

Article

The Nonlocal Mind Paradigm: A Transdisciplinary Revision of Mind-Body in Philosophy, Art & Science

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ABSTRACT

There is a pre-physical, unobservable domain of potentiality in quantum theory. It is the basis of fundamental interconnectedness and wholeness of Reality. Nonlocal consciousness is not confined to specific points in space, including brains or bodies nor the present moment. It is an ordering principle that can inject information into disorganized or random systems. It can operate beyond mere awareness, unconsciously, drawing on individual and collective consciousness, as well as the world or environment. Coherence or resonance may be expressed as compassion, empathy, love, unity, oneness, and connectedness. Consciousness affects or informs human and nonhuman or inanimate forms alike. Consciousness is present everywhere in spacetime, so has no need to “go” or “be sent” via a medium or carrier. Synchronous events, including intentional or directed healing, may work via coherence, an entanglement or resonance effect, but we should be careful not to mistake this field effect for the mind itself, which permeates and undergirds all. Still none of us has any idea how anything material could be conscious, so we must simply stand in that Mystery. We share its essential nature; it is the cosmos within us. We are that.

Key Words: nonlocal, mind, mind-body, consciousness, pre-physical, interconnectedness, wholeness, synchronicity.



“This feeling for the infinite...can be attained only if we are bounded to the utmost. In knowing ourselves to be...ultimately limited – we possess also the capacity for becoming conscious of the infinite. But only then!” ~ C. G. Jung

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"By applying Ockham's razor to the basic epistemological question 'What is reality?' the Buddhist idealists reach the conclusion that belief in an external reality is a 'superfluous hypothesis'" ~ Philip K Dick, in the introduction to "The Golden Man"

"There are no conditions to fulfill. There is nothing to be done, nothing to be given up. Just look and remember, whatever you perceive is not you, nor yours. It is there in the field of consciousness, but you are not the field and its contents, nor even the knower of the field. It is your idea that you have to do things that entangle you in the results of your efforts - the motive, the desire, the failure to achieve, the sense of frustration - all this holds you back. Simply look at whatever happens and know that you are beyond it." ~ Nisargadatta Maharaj

Unbound Consciousness: Beyond the Mind/Body Model

The universe is infinite, and so is the mind, not in the individual personalistic sense, but in terms of consciousness. 'Nous' is an ancient word for what we now call nonlocal mind or consciousness. Many philosophers and modern physicists consider 'consciousness' as the fundamental basis of all that is.

Alchemy, as the search for godhead in matter, argues that "there is one stone, one medicine to which nothing from outside is added, nor is it diminished, save that the superfluities are removed"...as above, so below; as within, so without. Alchemists sought the *Unus Mundus*, the One World analogous to the modern search for a Grand Unified Theory in physics, or the Theory of Everything uniting all known forces.

The Greeks conceived of the mind as both limited and infinite, human and divine. The root of this notion comes from Hermetic and occult sciences, attributed to Hermes Trismegistus. The mind is not localized nor confined to the body but extends outside it. This notion lies at the root of sympathetic magic.

The Persians were even bolder in their view that the mind could escape the confines of the physical body and create effects in the outside world. Their physician Avicenna declared, "The imagination of man can act not only on his own body but even on others and very distant bodies. It can fascinate and modify them, make them ill, or restore them to health."

These notions were superseded by later causal and mechanistic views that came to dominate Western science and medicine, separating mind and body. The nonlocal mind paradigm suggests we can effectively operate with the realization that consciousness can free itself from the body and can act not only on our own bodies, but nonlocally on distant things, events, and people, even if they are unconscious of the intentionality. But it is a holistic viewpoint that doesn't split mind from body. It also suggests a new emergent healing paradigm (Miller, 2003).

This nonlocal model is perhaps the basis of such phenomena as psychosomatics, remote healing, remote viewing, and dream initiations. Physicists use the term nonlocal to describe the distant interactions of subatomic particles such as electrons. We can experience nonlocal mind

spontaneously, paradoxically, without losing our individuality. A creator can live in many universes instead of simply adhering to a prescribed worldview such as the outmoded causal paradigm or unscientific New Age beliefs.

It has been proven that human minds display similar interactions at a distance (Krippner; Mishlove; Radin; Dossey; May; Stanford; Germine; Nelson; Motoyama; Sidorov; Swanson; Miller & Miller). These anomalies include therapeutic rapport, telepathy, clairvoyance, precognition, visions, prophetic dreams, breakthroughs, creativity, prayer, synchronicity, medical intuition, nonlocal diagnosis, spontaneous remission, and intent mediated or paradoxical healing.

