about the origins of qualia in conscious observation. Orch-OR submits that

energy in the microtubules of our neural anatomy reaches thresholds, that result in a cinematic series of unifications (e.g. *super-positions) of current systemic information*, expressed forty-frames a second—as "moments of consciousness".⁴¹

Time and the observer's "point of view" appear to share an equivalence; connecting energy, inertia and information; reforming physical matter in the brain. Neuro-physiological coherence in and among individuals has also been used to detect interconnectedness among people in widely separated locations.⁴²

Are we so attached and identified with our form and appearances, and afraid of the radical nature of our spiritual freedom (as "nobodies" going nowhere forever), that we have overly restricted our choices, excessively narrowing the scope of what is considered possible? There's a good chance we are "making it all up."

If alternatively the whole is represented in every one of us, and we are in fact not separate, then we can act together as one consciousness—by simply becoming conscious of who and what we actually are. Then our exclusive belief in a separate, self-isolating personality can undergo a naturally supported shift, wherein each of us experiences how unique we all are, while sensing together what does not change—at the pivotal core of our ever present eternal being.

It's said we tend to overlook the obvious. The single greatest oversight today might be missing the pivotal importance of a self/Self-referencing Void. Why else might the origin of our universe have remained so elusive, and unknowable?

Experimental Testing

The indivisibility of all point locations may be measurable technologically by modulating and sampling simultaneities in separate superconducting samples. Devising new ways of utilizing existing instruments for precise temporal sampling may offer a way to access and transmit information nonlocally. If this hypothesis proves correct, computers and communication systems could connect remotely.

A modified array of quantum interference devices (Josephson Junctions: <u>s.q.u.i.d.s.</u>)⁴³ might be capable of accomplishing this test by mimicking what humans are already capable of. Modulating the electro-magnetic field by applying alternating frequencies and rapidly changing voltages between virtually identical remote devices (like us?) may yield a breakthrough into instantaneous nonlocal, point-to-point communications. If the universe can create us —"we can do this".

Ken Shoulders has been developing a new type of computer chip.⁴⁴ Etched microscopic groves replace wires wherein the coulomb repulsion force is overcome allowing tiny electron charge bundles to communicate far more information much more rapidly. High-temperature ceramic superconductors may

have been discovered recently that can operate at hundreds of degrees Fahrenheit. Quantum computing could soon become practical.



"Behind it all is surely an idea so simple, so beautiful, that when we grasp it—in a decade, a century or a millennium—we will all say to each other, how could it have been otherwise." — J. A. Wheeler

Utilizing the insights of Bruce Lipton, a pioneer in epigenetics and quantum biology, William Braud's lifetime of research into communication anomalies between people, people and animals and people and machines, exploring many forms of intentional influence (including backward and forward causation through space as well as through time) and Dean Radin's comprehensive consciousness research offers us the ability to alter what were thought to be "involuntary"

aspects of our neural anatomy, 1) changing forever our attitudes and beliefs, 2) retroactively healing ourselves, while 3) *responsibly affecting* the nervous systems of distant persons.

"Being creative within the confines of our apparent limitations may be the best chance we have to transform ourselves and collectively transform our world. We have to first be limited to be limitless. Our greatest limitation turns out to be the ultimate liberation." —Phil Hansen

Perception and Evolution

"Monism is the position that mind and body are not ontologically distinct kinds of entities. This view was first advocated in Western philosophy by Parmenides in the fifth century B.C. and was later espoused by the seventeenth-century rationalist Baruch Spinoza. Physicalists argue that only the entities postulated by physical theory exist, and that the mind will eventually be explained in terms of these entities as physical theory continues to evolve. Idealists maintain that the mind is all that exists and that the external world is either mental itself, or an illusion created by the mind. Neutral monists such as Ernst Mach and William James argue that events in the world can be thought of as either mental (psychological) or physical depending on the network of relationships into which they enter, and dual-aspect monists such as Spinoza adhere to the position that there is some other neutral substance, and that both matter and mind are properties of this unknown substance."