Nonlocal mind erupts spontaneously, surprising, even shocking us with startling effects. The mind has ultra-dimensional qualities seemingly unlimited by physical constraints. Psi phenomena concern organism-environment interactions in which it appears that information or influence has occurred that cannot be explained through current models of sensory-motor channels. They are outside current scientific concepts of time, space, and force. We have hypotheses but little idea how organism-environment and organism-organism information and influence interface and flow.

“Emergence” is the process by which order appears spontaneously within a system. It is essential to understanding functional consciousness, the mind/body, subjective experience, and the healing process. When many elements of a system mingle, they form patterns among themselves as they interact.

Fundamental physics is about observable and verifiable anticipation of possible relatively evolving quantities and/or qualities, including complementary wave/particle descriptions. Quantum mechanical equations of motion yield open systems and work out their consequences for the flow of information. We have tremendous empirical evidence that quantum mechanics is part of such a physics. And so are we when we seem to make “quantum leaps” in awareness.

When the mind lets go of its rational order, lets the old form die, and enters into a bifurcation or unstructured chaos, the whole person emerges with a new form, embodied as a creative expression, an intuition, or as healing. The deepest effects result in a new self image. Most often it is characterized by an element of novelty and surprise, since it apparently does not originate in what came before. Both healing and medical intuition are examples of emergence. It is a spontaneous solution to a problem.

The healing arts, from conventional medicine to alternative/complementary medicine (CAM), and from psychology to pastoral counseling are undergoing a shift from a mechanistic to a holistic paradigm. Science is actually an experimental philosophy whose highest value is empiricism, and conventional healing shares this philosophy. All new scientific theories require some unifying idea, and that idea is, by definition, metaphysical – essentially untestable.

Today’s heresies are tomorrow’s dogmas. In any metaphysical dispute, strong non-scientific arguments can propose new theories, which may become scientific. Speculative ideas have contributed heavily to the growth of knowledge.

Rather than discouraging exploration of fringe areas of knowledge, this awareness makes it mandatory we explore all possible modalities and anomalies without prejudice, no matter how unconventional. Even extraordinary subjects may be approached with rigorous protocols. Though subjectivity is unwelcome in science, we can study the subjective nature of experience (qualia) in various ways. The process of healing is one such subjective experience.

The alchemists, who were students of consciousness in matter, created an elixir of life, a “medicine of philosophers”, a cure-all or panacea. What the modern world yearns for is a “meta-syn,” or visionary synthesis rooted not in a mechanistic model but one using nature’s own organic forms of self-organization.

This model is based on the peculiar characteristics of nonlocality and probability of quantum physics, rather than classical Newtonian mechanics. QM doesn't explain gravity, but the fact that the world “ever” appears classical is just a simplification due to our inability to sense quantum states directly. There is no such thing as a classical world.

Hopefully, the new model has the power to resonate with our whole being and propel us into a more effective healing paradigm. Emergent healing is actually a treatment philosophy, rooted in a worldview born from our current understanding of the nature of Reality as described in chaos theory, quantum mechanics, and the holographic concept.

Health is the natural outcome of a meaningful life, not just absence of symptoms. It means a comprehension of the complexities of life that is deeper than the conventional worldview of cause and effect. It proposes that consciousness is the foundation of reality. We do not exist independently from the universe, but the exact nature of that seamless connection is unknown.

Rooted in relativity, quantum, holographic and chaos theories, a nonlocal metaphysical context suggests such a paradigm shift from the purely causal healing model. The interactive field (psychodynamic field) present in healing situations can be amplified intentionally through therapeutic entrainment, or resonant feedback playing off the unified field (universal field).

Synchronicity

In 1948 psychologist Carl Jung and physicist Wolfgang Pauli began talking about an acausal yet meaningful connecting principle that Jung dubbed synchronicity. Jung used over 1,400 of Pauli’s incredibly rich dreams to write his books on alchemy, a modern version of the search for godhead in matter. Pauli’s professional work validated quantum mechanics; energy appears in ‘bundles’ which appear as various subatomic particles that are manifestations of different types of fields.

The two theoreticians were on complementary vectors. They cross-fertilized one another with concepts from their respective fields, a psychophysical merger. Pauli discovered an abstract pattern hidden beneath the surface of atomic matter that determines its behavior in a noncausal

way. Jung argued certain patterns are linked in nonmechanical ways forming a causeless but meaningful order mirrored in mind and matter.

Modern physics literally realized the transmutative dream of the alchemists when it learned to manipulate and exploit the atom. Transmutation is changing the number of protons in the atomic nucleus of the basic elements. Matter is now viewed as a process not a thing. Mind is a special kind of process depending on arrangements of matter. Likewise, embedded process. Metaphysically, even “God is a verb” as is everything else.

When Wolfgang Pauli collaborated with Jung, he encouraged us to find “a neutral, or unitarian language in which every concept we use is applicable as well to the unconscious as to matter, in order to overcome this wrong view that the unconscious psyche and matter are two things.” Psyche and soma are indissolubly wed in nature and our nature, and must be considered in an adequate account of reality.

However, now there is no consensus in physics, so all contemporary models -- Transactional (quantum handshake), Many-Worlds (decoherence), M-Theory (strings), Copenhagen (wave-function collapse), Holographic (frequency domain; resolution), Implicate (hidden information), etc. -- are essentially philosophical, or colored by the psyche and philosophy of their originators. Imagination has to cross the boundaries of disciplines to somehow find links between the observable and unknowable. Both matter and psyche are in a constant state of redefinition.

Psychology describes psychic contents with psychic means. Psyche is subject and object, medium and message. Models, questions and proofs all originate in the human mind. And even in physics there is no objective observer outside the universe to experiment on it. Jung contended the common background of physics and depth psychology was psychic as much as physical. This essential third element is transcendental. Both disciplines engage in a reflective interior search for hidden connections along with the outward gaze of scientific inquiry.

The presence of the observer has an effect on what is observed, both in terms of interpreting that experience (projection, archetypes, assumed truths; worldview) and literally at the physical level. This is embodied in the Uncertainty Principle, where we cannot know a particle’s position and momentum simultaneously. There is no objectivity possible as relativity and quantum mechanics have demonstrated.

Synchronicity explores the borderland between meaning and spacetime, where chance meets necessity, when external and internal circumstances align in meaningful coincidence. It links the observable and unknowable, the effect of the particular and specific with the universal. In this nonlocal effect, certain qualities manifest relatively simultaneously in different or proximate places. It is a parallelism that cannot be explained causally. Is it an invisible field effect linking multidimensional spaces?

Synchronistic phenomena coincide and are amplified in space and time. It manifests as psychic phenomena when the connection is psyche to psyche, including empathic psychophysical manifestations. When it is between psyche and the outside physical world it creates other

phenomena such as anomalous cognition (A.C.) or psychokinesis, or perhaps lucky shopping – finding what you want!

Pauli seemed so prone to generating weird phenomena around him that Jung called it the ‘Pauli Effect.’ Machinery broke, fires started, equipment exploded or fell apart, and other strange things manifested in his presence. Powerful activations of the unconscious are associated with such effects.

Inner psychological images meet outer facts in physical knowledge. Complementary or parallel psychological and physical explanations can be argued. But Jung and Pauli agreed there is an unknowable structuring element in the collective unconscious that arranges the registering of acausal events. Synchronicity is a psychic equation: this equals that though the energy is manifested in dual relationship in the spacetime continuum. There is a constant connection through effect, not causation. What is simply is...and, it is meaningful.

Synchronicity can be metaphorical or symbolic, or quite literal. It is a structurally accurate relationship connection. Synchronicity embodies a psychophysical unity. It illumines us, reminding us of the uncanny and unknowable side of life. It is spirit in matter, an animating principle. It emerges from a level where psyche and matter originate, where religion and science originate. It takes us by surprise from out of the blue when it lacks directed intentionality.

There is a tale about the Venus de Milo which embodies very dramatic synchronicity. Before it was sold to the Louvre, the statue was in the hands of a Venetian art dealer, who found it more profitable to sell pieces of the statue to the superstitious. It was said it had the power of make women who touched it beautiful. Realizing the potential for profit, the art dealer arranged to make a plaster cast and have the original statue smashed to bits and parsed out.

When the art dealer raised his arm to give the signal to destroy the statue, his arm was severed from his body as if by an invisible sword. Simultaneously the opposite arm of the Venus de Milo was also severed. Both arms fell to the floor, one of flesh and one of stone. They fell in the form of a cross, which the workers took as a divine sign to cease their vandalism.

But when we imagine that we have intentionally conjured a desired result, our puny personalities cannot call it anything but magic and stand in awe of the Mystery. This doesn’t mean the result is caused by our will, but perhaps through a certain intuitive alignment or resonance with the flow of all that is. As in Pauli’s physics discovery, the underlying pattern of the whole dance has a profound effect on the behavior of each individual particle. Every occurrence is a unique synchronous act of creation in time.

Jung implied that the unconscious or fundamental consciousness is the animating power of all matter. He defined a psychoid realm where mind/matter melded subjective and objective into a unity. He viewed mind-matter as a continuum of the unconscious, or primordial consciousness.