The FieldREG data from the <u>Global Consciousness Project</u> (Roger Nelson)⁴⁶ and the <u>Global Coherence Initiative</u> (Heartmath)⁴⁷ appear to support both the local and nonlocal effects predicted by the cosmology presented in this paper. Also Sperry's research conducted with self-selected, multicultural groups over three decades indicates that any one of us—alone or in groups, and by implication humanity as a whole—are naturally designed to recognize and share a single witnessing self/Self-aware consciousness within a commonly sensed field of intelligence. In-person and online groups are being facilitated and trainings successfully conducted.⁴⁸ Nature may well have designed us to be awake as both one and many, experiencing the whole within each of us.

It is now possible (by mutual agreement) to directly share an experience of being energy and matter (as one mind and body) as the by-product of a mirror-like Void undergoing an exquisitely subtle yet vital form of *what feels like* toroidal (or cyclic) collapse and expansion—in space over time. Participants share a "common sense" that we are each and all localizing the nonlocal whole.

Our awareness has no image. Yet like a mirror, it unites, reflects, and transforms our imaginations causing love and awe. By sharing awareness, the delusions of separation dissolve, awakening and enlightening our selves and one another. Nature appears to have designed us to awaken together—as both one and many —experiencing "the whole" within each of us.

Evidently being aware-of-awareness together reliably resolves individual suffering, social conflicts as well as cultural confusion.⁴⁹ *Who and what we are is most noticeable when awareness is aware of itself.* There is a progressive refinement of perceptual clarity. When accessing comprehensive, information-rich insights, our minds function by freely associating, finding more relevant data and synthetic understandings with virtually no effort. Sharing conscious awareness brings about a field of perception we all can experience as a commonly sensed intelligence.⁵⁰



It is possible every thing and every one will someday embrace and support the freedom to re-create reality - afresh - led by "Consciousness" itself. If the Void is recognized as our "immortal" being, codependent neuroses and interdependent ideas and imagery may well lose their current power to manipulate our attention.

Testing Our Subjectivity

A series of cooperative multinational scientific experiments have found evidence that people of all races are aligned or misaligned personally and socially by how we pay attention together, determining the quality of human society in concrete, tangible ways.⁵¹ Extensive research comprising thousands of studies stretching back to before 1900 have found that subjective experience allows us to "receive and send information" across spatial boundaries, uniting the present moment backward and forward in time.^{42a-c}

Summary

As the accelerated motion of a magnet (in classical mechanics) gives rise to particles of radiation that are easily measured, the accelerated implosion and expansion of an empty Void might be found to give rise to the thermodynamic evolution of (perceptually recognized) quantum mechanical observational measurement systems—as in the Unruh effect. Phase transitions between all forms and a singular formlessness may be impersonal, and, for the most part, non-conscious, yet reliably reunite, revise and awaken unconditional love for "all that is" perceptible – as a personal experience - in present moment awareness.

For enlightened consciousness, it is said: "[O]ne must see that what is still—is moving, and that what is moving—is still." — unknown

In this view, as observer/creators, we are each and all accelerating the quantum vacuum by localizing the nonlocal whole as one of an unlimited number of axes of inertia for our internal world and external cosmos. We're recreating our selves and each other and all that is, in whole and in part, in subtle yet significant ways via the passive/activity of witnessing our momentary experiences. As such, freely focused attention and intention may well extend our ability to advance civilization by allowing "the love of our unity" to happen personally and socially.

Could observational measurement and the localization of the nonlocal whole via a self-organizing absence be able to generate energy and matter, our minds and bodies, and the emergence of a self/Self-aware universe wherein all potential and kinetic forces cancel to zero overall?

Epilogue

Sperry's primary focus for nearly four decades now has been to experientially explore our capacity to share consciousness ever more consciously and to model consciousness—to strengthen humanity's capacity to mutually understand as one single, already-unified universal intelligence.

Forging agreements among scientists and influential persons in the military, industrial, political, and medical/media establishments—by sharing commonly sensed perspectives—appears inevitable, no matter how illusive it may seem today. We appear to be opening ourselves to a profound communion —as every form of life grows by making more observations per unit area space-time.

The dawn of the long-promised golden age may be unfolding without effort as our suffering socially and individually focuses our attention on sensing and releasing these wisdom-bearing painful contractions in our many/one body/mind. We appear to be a "deathless" intelligence, resolving the dire conditions we, alone, are responsible for unconsciously creating.



ONE for ALL and ALL for NO "THING"

 $1/\infty = 0$

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