Jung also postulated a transconscious or unintegratable realm of archetypal forces. There is some evidence that the groundstate of the vacuum potential or ZPE provides a model for a subquantal field effect that influences matter/energy through chaotic virtual photon fluctuation.

Quantum Biophysics and Healing

Our contemporary task is to move beyond the apparent mind/body dichotomy of western mechanistic thought. This cannot remain a mere concept but must become part of our essence, a belief lived from our very core. Living from a holistic perspective is an experiential process, a Way of life.

"Consciousness" encompasses the potentially integrated healing aspects of brain, mind, emotions, and spirit, together with physiological and environmental influences that produce unique patterns. Healing is a physical or biological form of creativity. Nonlocal healing is a synchronistic event, which takes place in the presence of intentionality to share a common field of influence.

The "consciousness of healing" may be a pattern, or patterns, that can be identified in the anomalous energies associated with sensitive persons. Anomalous energies are one highly meaningful constellation of factors. Recurrent, complex, interrelated patterns, processes and temporal variations, influenced by the environment, are inherent in states of consciousness for better or worse.

Selected aspects of consciousness provide more reliable experimental replication and active integration of holistic investigations into the sources and processes of healing, other associated non-local phenomena, environmental effects and biophysical interactions of body, mind, emotions and spirit.

New developments on the frontier of science start with (1) observations of phenomenological effects, (2) collection of anecdotal information, (3) organizing the data into useful patterns and relationships from the experiential data, (4) developing a subsequent taxonomy for defining discrete phenomena and their various aspects, (5) forming research protocols and designs to test hypotheses and maximize successful and reproducible results, and (6) utilizing the research results in development of individual and group healing applications and expanding knowledge about the bioenergetic aspects of healing..

It has been suggested (Dossey; Krippner; Gowan; Motoyama; Beal and Gilula, 2004) that some individuals possess unusual capabilities and processes of consciousness. They are often considered intuitive about past, present or future events, and highly sensitive to body, mind, spirit and environmental influences, in and around other persons, as well other living and non-living systems. They may be admired, imitated, ignored, feared, suppressed or judged as "handicapped" or "mentally afflicted", depending on how they use their "gifts".

Associated with an individual's abilities, there are aspects of, (1) emotional events, both life-changing (epiphany or tragedy), and sequelae, (2) and/or an inherited component, (3) a health issue, which may also serve to influence their unusual capabilities, and, (4) an environmental influence, positive or negative.

Please note that these people, by inheritance, accident, illness, discipline, or environmental influence manifest an incredible range of sensitivity, down to quantum energy levels. Many

persons involved in healing processes are hypersensitive to chemical, electromagnetic, and electrical factors, whether acquired either naturally or artificially induced.

Strong psychosomatic overtones are related to electrical and electromagnetic hypersensitivity (EHS) as well as to multiple chemical sensitivities (MCS). This type of adaptation and sensitivity may be one of the characteristics important to possess or develop in the healing process.

There are many answers to "unexplained phenomena." We are developing more sensitive instruments to measure, internally and externally, the electrochemical nature of living systems and the interacting variables of the environment. Every day we watch the impossible or nonsensical become useful and applicable through technological and conceptual quantum leaps in awareness.

The complex interactions of all these energy factors (holographic, quantum, electromagnetic and chemical) that shape life processes must be considered, along with genetic, biochemical, age, gender and health processes. All of these factors must be addressed in any exploration of unusual states of consciousness whether they occur in individuals or in groups. There is comparatively very little human perspective/awareness anywhere about our long-term relationship interactions with the earth and all other living systems.

We are a product of our natural earth environment and respond to some subtle degree (and sometimes not so subtle) to the same geoelectromagnetic, chemical and atmospheric factors which affect all other living things. We can, and are, affecting the balance of nature, which in the long-term affects us. This is a true form of biological feedback.

The field of healing sources and processes requires the development of taxonomy and protocols for analyzing and exploring inherited, spontaneous, controlled and stressful patterns of consciousness, and relating these patterns to potential environmental influences.

Areas of concern, which can respond to investigation, are the recurrent, complex, interrelated patterns of brain activity (before, during, and after healing events) related to 1) the consciousness of the healer (what psychophysiological patterns are required to produce optimal and repeatable healing, 2) environmental influences supporting the healing objectives, and 3) consciousness of the subject.

When both the patient and healer are co-equals in the process and on a "level playing field," patient safety is optimized, but so is healer safety. This type of setting also maximizes the possibilities of bioentrainment of physiological signals belonging to both patient and healer.

A level playing field also allows patient and healer to co-create the process of healing from a position of mutual empathy, respect, and trust. Such a level field is created by an environment, which maximizes those traits. Interrelated patterns of consciousness are reflected in brainwave (EEG) frequency distribution, psychophysiological states, and environmental conditions, which affect the clinical healing setting (Gilula).

Unusual states of consciousness, controlled or spontaneous may occur due to: (1) external sensory induction, sensory deprivation or sensory over-stimulation, (by environmental influences); (2) internal changes that are self-induced by body and mind disciplines, (3) ill health, (psychophysiological aspects of electrical and chemical sensitivity), accident, injury or near-death trauma, (4) inherited CNS influences, for example, familial periodic paralysis (FPP) and recurring spontaneous psychokinesis (RSPK), or (5) interactive combinations of the previous factors.

Research suggests that RSPK incidents tend to occur under unusual emotional stress and on days of above average geomagnetic fields, modulated by EMFs from the agent and focused by the agent onto significant other objects. Krippner and Persinger also report anomalies and amplification of psi reports associated with periods of exposure to tectonic strain.

The RSPK process is similar to the electro-acoustic effect of movement induced in the diaphragm of a loudspeaker by an electric current. But, in RSPK, the EMF energy moves through space-time without the benefit of electrical wiring, presumably because it is highly focused.

Roll brings up Puthoff's theory that the central person affects the zero-point energy (ZPE) that fills space and thereby the gravity/inertia that usually keep things in place. If the ZPE is affected during RSPK, this may suggest that the ZPE has a consciousness component.

Meditative or yogic practices would add a dimension of personal exploration to any investigation of the zero-point energy. Recent research studies of the nature of consciousness and the relationship to "quantum holography", requires a new perspective regarding time, space and energy interactions.

Persons who exhibit strong allergic responses, who are often chemically and/or electrically sensitive, may inadvertently affect tape recorders, computers, lights, TVs and other sensitive electronic equipment during their reactive episodes. This is strongly reminiscent of the "Pauli Effect." Robert Morris has reported that some individuals are affecting electronic equipment when they are in an intense or traumatized emotional state. Effects on magnetometers, electrical, magnetic, and electromagnetic field detectors have been noted from persons who claim non-local energy projection abilities.

Pathological sensitivities can be either inherited or accidentally acquired. Spontaneous, non-local events may occasionally occur around FPP or EHS-afflicted individuals. The events seem causally related to RSPK, and include lights going on and off (usually solar-activated types), computers crashing, individual components burning up, and other similar effects on sensitive solid-state electronic devices. Stressful events that may be psychophysiological or environmental seem to help initiate both FPP and ESH reactions, with RSPK occurring sometimes as a side-effect.

New methodologies and taxonomies may provide more consistent replication, control, amplification, and exploration of the subtle energies associated with healing and other states of consciousness. In the efforts to understand the interrelated patterns of body, brain, emotions,

mind and environment involved in healing processes, we may describe some sources of healing within the blend of consciousness and quantum cosmology.

Nonlocal Creative Source

AHA! All true creativity springs from the unknown, from a deep wellspring of flowing forth. Creativity involves a sense of discovery and epiphany, of realization as well as shaping of media. Musicians often speak of an uncanny ESP that takes them to new heights of creativity developed among players. The same deep knowing develops among fellow artists in other media as well.

If we follow some natural laws we can become more effective creators. You cannot create your life, per se, but through adopting certain attitudes and exercising certain principles you can enhance your life experiences one creative act at a time. We saw this in considering the emergence of a special form of creativity -- healing.

An open Way facilitates creativity, opens the creative space, limits resistance, increases flow. We can learn through shaping, rather than through thinking, doing, feeling, undertaking, experiencing, or being. It is different from cognitive learning, behavioral learning, emotional learning, action learning, experiential learning and ontological learning.

Most of our learning systems are cognitive, about thinking and writing, rather than shaping and making. Artificer learning (Wildman and Miller, 2003) is learning by shaping. Shaping with a clear telos or intentionality allows fluidity in the process of formation to suit the particular situation, optimizes the flow state (Csikszentmihalyi).

We can increase our effectiveness as creators by the following (Fritz):

*Allowing our driving force to be desire, loving the creation enough to bring it into being;
Recognizing that when we master the creative process, the unusual becomes usual;
Realizing form is not a formula, which can actually work against the creative process;
Being process-oriented, focusing on how to create, rather than results or goal oriented;
Knowing what you don't or can't know and refraining from speculation that distorts reality;
Remaining a learner, rather than performer with a fixed level of capacity;
Working with an attitude of choice, rather than obligation to manipulate or motivate yourself;
Stretching toward the new and unfamiliar and consolidating by repetition;
Maintaining some separation for engagement and relationship between creator and creation;
Focusing on the creation, not yourself, from a first-person to third-person orientation away from your identity to the actual creation and reality;
Idealism can set you up for ideal-reality conflict which is irrelevant to creation or your ability to create it;*

*A specific prescribed worldview is less important than the ability to live flexibly within many universes;
Creative process deals with relative not absolute truth;
Consider your life a blessing to bring into being creations you simply want but don't need;
Make individual creations in your life to shape it through deep involvement;
Practice objectively observing current reality and how to close the gap toward your vision;
Simple plans help develop effectiveness and efficiency;
The more you create, the more you can create;
Deadlines help you focus your creative process;
Always have a place to go in the open-ended creative process.*

Creativity is a process, not a product. Art transcends logic, and even when planned is not calculated nor thought out. Art springs from a creative cauldron stirred by one's psyche into a magical brew. We can be creative in a variety of ways at whatever we do. Even when we speak, we should remember we are using our vocal instrument which plays the music of our soul. Qualities of the voice – tone, meter, pitch, rhythm, volume, attack, etc. – reveal more than the words we use. If you speak in a flat tone no passion or soothing is communicated. A melodic voice implies emotional range.

Charisma is energy which flows from the heart. Charisma can be created when the speaker's feelings are transferred in their purest form to the listener. Raw feelings convey the passion of pure energy. If your reservoir of pure feelings is full you can transfer that to your audience via sound and rhythm, and animation of the whole body that conveys emotional energy to the audience. Let it come bursting forth from the soul like a work of art.

Feel the passion; feel the fervor; feel the feelings no matter how you intend to express them. Let it flow forth like song. Make your arguments with a variety of colors and strokes, and know when to stop! Embrace and cherish your feelings as you and they express themselves. Feel the spectrum of pain and joy evoking the most exquisite affirmation of life (Spence).

Truth is a revelation of what we already know but haven't heard in words before. In truth we discover what we already know but haven't confronted. Truth as a judgment is the product of our experience. In our belief systems, truth is what we accept of our history, what we accept as truth. We choose truth, which is revealed in direct proportion to our ability to discard all we were previously told is true – presumptions, assumed truths, limited self image.

Neurologist Ramachandran has summarized 10 artistic universals which constitute 10% of the content of art to 90% of the endless cultural variations represented by art history. This 10% represents the visual primitives of human perception that we respond to emotionally and aesthetically: neuroaesthetics. In addition to other sensory modalities, thirty visual centers are linked to the emotional part of the brain. They please our neural circuits and mesmerize us. They include:

*Peak shift (amplification of traits; ultranormal stimuli, or caricature)
Grouping (Aha! arousal vision evolved to discover objects and defeat camouflage)
Contrast (visual peekaboo; the act of searching is pleasing)*

Isolation (understatement; less is more; attentional focus)
Perception problem solving
Symmetry
Abhorrence of coincidence/generic viewpoint (novelty-seeking)
Repetition, rhythm and orderliness
Balance
Metaphor (layers of meaning)

‘Know Brow’ art is the product of new media – ars electronica -- that transcends the dichotomies of high and low brow with its own technoshamanic ecstasis. It implies the knowledge, attitudes and skill sets necessary to produce art with highly technical processes, but also the visionary capacity to see multiple layers of meaning through direct experience. This knowing is a discovery process, and immersion, a seeking, a gnosis that cuts a path through the mindscape of the ‘now’ toward the future that remains perpetually undefined.

We commune with the past to inform our present, not just as a homage, but to gain initiation to that transtemporal way of knowing and honoring our cultural roots.

‘Know brow’ art, as a movement toward more and more fully immersive multidimensional experiences, encourages the active, constructivist acquisition of artistic knowledge and openness to new forms and media, as well as technical capacities. We want to inspire more than digital “factory workers” or proficient craftspeople.

We want to enable the student to make, shape or organize with a *telos*, a meaningful purpose that has deep psychic rootedness: one who invents, not adopts; who shapes not copies; who builds not assembles; who is capable not merely competent; who is efficacious not just efficient; who experiments not just conceptualizes. There is a bliss that comes from within us that energizes, even enflames the human desire to enact, to enable, to engage, to outwork it, i.e. to transform ourselves and the world (bizarre and grandiose as this may sound).

Discussion

Quantum mechanics, chaos theory and complexity have superseded both the pre-scientific and mechanistic worldviews. The new paradigm is an organic model – Nature’s Way of fractal-scale, spontaneous self-organization, self-assembly, regeneration, and transmutation of energy/matter.

Chaos prevails from the infinitely small to cosmic levels. Dynamic processes are deterministic though unpredictable. All experience is subjective. Intuition is an informational source that is non-linear and therefore can create quantum leaps in consciousness. Using imagination, we can ‘see through’ to a deeper level of reality.

The Universe is a fractal manifestation of the interaction or interdependence of chaos and order. Nature and evolution are complimentary systems evolving at the edge of chaos – the source of

the genesis of new forms. Like a fractal, the individual embodies the whole, to a greater or lesser degree. We are neither exclusively biological nor psychospiritual beings – we are both/and psychobiological.

Archetypes are rooted in or emerge from the “Demiurgic field” as attractors, chaotic systems having fractal or reiterative structures that repeat at all levels of observation. They never settle into equilibrium, periodicity, or resonance. Transpersonal experience creates a new interpretation, or perspective on reality. Systems arise from positive feedback and amplification. Thus, archetypes introduce erratic behavior that leads to the emergence of new situations, including creative insight.

Both perception and cognition can be modeled as a transition from a state of chaos representing the unrecognized condition, or the unresolved problem, to a state of order. Creativity or learning can emerge spontaneously, from exploring states of confusion, to the instantaneous insight of a “Eureka” moment, or knowing state through bifurcation to a new attractor, to chaotic resolution.

Art and artfulness embody the imagination expressed as a living form. An expressive form manifests human feelings and values, a concept of life (exoteric) and inward reality (esoteric) – the logic of consciousness itself. Other examples are sudden illumination, aesthetic appreciation or arrest, opening to nature (nature-mystic experience), simple recognition to dramatic realization, or awe.

An experience, innovation, discovery or realization always has aesthetic appeal. It contains mythological, metaphorical and epistemological dimensions. When we have a creative, therapeutic or transformative experience, it involves a degree of ‘what it is like’ to be shaped, to apprehend this given, to undergo this process or happening.

Chaos theory shows us we actually need to cooperate with chaotic dynamics, to enter a less-rigid process of flow, submitting outworn aspects of the ego to dissolution. This increases our adaptability helping us evolve. At supercritical junctions (crises, crossroads, bifurcations) we either breakdown (emergency) or increase adaptation (emergence) with more creative solutions.

Creativity is an excited-exalted state of arousal with a characteristic increase in both informational content and the rate of information processing. Creative holistic repatterning is introduced into the human system through the psyche as nonmanifest yet phenomenological images, symbols, and patterning information.

Imagination is embodied, objectified, expressed in the creative process. It is knowing through living through, distinctionally different from knowing about. It carries a sense of immediacy. Imagination is the voice of creativity. It is the primary way we experience soul; imagination embodies its own reality. It is self-revelatory. Meaning dwells in the image like consciousness dwells in the body.

We live in a chaotic universe to which we are seamlessly wed. We are a chaotic system ourselves, and chaotic systems exhibit holistic behavior. Holism sees the world in all its

diversity as connected. A global wave of information (consciousness) is responsible for the extraordinary coherence that expresses as self-organization. It's not a case of 'we are the world'; we are one with the whole universe of phenomena and being in the deepest sense. The unifying force is consciousness.

Beauty is a state of consciousness described in Kabbalah and Hermetic philosophy as related to self-actualization. In psychological terms it implies transcendence of the realm of personality and intimate knowledge of the transpersonal self, self-actualization. It corresponds with creativity, healing, genius and bliss states or unitive experience. The bottom-up creative dynamic runs from personality to Self, to Demiurgic Field.

Chaos theory provides a comprehensive metaphor for uniting physical, emotional, mental and spiritual realities. Supreme insights are always metaphorical in expression. The empirical connection may lie in the mystery of the true nature of consciousness, healing, and creativity. Knowledge about natural phenomena, the way nature and ourselves work, can help us attune to deeper resources. The same essential dynamics that gave rise to the birth of the universe govern human creativity and learning.

Conclusions

There is a pre-physical, unobservable domain of potentiality in quantum theory. It is the basis of fundamental interconnectedness and wholeness of Reality. There is a dynamic creative boundary of infinite reiteration, creating order from disorder, in chaos theory. This cosmos is, indeed, greater than the Whole SUM of its parts.

Somehow each particle always seems to know what the other is doing. How does that work? It seems to violate Einstein's long-held tenet that no communication can travel faster than the speed of light. But under certain circumstances subatomic particles such as electrons can instantaneously communicate with each other regardless of the distance separating them, whether they are 10 feet or 10 billion miles apart.

Wormholes and tunneling aside, how does every point in space connect to every other point in the Universe? In a Holographic Universe, even Time and Space can no longer be viewed as fundamentals, because concepts such as location break down in a universe where nothing is truly separate. The apparently concrete world is a multidimensional projection.

Experimental findings by Aspect (1982) seem to imply that objective reality does not really exist. Despite its apparent solidity, the quintessence of the universe is a gigantic and splendidly detailed hologram. While this hologram implies an objective reality, it is not directly perceivable. This is where the essence of the "mystery" lies. It is the inherently non-observable and therefore metaphysical part of objective reality.

A hologram suggests that some things in the universe do not lend themselves to this empirical approach. If we try to deconstruct something constructed holographically, we only get smaller

wholes, with fuzzier resolution. In this sense, the part contains the whole. If the apparent separateness of subatomic particles is illusory, it means that at a deeper level of reality all things in the universe are infinitely interconnected.

The reason subatomic particles are able to remain in contact with one another regardless of the distance separating them is not because they are sending some sort of mysterious signal back and forth, but because their separateness is an illusion. At some deeper level of reality such particles are not individual entities, but are actually extensions of the same fundamental something.

Quantum mechanics determined the primacy of the inseparable whole. Holism is intrinsic to any quantum theory for biology. Descriptions of isolated systems are permissible only under experimental conditions. Holistic properties imply fundamental interconnectedness within the organism, between organisms, and with the environment.

The vacuum potential appears to be much more than a metaphor. It is the most fundamental phenomenon we are currently capable of perceiving. It provides us with a new paradigm for our very existence – one that recognizes wholeness, connectedness, integration, and participation in the universal scheme. Every ‘thing’ – from concepts to objects -- including the universal waveform originates from the fertile and “whole sum” womb of spacetime. This is also the domain of nonlocal mind.

Most scientists will tell you that wavefunctions, universal or otherwise, do not really exist, except on paper. But it may be that wavefunctions really exist and are akin to the mind of God. If the wavefunction is consciousness and our personal wavefunction is connected with it in a constrained or limited fashion, too much information appears as noise. But the connection suggests a relationship between intelligence and spacetime.

In a holographic universe even random events must be revisioned as based on holographic principles and therefore determined. Synchronicities or meaningful coincidences suddenly makes sense, and everything in reality would have to be seen as a metaphor, for even the most haphazard events would express some underlying symmetry and meaning within the whole.

Nonlocal events, like synchronistic events are apparently 1) unmediated, requiring no go-between signal; 2) unmitigated, with no diminishing of effect with distance; 3) immediate, apparently outside of time and space as we commonly understand them. In this acausal process, consciousness is fundamental, not derivative and unexplainable in terms of anything more basic.

However, it is unlikely we will ever be able to demonstrate that consciousness is a logically necessary accompaniment to any material process, however complex. But we can show that empirical processes of a certain kind and complexity appear to have it. It may even be an intrinsic “quality” of matter, like mass, or maybe more closely related to the foundational nature of “information.”

Nonlocal consciousness is not confined to specific points in space, including brains or bodies, nor to the present moment. It is an ordering principle that can inject information into disorganized or random systems. It can operate beyond mere awareness, unconsciously,

drawing on individual and collective consciousness, as well as the world or environment. Coherence or resonance may be expressed as compassion, empathy, love, unity, oneness, and connectedness. Consciousness affects or informs human and nonhuman or inanimate forms alike.

But it is not simply a matter of philosophically or conceptually embracing a new paradigm that can change ourselves or the arc of our stewardship of the planet Earth. We can rhapsodize in a self-congratulatory way all we want about holism, the web of life and our place in the cosmos.

But to change things we have to change ourselves, be willing to transform utterly in our essence and implement what we have learned about the deep nature of reality. Simply mastering QM and complexity theory won't help us evolve morally, emotionally or spiritually. We have to transform our inner consciousness to truly embrace global consciousness as our legacy.

“The ecological crises – or Gaia’s main problem is not pollution, toxic dumping, or ozone, depletion,...but that not enough human beings have developed to the postconventional, worldcentric, global levels of consciousness...by going through at least a half-dozen major interior transformations, ranging from egocentric to ethnocentric to worldcentric, at which point, and not before, they can awaken to a deep and authentic concern for Gaia. The primary cure for the ecological crisis is not learning that Gaia is a Web of Life, however true that may be, but learning a way to foster these many arduous waves of interior growth, none of which have been addressed in most of the new-paradigm approaches.” (Wilber, 2000)

Consciousness is present everywhere in spacetime, so has no need to “go” or “be sent” via a medium or carrier. Synchronous events, including intentional or directed healing, may work via coherence, an entanglement or resonance effect, but we should be careful not to mistake this field effect for the mind itself, which permeates and undergirds all. Still none of us has any idea how anything material could be conscious, so we must simply stand in that Mystery. We share its essential nature; it is the cosmos within us. We are that.

"Reality is that which, when you stop believing in it, doesn't go away." - Philip K. Dick.

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